Actuarial Section

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BUCK CONSULTANTS

July 24, 2002

Board of Trustees
Public Employees' Retirement System
of New Jersey

Re: Actuary's Certification Letter

Members of the Board:

An actuarial valuation of the Public Employees' Retirement System of New Jersey (PERS) is performed annually to measure the ongoing costs of the System (with required contributions determined separately for the State and Local employers) and the progress towards the funding goals of the System over time. In general, the financial goals of the PERS are a pattern of contributions which is relatively stable over time as a percentage of pay for a stationary employee population.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution for basic allowances and cost of living adjustments (COLA's) is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. The unfunded accrued liability contribution for basic allowances and COLA's is determined as a level percentage of pay required to amortize the unfunded accrued liability in annual payments increasing by 6% per year and paid annually for a specific time as determined by the State Treasurer. (Initially, this period was determined to be 40 years as of March 31, 1992. Any actuarial gains or losses for the 10 valuation years following the March 31, 1992 valuation were to increase or decrease the amortization period unless an increase would have caused the amortization period to exceed 40 years decreasing to 30 years by 2002).

The provisions of Chapter 115, P.L. 1997 of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds and to use any excess valuation assets to reduce required normal contributions payable by the State and Local employers by up to 100% of excess assets through the July 1, 2001 valuation, and on a declining maximum percentage of excess assets thereafter. (The legislation also provided for a reduction from excess assets during calendar years 1998 and 1999 of the contributions by employees of the State and Local employers of ½ of 1% with the provision for similar reductions in contributions in future valuations under certain conditions. Chapter 415, P.L. 1999 further reduced State and Local employer member contributions from excess valuation assets by 2% for calendar years 2000 and 2001).

The valuation also incorporates the provisions of Chapter 133, P.L. 2001, which provided for an increase in pension allowances payable from the System for active members, existing retirees and beneficiaries, reduced the age requirement and increased the benefits payable to certain veteran members, prescribed the use of market value as actuarial value of assets retroactive to the June 30, 1999 valuation and established the Benefit Enhancement Fund to fund the cost of the benefit improvements.

The enactment of this legislation had no effect on required System costs. No contributions were required for the fiscal year beginning July 1, 2002. There were no required unfunded accrued liability payments due to the fact that a net surplus existed as of July 1, 2001 and the required normal contributions were reduced to $0 due to the recognition of a portion of excess assets (certain Local employers were still required to pay costs attributable to members who retired under ERI programs).

In addition, the required contribution for providing postretirement medical costs for State employees was determined separately. The contribution is comprised of three pieces, an amount necessary to pay anticipated premiums for the current year's benefits less the expected return on Post Retirement Medical Fund assets, plus an amount that will ensure an increase in the fund equal to ½ of 1% of the salary of active State employee members from the current valuation period.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

As stipulated in the statutes, an actuarial investigation of the mortality, service and compensation experience of the members and beneficiaries of PERS is made once in every three-year period. The contributions for the fiscal year beginning July 1, 2002 were based on the revised actuarial assumptions that were determined from the April 1, 1996 to March 31, 1999 Experience Study (which was approved by the Board of Trustees at the October 18, 2000 Board meeting), the projected unit credit funding method, a salary scale assumption which averages 5.95% per year, and an interest rate of 8.75% (which was used in accordance with the directive of the State Treasurer issued in 1992 under the terms of Chapter 41, P.L. 1992). The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period.

The assumptions used to prepare the information required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB) were the same as those used for funding purposes except that, in the determination of the Annual Required Contribution (ARC), the actuarial surplus attributable to the change in asset method due to Chapter 133, P.L. 2001 was amortized over a 10 year period and the balance of the actuarial surplus was amortized over 40 years. Both amortization payments are increasing at 5% per year (but not less than the current year's unfunded COLA normal cost contribution) and excess assets were not used to offset required normal cost contributions.

In our opinion, the attached schedules of valuation results fairly represent the status of the PERS and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants, Inc.:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added To and Removed from Rolls
- Schedule of Active Member Valuation Data
- Solvency Test
- Analysis of Past Financial Experience
  Reconciliation of Employer Contribution Rates
- Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

Respectfully submitted,

Buck Consultants, Inc.

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STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Public Employees' Retirement System

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Section 19 of Chapter 15A of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the mortality, service and compensation experience of the members and beneficiaries of the PERS to assure that the tables used for determining expected liabilities are consistent with recent experience.

The actuarial assumptions used for the July 1, 2001 actuarial valuation of the PERS were based on the results of the experience study which covered the period from April 1, 1996 to March 31, 1999.

There were no other changes in actuarial assumption and methods since the previous valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2001 valuation is as follows:

Valuation Interest Rate: 8.75% per annum, compounded annually.

Separations From Service and Salary Increases: Representative values of the assumed annual rates of separation and annual rates of salary increases are as follows:

	ANNUAL RATES OF									
	SELECT WITHDRAWAL						ULTIMATE WITHDRAWAL*			
	1st YEAR		2nd YEAR		3rd YEAR		PRIOR TO ELIGIBILITY FOR BENEFIT		AFTER ELIGIBILITY FOR BENEFIT	
AGE	STATE	LOCAL	STATE	LOCAL	STATE	LOCAL	STATE	LOCAL	STATE	LOCAL
25	23.40%	25.06%	18.23%	19.13%	13.06%	13.19%	5.87%	5.67%	—	—
30	22.07	21.88	17.06	16.25	12.05	10.62	3.67	4.73	.07%	.11%
35	17.87	19.10	13.37	13.74	8.88	8.37	2.59	3.47	.14	.12
40	16.66	18.26	12.31	12.98	7.96	7.69	2.59	3.12	.15	.20
45	15.71	17.67	11.48	12.45	7.24	7.21	1.73	2.77	.20	.26
50	14.70	16.99	10.59	11.83	6.48	6.66	1.73	2.08	.85	.73
55	14.07	16.58	10.04	11.46	6.33	6.33	1.73	1.89	.86	1.17

	ANNUAL RATES OF						
	ORDINARY DEATH**		ORDINARY DISABILITY***		SERVICE RETIREMENT		SALARY INCREASES
AGE	STATE	LOCAL	STATE	LOCAL	STATE	LOCAL	
25	.06%	.06%	.01%	.01%	—	—	6.90%
30	.08	.08	.04	.05	—	—	6.65
35	.10	.09	.05	.09	—	—	6.40
40	.13	.12	.09	.23	—	—	6.15
45	.18	.19	.31	.27	—	—	5.90
50	.29	.34	.47	.45	—	—	5.65
55	.38	.46	.63	.68	15.4%	11.7%	5.40
60	.55	.66	1.30	.68	8.8	7.8	5.15
65	.81	.96	1.34	.76	23.1	22.1	4.65
69	1.14	1.28	1.65	.92	15.0	11.6	4.65

* *The sum of the rates of withdrawal after eligibility for a benefit and those prior to eligibility are the rates assumed for members withdrawing with a benefit.*

** *A separate rate is used for accidental death.*

*** *A separate rate is used for accidental disability.*

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS, *Continued*

Deaths After Retirement: 1979 George B. Buck Mortality Tables for service retirement and dependent beneficiaries. Special mortality tables are used for the period after disability retirement. Representative values of the assumed annual rates of mortality are as follows:

SERVICE RETIREMENTS			DISABILITY RETIREMENTS		
AGE	MEN	WOMEN	AGE	MEN	WOMEN
55	.71%	.34%	35	3.16%	4.25%
60	1.20	.57	40	3.25	2.74
65	2.06	.99	45	3.88	3.18
70	3.39	1.74	50	4.12	3.29
75	5.34	2.98	55	4.50	3.70
80	8.31	4.90	60	5.10	4.39
85	12.50	7.84	65	6.04	3.63

Valuation Method: Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains or losses are recognized in future accrued liability contributions.

COLA: Benefits are assumed to increase 2.4% each year.

Expenses: Payable from excess investment return through employer contributions.

Asset Valuation Method: A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period. (In accordance with Chapter 133, P.L. 2001, the June 30, 1999 asset valuation method was changed to redetermine the actuarial value of assets to be the full market value. Beginning with the June 30, 2002 valuation, the five-year average of market value with mark-up was continued.)

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Public Employees' Retirement System

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

STATE

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER**	ANNUAL*** ALLOWANCE		
7/1/01	2,278	$35,883,305	1,248	$11,826,820	31,518	$405,725,967	8.29%	$12,873
7/1/00	2,795	40,943,697	1,705	15,679,964	30,488	374,653,652	8.48	12,289
7/1/99*	2,248	32,283,106	1,059	6,927,298	29,398	345,379,931	7.92	11,748
3/31/98	2,092	28,322,184	905	8,397,319	28,209	320,024,123	8.41	11,345
3/31/97	1,984	24,448,483	1,087	8,695,987	27,022	295,187,753	7.36	10,924
3/31/96	1,713	19,337,673	1,214	9,550,186	26,125	274,942,736	3.60	10,524

LOCAL EMPLOYERS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER**	ANNUAL*** ALLOWANCE		
7/1/01	4,800	$52,657,599	3,148	$22,448,803	73,407	$633,154,111	7.04%	$8,625
7/1/00	6,211	65,505,051	4,091	27,237,422	71,755	591,523,823	8.14	8,244
7/1/99*	5,232	53,039,508	2,562	12,187,251	69,635	546,988,481	8.07	7,855
3/31/98	5,058	48,511,435	2,634	17,999,889	66,965	506,136,224	8.40	7,558
3/31/97	5,051	43,849,780	2,784	15,766,696	64,541	466,924,601	7.06	7,235
3/31/96	4,811	39,405,857	2,925	16,072,111	62,274	436,135,739	6.45	7,003

TOTAL SYSTEM

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER**	ANNUAL*** ALLOWANCE		
7/1/01	7,078	$88,540,904	4,396	$34,275,623	104,925	$1,038,880,078	7.52%	$9,901
7/1/00	9,006	106,448,748	5,796	42,917,386	102,243	966,177,475	8.27	9,450
7/1/99*	7,480	85,322,614	3,621	19,114,549	99,033	892,368,412	8.01	9,011
3/31/98	7,150	76,833,619	3,539	26,397,208	95,174	826,160,347	8.40	8,681
3/31/97	7,035	68,298,263	3,871	24,462,683	91,563	762,112,354	7.18	8,323
3/31/96	6,524	58,743,530	4,139	25,622,297	88,399	711,078,475	5.33	8,044

* *Census data as of March 31, 1999.*

** *These values include beneficiaries in receipt but exclude deferred vested terminations.*

*** *The benefit amounts shown are the annualized benefits as of the valuation date and are not the actual benefits paid during the fiscal year.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Public Employees' Retirement System

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

STATE

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	77,345	$3,288,383,788	$42,516	2.79%
7/1/00	74,808	3,094,277,064	41,363	3.17
7/1/99*	73,044	2,928,470,790	40,092	4.40
3/31/98	73,060	2,805,791,009	38,404	4.04
3/31/97	73,554	2,714,991,457	36,912	1.18
3/31/96	75,724	2,762,479,385	36,481	1.27

LOCAL EMPLOYERS

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	172,138	$5,240,338,738	$30,443	3.14%
7/1/00	166,388	4,910,966,308	29,515	2.95
7/1/99*	162,378	4,655,241,261	28,669	2.70
3/31/98	161,687	4,513,357,772	27,914	2.45
3/31/97	161,771	4,407,751,955	27,247	2.39
3/31/96	161,641	4,301,404,278	26,611	3.31

TOTAL SYSTEM

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	249,483	$8,528,722,526	$34,186	3.00%
7/1/00	241,196	8,005,243,372	33,190	3.03
7/1/99*	235,422	7,583,712,051	32,213	3.32
3/31/98	234,747	7,319,148,781	31,179	3.01
3/31/97	235,325	7,122,743,412	30,268	1.71
3/31/96	237,365	7,063,883,663	29,760	2.26

**Census data as of March 31, 1999.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Public Employees' Retirement System

SOLVENCY TEST

STATE

VALUATION DATE	ACCRUED LIABILITIES FOR (1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS	NET ASSETS AVAILABLE FOR BENEFITS**	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE (1)	(2)	(3)
7/1/01	$2,411,616,329	$3,969,922,145	$3,504,924,894	$11,123,818,861***	100.00%	100.00%	100.00%
7/1/00	2,246,319,591	3,426,353,181	2,866,012,450	9,743,727,383	100.00	100.00	100.00
7/1/99*	2,109,392,676	3,147,877,213	2,601,596,967	8,915,211,123	100.00	100.00	100.00
3/31/98	1,889,134,891	2,933,598,137	2,360,801,975	7,660,977,874	100.00	100.00	100.00
3/31/97	1,668,789,572	2,709,139,027	2,411,680,969	7,011,546,618	100.00	100.00	100.00
3/31/96	1,531,463,496	2,532,911,598	2,182,548,223	6,651,419,645	100.00	100.00	100.00

LOCAL EMPLOYERS

VALUATION DATE	ACCRUED LIABILITIES FOR (1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS	NET ASSETS AVAILABLE FOR BENEFITS**	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE (1)	(2)	(3)
7/1/01	$3,234,451,958	$5,885,278,088	$4,699,308,445	$16,625,288,260***	100.00%	100.00%	100.00%
7/1/00	3,025,058,034	5,140,058,713	3,842,044,059	14,380,511,913	100.00	100.00	100.00
7/1/99*	2,871,669,798	4,735,008,728	3,633,774,845	13,248,481,144	100.00	100.00	100.00
3/31/98	2,592,040,580	4,401,209,760	3,360,641,758	11,331,591,388	100.00	100.00	100.00
3/31/97	2,425,485,295	4,050,057,369	3,185,281,920	10,390,581,923	100.00	100.00	100.00
3/31/96	2,257,744,514	3,705,096,606	3,053,235,938	9,795,644,618	100.00	100.00	100.00

TOTAL SYSTEM

VALUATION DATE	ACCRUED LIABILITIES FOR (1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) CURRENT INACTIVE MEMBERS	NET ASSETS AVAILABLE FOR BENEFITS**	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE (1)	(2)	(3)
7/1/01	$5,646,068,287	$9,855,200,233	$8,204,233,339	$27,749,107,121***	100.00%	100.00%	100.00%
7/1/00	5,271,377,625	8,566,411,894	6,708,056,509	24,124,239,236	100.00	100.00	100.00
7/1/99*	4,981,062,474	7,882,885,941	6,235,371,812	22,163,692,267	100.00	100.00	100.00
3/31/98	4,481,175,471	7,334,807,897	5,721,443,733	18,992,569,262	100.00	100.00	100.00
3/31/97	4,094,274,867	6,759,196,396	5,596,962,889	17,402,128,541	100.00	100.00	100.00
3/31/96	3,789,208,010	6,238,008,204	5,235,784,161	16,447,064,263	100.00	100.00	100.00

* *Accrued liability amounts determined as of March 31 and rolled forward three months to June 30.*
** *Actuarial Value including receivable amounts but excluding postretirement medical fund assets.*
*** *Reflects the retroactive actuarial value of asset adjustment to the July 1, 1999 vaulation as required under the provisions of Chapter 133, P.L. 2001.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Public Employees' Retirement System

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF EMPLOYER CONTRIBUTION RATES

STATE

VALUATION YEAR	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	MARCH 31, 1998	MARCH 31, 1997	MARCH 31, 1996
Effective Prior Year Contribution Rate	3.74%	3.91%	3.63%	3.16%	2.82%	2.29%
Net Change Due to:						
Current New Entrants	0.04	0.02	0.02	0.04	0.03	0.05
Excess Salary Increases	0.01	0.01	0.02	(0.03)	(0.18)	(0.23)
Assumption/Method Changes	0.00	0.29	0.08	0.000	(0.06)	0.24
COLA Phase-In	0.03	0.03	0.07	0.06	0.05	0.07
Active Experience	0.37	(0.11)	0.09	0.26	0.40	0.09
Other Experience	0.06	(0.07)	(0.03)	0.05	0.06	0.12
Investment Loss/(Gain)	0.00	0.00	0.00	0.00	0.00	(0.14)
Non-Contributory Group Insurance Premium Fund Experience	(0.28)	(0.34)	0.03	0.09	0.04	0.02
Chapter 133 Benefit Improvements	0.71	0.00	0.00	0.00	0.00	0.00
Net Effect of Chapter 133**	(0.71)	0.00	0.00	0.00	0.00	0.00
Net Effect of Chapter 115*	(3.97)	(3.74)	(3.91)	(3.63)	(3.16)	(2.51)
Actual Contribution Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

LOCAL EMPLOYERS

VALUATION YEAR	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	MARCH 31, 1998	MARCH 31, 1997	MARCH 31, 1996
Effective Prior Year Contribution Rate	3.37%	3.70%	3.37%	3.01%	2.50%	1.36%
Net Change Due to:						
Current New Entrants	0.03	0.04	0.03	0.02	0.02	0.04
Excess Salary Increases	0.07	0.01	0.01	(0.03)	(0.04)	(0.03)
Assumption/Method Changes	0.00	0.17	0.08	0.00	(0.03)	0.24
COLA Phase-In	0.05	0.03	0.06	0.08	0.05	0.05
Active Experience	0.55	(0.20)	0.09	0.15	0.38	0.08
Other Experience	0.06	(0.01)	0.09	0.05	0.09	0.15
Investment Loss/(Gain)	0.00	0.00	0.00	0.00	0.00	(0.16)
Non-Contributory Group Insurance Premium Fund Experience	(0.41)	(0.37)	(0.03)	0.09	0.04	(0.01)
Chapter 133 Benefit Improvements	0.66	0.00	0.00	0.00	0.00	0.00
Net Effect of Chapter 133**	(0.66)	0.00	0.00	0.00	0.00	0.00
Net Effect of Chapter 115*	(3.72)	(3.37)	(3.70)	(3.37)	(3.01)	(1.72)
Actual Contribution Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

* *Net effect of reduction in normal cost contribution due to use of excess assets and elimination of accrued liability contribution due to surplus position.*

** *The additional annual employer normal contribution for the increase in benefits is funded by assets accumulated in the Benefit Enhancement Fund.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Public Employees' Retirement System

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

1. DEFINITIONS

Final Compensation (FC): Average annual compensation for the three years of creditable service immediately preceding retirement or the highest three fiscal years of membership service.

Accumulated Deductions: Sum of all required amounts deducted from the compensation of a member or contributed by him.

Class A Member: Any member who contributes towards a 1/64th retirement benefit.

Class B Member: Any member who contributes towards a 1/55th retirement benefit.

2. BENEFITS*

Service Retirement: Eligible at age 60. Benefit equals a member annuity plus an employer pension which, together, equal 1/64th of FC for each year of service for Class A members and 1/55th of FC for each year of service for Class B members.

Ordinary Disability Retirement: Eligible after 10 years of service. Benefit equals a member annuity plus an employer pension which, together, equal 1-1/2% of FC for each year of service; minimum benefit of 40% of FC.

Accidental Disability: Eligible upon total and permanent disability prior to age 70 as a result of a duty injury. Benefit equals a member annuity plus an employer pension which, together, equal 2/3 of contributory compensation at the date of injury.

Lump Sum Withdrawal: Eligible upon service termination prior to age 60 and prior to 10 years of service. Benefit equals refund of accumulated deductions plus, if the member has completed three years of service, interest allowed thereon.

**Special benefits for veterans, law enforcement officers, and legislators are summarized at the end of this section.*

Vested Retirement: Eligible after 10 years of service. Benefit equals the lump sum benefit described above or a deferred retirement benefit, commencing at age 60, equal to the service retirement benefit based on service and FC at date of termination.

Early Retirement: Eligible after 25 years of service. Benefit equals the lump sum benefit described above or the vested benefit reduced by 1/4 percent for each month retirement date precedes age 55.

***Ordinary Death (Insured)*:**

BEFORE RETIREMENT

Eligible if active. Benefit equals accumulated deductions with interest plus an amount equal to 1-1/2 times contributory compensation at date of death.

AFTER RETIREMENT

Before Age 60:
Eligible if disabled or vested terminated. Benefit equals 1-1/2 times last contributory compensation if disabled, accumulated deductions only if vested terminated.

After Age 60 or Early Retirement:
Eligible after early retirement or after attainment of age 60 for other types of retirement (if not disabled, 10 years of service credit required on members enrolling after July 1, 1971). Benefit equals 3/16 of last contributory compensation.

Voluntary Death Benefit: An additional, employee-paid, death benefit is also available through the purchase of a group insurance with an outside carrier.

Accidental Death: Eligible upon death resulting during performance of duty. Benefit varies as follows:

Widow(er) - 50% of contributory compensation paid as pension.

Child(ren) - No spouse - 20% (1 child), 35% (2 children), 50% (3 or more children) of contributory compensation pension paid as pension to age 18

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

or life if disabled.

Surviving dependent parent - No spouse or child - 25% (1 parent) or 40% (2 parents) of contributory compensation paid as pension.

No relation above - Accumulated deductions paid to other beneficiary or estate.

In addition, the employer-paid lump sum ordinary death benefit is paid.

Optional Benefits: Various forms of payment of equivalent actuarial value are available to retirees.

Special Benefits:

VETERANS

Service Retirement:
Eligible if member on January 2, 1955, attains age 60, completes 55 years of service. Benefit equals 50% of final contributory compensation (veteran members after January 2, 1955 must attain age 62 with 20 years of service).

Chapter 220 Benefit:
Eligible if age 55 and completes 35 years of service. Benefit equals 1/55th of final contributory compensation for each year of service.

LAW ENFORCEMENT

Service Retirement:
Eligible at age 55 after 20 years of service. Benefit equals a member annuity plus an employer pension which, together, equal 2% of final contributory compensation for each of the first 25 years of service plus 1% of such compensation for noncontributory service or service over 25 years plus 1-2/3% for non-law enforcement service.

Chapter 4, P.L. 2001 Special Retirement:
After completion of 25 years of service, an additional retirement benefit equal to 5% of final contributory pay is added to the above service related retirement benefit. There is a maximum total benefit of 70% of final contributory pay.

Ordinary Disability:
Eligible after 5 years of service. Benefit is the same as for regular members.

Death After Retirement:
Eligible upon death after an accidental disability retirement. Benefit is the same as for a regular member with a $5,000 minimum.

LEGISLATORS

Service Retirement:
Eligible at age 60 and termination of all public service. Benefit is equal to a member annuity plus an employer pension which, together, equal 3% of final contributory compensation for each year of service to a maximum of 2/3 of final compensation.

Vested Retirement:
Eligible after 8 years of legislative service. Benefit is a service retirement benefit deferred to age 60 or, alternatively, a lump sum equal to his accumulated deductions.

3. CONTRIBUTIONS

By Members:

Members enrolling in the retirement system on or after July 1, 1994 will contribute 5% of compensation. Members enrolled prior to July 1, 1994 will contribute 5% of compensation to the retirement system effective July 1, 1995 unless they previously had contributed less than 6% in which case they will contribute 4% of compensation beginning July 1, 1995 and 5% of compensation beginning July 1, 1996.

By Employers:

NORMAL CONTRIBUTION

The State and Local employers pay annually a normal contribution to the retirement System. This contribution is determined each year on the basis of the annual valuation and represents the value of the benefits to be earned in the year following the valuation date. The normal contributions for active

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

members' COLA are being phased in.

In accordance with the provisions of Chapter 79, P.L. 1960, which provided that the monies appropriated for payment of the noncontributory life insurance coverage shall be held separate from the retirement System monies, the amount required to pay such benefit is deducted from the normal contribution certified for payment to the retirement System and paid to a Group Insurance Premium Fund, which is administered by the State Treasurer.

In accordance with the provisions of Chapter 133, P.L. 2001, the Benefit Enhancement Fund (BEF) was established to fund the additional annual employer normal contribution due to the law's increased benefits. If the assets in the BEF are insufficient to cover the normal contribution for the increased benefits for a valuation period, the State will pay such amount for both the State and local emloyers.

ACCRUED LIABILITY CONTRIBUTIONS

The State and Local employers pay contributions to cover any unfunded accrued liability. An unfunded accrued liability contribution was established for active life COLAs. The amortization periods for funding these liabilities were set initially at 40 years. The accrued liability contribution for active members' COLA liabilities are being phased in. Experience gains or losses for the 10 valuation years following the March 31, 1992 valuation will increase or decrease the unfunded accrued liability contribution. Thereafter, actuarial gains or losses will increase or decrease the amortization period unless an increase will cause it to exceed 30 years.

A MILLIMAN GLOBAL FIRM

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August 29, 2002

Board of Trustees
Teachers' Pension and Annuity Fund
of New Jersey

Re: Actuary's Certification Letter

Members of the Board:

This letter constitutes the actuary's certification letter for the Comprehensive Annual Financial Report (CAFR) of the Teachers' Pension and Annuity Fund of New Jersey (TPAF). It reflects the results of the June 30, 2001 Annual Actuarial Valuation of TPAF.

The funding objective of the plan, as modified by Chapter 133, P.L. 2001 and Chapter 115, P.L. 1997, is to have the State make sufficient contributions into the plan to cover the normal cost of the plan subject to a phase-in of the pension adjustment benefits (for the 2001 valuation, 41.97% of the cost of such benefits was reflected).

If there are sufficient assets in the Benefit Enhancement Fund (BEF), the State may reduce its contribution up to the additional normal cost of the plan (the difference between the 1/55th formula and the 1/60th formula normal costs). The BEF was established by Chapter 133, P.L. 2001. As of the June 30, 2001 Actuarial Valuation, there were sufficient assets in the BEF and the State reduced its contribution accordingly. In the event there are assets in excess of Actuarial Accrued Liabilities, the BEF and the value of future unphased-in normal costs for pension adjustments, the State may reduce both its contribution and Member contributions. In the event Unfunded Actuarial Liabilities exist, the State will amortize them generally over a 30-year period as a level percentage of payroll. As of the June 30, 2001 Actuarial Valuation, there were such "excess assets" and the state reduced both Members' and its contributions accordingly.

The valuation was based on a set of actuarial assumptions (described in detail in the section headed "Summary of Actuarial Assumptions and Methods") which was adopted by the Board of Trustees as a result of a study of actual experience under the Teachers' Pension Annuity Fund during the 3-year period ending June 30, 2000. For purposes of determining contributions, these assumptions are being phased-in over a 3-year period. The actuarial assumptions and methods used for funding purposes meet the parameters set forth in Governmental Accounting Standards Board (GASB) Statement No. 25 except with respect to the phase-in of the new assumptions and the phase-in regarding the normal cost of pension adjustment benefits.

The following supporting schedules in the Actuarial Section were prepared by Milliman:

Summary of Actuarial Assumptions and Methods

Summary of Retired Members and Beneficiaries Added to and Removed from Rolls

Schedule of Active Member Valuation Data

Solvency Test

Analysis of Financial Experience

Summary of Principle Plan Provisions

In addition, Milliman prepared the "Schedule of Funding Progress" and the "Schedule of Employer Contributions" in the Financial Section.

Differences between our projections and actual amounts depend on the extent to which future experience conforms to the assumptions made for this analysis. It is certain that actual experience will not conform exactly to the assumptions used in this analysis. Actual amounts will differ from projected amounts to the extent that actual experience deviates from expected experience.

In performing this analysis, we relied on data and other information provided by the Division of Pensions and Benefits. We have not audited or verified this data and other information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or for relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

Respectfully submitted,

MILLIMAN USA, INC.

By: William A. Reimert, FSA, MAAA

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Teachers' Pension and Annuity Fund

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS AS OF JUNE 30, 2001

A. Actuarial Assumptions

Interest: 8.75% per annum, compounded annually.

CPI: 4.0% per annum, compounded annually. The pension adjustment is 60% of the cumulative increase.

Future Payroll Growth: 5.0% per annum, compounded annually.

Salary Scale: Salary increases vary by age and service with a salary scale which averages 5.95%. Illustrative rates are shown below:

LESS THAN 10 YEARS OF SERVICE		10 OR MORE YEARS OF SERVICE	
YEARS OF SERVICE	ANNUAL RATE	AGE	ANNUAL RATE
0	8.16%	30	7.88%
1	8.16	35	7.88
2	7.15	40	7.14
3	7.08	45	5.94
4	7.08	50	5.20
5	7.08	55	4.95
6	7.08	60	4.83
7	7.08	65	4.74
8	7.08	70	4.72
9	7.08		

Termination: Withdrawal rates vary by age, service and sex. Illustrative rates are shown below:

YEARS OF SERVICE	LESS THAN 10 YEARS OF SERVICE		AGE	10 OR MORE YEARS OF SERVICE			
				ANNUAL RATES FOR THOSE WITH DEFERRED ANNUITY BENEFITS*		ANNUAL RATES FOR THOSE RECEIVING RETURN OF CONTRIBUTIONS	
	MALE	FEMALE		MALE	FEMALE	MALE	FEMALE
0	8.13%	7.54%	25	0.07%	0.08%	1.14%	1.58%
1	6.45	6.04	30	0.07	0.08	1.14	1.58
2	5.61	5.40	35	0.07	0.08	0.88	1.27
3	4.53	5.40	40	0.07	0.08	0.51	0.83
4	3.60	4.80	45	0.14	0.12	0.30	0.55
5	3.07	4.48	50	0.31	0.45	0.19	0.36
6	2.55	4.29	55	1.03	1.22	0.16	0.30
7	2.34	3.60					
8	1.71	2.68					
9	1.16	2.22					

**Members must have attained 10 years of service or 60 years of age in order to receive an annuity benefit.*

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS, *Continued*

A. Actuarial Assumptions, *Continued*

Retirement: Rates of retirement vary by age and when initially eligible. Illustrative rates are shown below.

FIRST YEAR OF ELIGIBILITY FOR UNREDUCED RETIREMENT		
	ANNUAL RATE	
AGE	MALE	FEMALE
55	15.34%	16.49%
56	15.34	16.49
57	15.34	16.49
58	15.34	16.49
59	15.34	16.49

AFTER FIRST YEAR OF ELIGIBILITY FOR UNREDUCED RETIREMENT		
	ANNUAL RATE	
AGE	MALE	FEMALE
55	15.34%	16.49%
56	10.25	11.33
57	10.84	11.67
58	12.04	11.81
59	13.85	12.62
60	17.28	13.56
61	19.61	14.21
62	31.39	20.98
63	25.38	18.86
64	25.38	19.56
65	32.67	29.03
66 - 70	30.04	27.79
71 and Over	44.73	46.01

REDUCED RETIREMENT		
	ANNUAL RATE	
AGE	MALE	FEMALE
<45	1.0%	1.20%
45	1.0	1.20
46	1.0	1.20
47	1.0	1.20
48	1.2	1.36
49	1.4	1.52
50	1.6	1.68
51	1.8	1.84
52	2.0	2.00
53	2.0	2.00
54	2.0	2.00

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS, *Continued*

A. Actuarial Assumptions, *Continued*

Disability: Illustrative rates of the incidence of disabilities among active members are shown below.

AGE	ANNUAL RATES			
	ORDINARY		ACCIDENTAL	
	MALE	FEMALE	MALE	FEMALE
25	0.018%	0.022%	0.009%	0.006%
30	0.026	0.031	0.009	0.006
35	0.039	0.048	0.009	0.006
40	0.057	0.070	0.009	0.006
45	0.087	0.107	0.009	0.006
50	0.142	0.174	0.009	0.006
55	0.241	0.296	0.009	0.006

Mortality (pre-retirement): Illustrative rates of mortality of active members are shown below:

AGE	ANNUAL RATES		
	ORDINARY		ACCIDENTAL
	MALE	FEMALE	UNISEX
25	0.037%	0.018%	0.0004%
30	0.043	0.021	0.0004
35	0.061	0.035	0.0004
40	0.099	0.046	0.0004
45	0.135	0.077	0.0004
50	0.226	0.116	0.0004
55	0.333	0.178	0.0004
60	0.393	0.260	0.0004
65	0.550	0.314	0.0004
70	0.768	0.610	0.0004

Mortality (post-retirement): Special mortality tables are used for the period after disability retirements. Illustrative rates of mortality for retired members and beneficiaries are shown below:

AGE	SERVICE RETIREMENTS AND BENEFICIARIES		DISABILITY RETIREMENT	
	MALE	FEMALE	MALE	FEMALE
40	0.12%	0.06%	2.89%	1.01%
45	0.17	0.09	3.02	1.08
50	0.61	0.13	3.22	1.28
55	0.56	0.21	3.54	1.61
60	0.68	0.42	4.05	2.12
65	1.19	0.81	4.84	2.92
70	1.98	1.29	6.08	4.18
75	3.45	2.10	8.00	6.14
80	6.09	3.66	10.97	9.16

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS, *Continued*

Marriage: Husbands are assumed to be 3 years older than wives. Among the active population, 80% of participants are assumed to be married. No children are assumed. Neither the percentage married nor the number of children assumptions are necessarily individually explicit, but they are considered reasonable, when viewed as a single combined assumption.

Post Retirement Medical: Projected 2002-2003 Per Retiree Benefit Costs (based on June 30, 2001 health plan distribution, medical trends ranging from 12%-14% for those less than age 65 and 14%-16% for those greater than 65, and the Social Security Standard premium for Medicare Part B):

Pre-Medicare:	$10,054.20
Medicare Eligible:	$6,255.96

B. Actuarial Valuation Method: The Projected Unit Credit Method was used as required by Chapter 62, P.L. 1994 as modified by Chapter 115, P.L. 1997 and 133, P.L. 2001.

C. Asset Valuation Method: A five year average of market value with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period. Cash flows are based on an accrual accounting approach.

D. Changes in Actuarial Assumptions: Demographic assumptions (termination, retirement, disability, and mortality) and the salary increase assumption were updated based on the April 1, 1997 to June 30, 2000 Experience Study. The per capita benefit costs for postretirement medical benefits have changed since the previous valuation. The costs were previously $7,556.64 for pre-Medicare and $5,280.12 for Medicare eligible.

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN AVERAGE ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE		
3/31/95	N/A	N/A	N/A	N/A	42,599	$745,989,541	7.50%	$17,512
3/31/96	2,699	N/A	1,534	N/A	43,764	809,117,171	5.57	18,488
3/31/97	3,205	N/A	1,580	N/A	45,389	884,918,995	5.45	19,496
3/31/98	3,186	N/A	1,758	N/A	46,817	959,119,419	5.08	20,487
6/30/99	3,840	N/A	1,597	N/A	49,060	1,052,601,920	4.72	21.455
6/30/00	4,379	N/A	2,074	N/A	51,365	1,159,146,402	5.18	22,567
6/30/01	4,228	N/A	1,701	N/A	53,892	1,282,856,638	5.48	23,804

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

VALUATION DATE	NUMBER OF ACTIVE MEMBERS (a)	ANNUAL COMPENSATION (b)	AVERAGE COMPENSATION (b/a)	% INCREASE IN AVERAGE COMPENSATION
3/31/95	117,399	$5,610,121,973	$47,787	3.02%
3/31/96	117,666	5,829,763,310	49,545	3.68
3/31/97	118,810	6,016,193,564	50,637	2.20
3/31/98	121,251	6,251,626,008	51,559	1.82
6/30/99	124,823	6,540,450,038	52,398	1.63
6/30/00	129,987	6,900,894,090	53,089	1.32
6/30/01	135,850	7,317,893,866	53,867	1.47

SOLVENCY TEST

VALUATION DATE	ACCRUED LIABILITIES FOR			NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS		
	(1) ACTIVE MEMBER CONTRIBUTIONS	(2) RETIREES & DEFERRED VESTED	(3) ACTIVE MEMBERS (EMPLOYER FINANCED)		(1)	(2)	(3)
3/31/95	$3,003,349,470	$7,388,095,383	$8,080,872,271	$16,720,290,673	100.00%	100.00%	78.00%
3/31/96	3,365,884,980	8,188,782,898	8,273,760,857	20,843,247,418	100.00	100.00	100.00
3/31/97	3,636,516,257	8,928,584,128	8,659,384,203	22,045,481,579	100.00	100.00	100.00
3/31/98	4,158,202,803	9,872,134,353	9,454,066,294	24,478,860,383	100.00	100.00	100.00
6/30/99	4,663,478,090	10,850,247,466	10,032,357,733	27,457,451,678	100.00	100.00	100.00
6/30/00	5,034,537,874	12,125,009,498	10,245,070,679	30,203,205,322	100.00	100.00	100.00
6/30/01	5,372,735,178	14,623,923,361	12,748,698,646	35,351,379,511	100.00	100.00	100.00

*Valuation Assets

ANALYSIS OF FINANCIAL EXPERIENCE
GAINS AND LOSSES IN UNFUNDED ACCRUED LIABILITIES
RESULTING FROM DIFFERENCES BETWEEN
ASSUMED EXPERIENCE AND ACTUAL EXPERIENCE

TYPE OF ACTIVITY	ACTUAL VALUATION AS OF	
	JUNE 30, 2000 ($ MILLIONS)	JUNE 30, 2001 ($ MILLIONS)
Economic Factors:		
Investment Return	$1,288.2	($1,248.1)
Salary Increases (includes data changes and miscellaneous)	18.4	149.0
COLA Adjustments	65.3	2.2
Expenses	(33.2)	(8.3)
Demographic Factors:		
Active Members(165.9)	(165.6)	(395.2)
New Entrants	(45.7)	(51.6)
Non-Contributing Members	(18.2)	(20.1)
Retirees and Beneficiaries	54.2	71.8
Net Actuarial Gains or (Losses)	$1,163.4	($1,500.3)

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Teachers' Pension and Annuity Fund

SUMMARY OF PRINCIPAL PLAN PROVISIONS

1. TYPE OF PLAN

The Plan is a contributory, defined benefit plan. Contributions by Members are 5% of compensation. If the Fund has excess assets, member contributions may be reduced by as much as 2%.

2. EFFECTIVE DATE

The Plan was established in 1919. It was reorganized and integrated with Social Security in 1955. Social Security integration was eliminated in 1966, i.e., reductions in retirement benefits based on Social Security benefits were eliminated. The Plan is coordinated with Social Security. Members receive their full benefits under the Plan and Social Security benefits.

3. ELIGIBILITY FOR MEMBERSHIP

Employees appointed to positions requiring certification as members of a regular teaching or professional staff of a public school system in New Jersey are required to enroll as a condition of employment. Employees of the Department of Education holding unclassified, professional and certificated titles are eligible for membership. Temporary or substitute employees are not eligible.

4. DEFINITIONS

a. ***Fiscal Year:*** A Fiscal Year is a 12-month period beginning on July 1 and ending on June 30.

b. ***Credited Service:*** A year of Credited Service for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability.

c. ***Final Compensation:*** This is the average annual compensation for the three consecutive years of Creditable Service immediately preceding retirement or the highest three fiscal years of Membership Service.

d. ***Final Year Compensation:*** This is the compensation upon which contributions by a Member to the Annuity Savings Fund are based in the last year of Membership Service.

e. ***Aggregate Member Contributions:*** This is the sum of all amounts deducted from the compensation of a Member or contributed by him or on his behalf without interest.

f. ***Class A Member:*** Any member who contributes towards retirement allowance based on 1/64th benefit rate per year of creditable service.

g. ***Class B Member:*** Any member who contributes towards a retirement allowance based on 1/55th benefit rate per year of creditable service.

5. RETIREMENT BENEFITS

a. ***Service Retirement:***

SERVICE RETIREMENT ELIGIBILITY: Eligibility means age 60 with no minimum service requirement.

SERVICE RETIREMENT BENEFIT: An employee's annual service retirement allowance is equal to a member annuity plus an employer pension which together equals 1/64th of Final Compensation for each year of service for Class A members and 1/55th of Final Compensation for each year of service for Class B members.

Note: See Section 12 for special benefits for veteran members.

b. ***Early Retirement:***

EARLY RETIREMENT ELIGIBILITY: A Member may retire after completion of 25 years of Creditable Service.

EARLY RETIREMENT BENEFIT: The benefit may be either:

(1) the lump sum withdrawal benefit described in 6.a. below; or

(2) the service retirement benefit reduced by 1/4 of one percent for each month the retirement date precedes age 55.

6. TERMINATION BENEFITS

a. ***Lump Sum Withdrawal:***

ELIGIBILITY: A Member is eligible upon termination of service.

LUMP SUM WITHDRAWAL BENEFIT: The benefit equals a refund of Aggregate Member Contributions plus, if the member has completed three years of service, interest accumulated at 2.0% per annum allowed thereon.

b. ***Deferred Retirement:***

ELIGIBILITY: A Member is eligible upon termination of service prior to age 60 and after 10 years of Creditable Service.

DEFERRED RETIREMENT BENEFIT: The benefit may be either:

(1) the lump sum withdrawal benefit described in 6.a. above, or

(2) a deferred retirement benefit, commencing at age 60, equal to a member annuity plus an employer pension which together provide a retirement allowance equal to the service retirement benefit based on Final Compensation and Creditable Service at date of termination.

7. DEATH BENEFITS

a. ***Ordinary Death (Insured) Benefit - Lump Sum (Non-Contributory):***

PRE-RETIREMENT DEATH BENEFIT ELIGIBILITY: Any current active member is eligible.

PRE-RETIREMENT DEATH BENEFIT: The benefit is a lump sum benefit equal to the Aggregate Contributions with interest allowed thereon plus an amount equal to 1-1/2 times Compensation at date of death.

POST-RETIREMENT DEATH BENEFIT PRIOR TO AGE 60 ELIGIBILITY: Eligible if disabled or retired early.

POST-RETIREMENT DEATH BENEFIT PRIOR TO AGE 60 BENEFIT: The benefit is as follows:

(1) For death while a Disabled Retiree the benefit is equal to 1-1/2 times Compensation.

(2) For death while an Early Retiree, the benefit is equal to 3/16 times Compensation.

(3) For death while vested terminated, the benefit is equal to his Aggregate Contributions with interest allowed thereon.

POST-RETIREMENT DEATH BENEFIT AFTER AGE 60 ELIGIBILITY: Eligible after attainment of age 60 for service, deferred and disabled retirements (if not disabled, 10 years of Creditable Service required for members enrolling on or after July 1, 1971).

POST-RETIREMENT DEATH BENEFIT AFTER AGE 60 BENEFIT: The benefit payable is equal to 3/16 times Compensation.

b. ***Contributory Death Benefit:*** An additional, employee-paid, death benefit is also available through group insurance purchased by the Board of Trustees. Contributions for this benefit are required by Members during the first year of enrollment. Participation may be terminated after the first year. The benefit prior to retirement is 2 times compensation. The benefit after retirement is 1/4 times final year compensation (coverage at retirement, and 10 years of participation for Members enrolling on or after July 1, 1970, is required).

c. ***Pre-retirement Accidental Death Benefit:***

ELIGIBILITY: A death resulting from injuries received from an accident during performance of duty and not a result of willful negligence is eligible.

PRE-RETIREMENT LUMP SUM BENEFIT: The benefit is a lump sum equal to 1-1/2 times Compensation.

PRE-RETIREMENT ACCIDENTAL DEATH BENEFIT: The benefit payable is as follows:

(1) The annuity benefit to a widow or widower is equal to 50% of Compensation, payable for life until remarriage.

SUMMARY OF PRINCIPAL PLAN PROVISIONS, *Continued*

(2) The annuity benefit, when there is no spouse, or the spouse is remarried, is equal to 20% of Compensation for one child, 35% for two children, 50% for three or more children. The benefit is payable while the children are under age 18 and it is payable for life if they are disabled.

(3) The annuity benefit, when there is no spouse or children, is equal to 25% of Compensation for one dependent parent and 40% for two dependent parents.

(4) The benefit, when there is no relation as stated above, is equal to the Aggregate Contributions with interest allowed thereon and is payable to a beneficiary or to the Member's estate. This is also the minimum benefit payable under (1), (2), and (3) above.

8. DISABILITY BENEFITS

a. ***Ordinary Disability Retirement:***

ELIGIBILITY: A Member is eligible for Ordinary Disability Retirement if he (she) has 10 years of Creditable Service and is totally and permanently incapacitated from the performance of usual or available duties.

ORDINARY DISABILITY RETIREMENT BENEFIT: The total retirement allowance is equal to the greater of:

(1) 1-1/2% of Final Compensation times the number of years of Creditable Service; or

(2) 40% of Final Compensation

Note: See Section 12 for special benefits for veteran members.

b. ***Accidental Disability Retirement:***

ELIGIBILITY: A Member is eligible upon total and permanent incapacitation as a direct result of a traumatic event occurring during and as a result of the performance of regular or assigned duties.

ACCIDENTAL DISABILITY RETIREMENT BENEFIT: The benefit payable is equal to a Member annuity plus an employer pension which together equals 2/3rds of the Compensation at date of injury.

9. COST-OF-LIVING PENSION ADJUSTMENT BENEFITS

All retirees and eligible beneficiaries will receive an annual adjustment of at least 60% of the cumulative change in the Consumer Price Index. This adjustment is first available on the 25th month after retirement or death.

10. ADDITIONAL OLD-PLAN BENEFIT

An additional pension is payable to any retirant who was a member of the old Teachers' Retirement Fund. This pension is the actuarial equivalent of his contributions to the old Teachers' Retirement Fund without interest.

11. SPECIAL MINIMUM BENEFIT

A member who retired prior to 1955 with 20 or more years of service may receive a minimum pension of $500 a month inclusive of any amounts payable under any pension adjustments.

12. SPECIAL BENEFITS FOR VETERANS

a. ***Service Retirement:*** Eligible if member attains age 60 and completes 20 years of service or attains age 55 and completes 25 years of service. Benefit equals 50% of highest 12-month contributory compensation.

b. ***Ordinary Disability:*** Eligible if member completed 20 years of service as of January 1, 1955. Benefit equals 50% of final contributory compensation.

c. ***Chapter 97 Benefit:*** Eligible if age 55 and completes 35 years of service. Benefit equals 1/55th of final year compensation for each year of service.

SUMMARY OF PRINCIPAL PLAN PROVISIONS, *Continued*

13. POST RETIREMENT MEDICAL BENEFITS

The Fund pays medical premiums including Medicare for retired members who retire after 25 years of service or under the disability provisions of the Fund.

14. BENEFIT AND COMPENSATION LIMITS

The provisions of IRC Section 415 and IRC Section 401(a)(17), which limit benefits paid and limit compensation used in determining benefits, has been reflected in this report.

The IRC Section 415 limit is $140,000 and the 401(a)(17) compensation cap is $170,000.

15. CONTRIBUTIONS

a. ***Member Contributions:*** Each member becoming a member on or after January 1, 1956 contributes at the rate of contribution applicable to Class B members.

(1) CLASS B MEMBERSHIP: Any member on December 31, 1955 may elect to be classified as a Class B member and contribute at the rate of contribution applicable to Class B members at his age at membership. Any such member may elect to increase his accumulated deductions by the amount required by the Board to receive credit as a Class B member for all or part of his service prior to such election.

(2) CLASS A MEMBERSHIP: Any member who is not a veteran and does not elect to be classified as a Class B member continues to contribute at the rate of contribution applicable to his age at membership which was payable prior to the establishment of the integrated system, except that if he became a member subsequent to June 30, 1946 he will pay after January 1, 1955 at the rate of contribution in effect on June 30, 1946 applicable to his age at membership.

Prior to July 1, 1979 different contribution rates were established for men and women. Effective on that date members contribute at rates intermediate between the rates previously applicable to male and female members, computed to provide the same present value of future employee contributions at each entry age on the basis of the membership as constituted on the effective date.

Prior to January 1, 1960 the Social Security contributions on compensation upon which the member's contributions were based were deducted from the contributions required to be paid to the retirement system. On and after January 1, 1960 and prior to January 1, 1967 the member's required contributions were reduced to the extent of the Social Security rate of contribution in effect on December 31, 1959. Effective January 1, 1967 and prior to July 1, 1994 the member's required contributions were reduced to 2% of the compensation subject to Social Security tax. Effective July 1, 1995, this reduction has been eliminated.

Members enrolled in the retirement system on or after July 1, 1994 shall contribute 5% of compensation to the system. Members enrolled in the retirement system prior to July 1, 1994 shall contribute 5% of compensation to the system effective July 1, 1995 unless they previously had contributed less than 6% in which case they shall contribute 4% of compensation beginning July 1, 1995 and 5% of compensation beginning July 1, 1996.

b. ***State and Other Sponsor Contributions:***

(1) NORMAL COST CONTRIBUTIONS: The State pays annually a Normal Cost contribution determined each year on the basis of the annual valuation as the percentage of compensation of members (exclusive of the compensation of veteran members employed as teachers on January 1, 1955) which will support the allowances with pension adjustments and death benefits which are not met by future Accrued

SUMMARY OF PRINCIPAL PLAN PROVISIONS, *Continued*

Liability contributions and the funds in hand available for such benefits. The Normal Cost contributions for active members' pension adjustments are being phased-in. Certain State Colleges will be allocated a portion of the Normal Cost.

(2) ACCRUED LIABILITY CONTRIBUTIONS: The State pays a contribution to cover any Unfunded Accrued Liability. There is currently no Unfunded Accrued Liability. Experience gains or losses are recognized in future Accrued Liability contributions. Certain State Colleges will be allocated a portion of the Accrued Liability Contribution.

(3) EARLY RETIREMENT INCENTIVE CONTRIBUTIONS: The State and Local employers which elected to participate in the early retirement incentive programs authorized by Chapters 137, 229 and 231, P.L. 1991 and Chapters 48, 138 and 163, P.L. 1993 pay contributions to cover the additional liability for these programs over amortization periods chosen by the employer or the amortization period for the Unfunded Accrued Liability of the system.

(4) CHAPTER 113 CONTRIBUTIONS: Certain School Districts have elected to exempt a select group of employees from the compensation limit under IRC Section 401(A)(17) incorporated under Chapter 113. These school districts will pay the full cost of the exemption at a member's date of retirement.

16. CHANGES IN PLAN PROVISIONS SINCE PRIOR VALUATION

Chapter 133, P.L. 2001 changed the denominators in the benefit formula from 70 for Class A members to 64 and 60 for Class B members to 55. The age eligibility for Chapter 97 benefits for veterans was reduced from 60 to 55.

BUCK CONSULTANTS

July 24, 2002

Board of Trustees
Police and Firemen's Retirement System
of New Jersey

Re: Actuary's Certification Letter

Members of the Board:

An actuarial valuation of the Police and Firemen's Retirement System is performed annually to measure the ongoing costs of the System (with required contributions determined separately for the State and Local employers) and the progress towards the funding goals of the System over time. In general, the financial goals of the Police and Firemen's Retirement System are a pattern of contributions which is relatively stable over time as a percentage of pay for a stationary employee population.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution for basic allowances and cost of living adjustments (COLA's) is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. The unfunded accrued liability contribution for basic allowances and COLA's is determined as a level percentage of pay required to amortize the unfunded accrued liability in annual payments increasing by 5.95% per year and paid annually for a specific time as determined by the State Treasurer. (This period was determined to be 40 years as of July 1, 1992.)

The provisions of Chapter 115, P.L. 1997 of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds and to use any excess valuation assets to reduce required normal contributions payable by the State and Local employers by up to 100% of excess assets through the July 1, 2000 valuation, and on a declining maximum percentage of excess assets basis thereafter (84% as of the July 1, 2001 valuation).

Also, the provisions of Chapter 428, P.L. 1999 and Chapter 8, P.L. 2000 made significant changes to the benefit provisions and funding of the System retroactive to the July 1, 1998 valuation. The funding changes included a revision to the actuarial value of assets used for the July 1, 1998 valuation, a change in the definition of excess valuation assets (to cover the expected additional normal cost contributions attributable to the legislation) and elimination of the basic accrued liability contribution payable by the Municipalities and Local Groups for the valuation period ending June 30, 1997.

The July 1, 2001 valuation incorporates the provisions of Chapter 201, P.L. 2001 which made changes to Chapter 247, P.L. 1993 with respect to the benefits payable to members who transferred from the Public Employees' Retirement System of New Jersey (PERS) to the Police and Firemen's Retirement System of New Jersey (PFRS) as a result of the Chapter 247 legislation. Each member or retiree who transferred from PERS as a result of Chapter 247 will receive full credit under PFRS for their PERS transferred service. Each member or retiree who transferred from PERS to PFRS as a result of Chapter 247 and who paid the cost for full PFRS service credit will be reimbursed for that payment. The increase in the unfunded accrued liability due to the preceding benefit improvements will be fully funded by the recognition of additional market value surplus in the determination of the actuarial value of assets for the July 1, 1999 valuation.

A contribution was required for the fiscal year beginning July 1, 2003 in the amount of $378,060,570. The required normal cost contribution is $377,852,435 and the unfunded accrued liability contribution is $208,135.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

As stipulated in the statutes, an actuarial investigation of the mortality, service and compensation experience of the members and beneficiaries of the Police and Firemen's Retirement System is made once in every three-year period. The contributions for the fiscal year beginning July 1, 2003 were based on the projected unit credit funding method, a salary scale assumption which averages 5.95% per year and an interest rate of 8.75% (which was used in accordance with the directive of the State Treasurer issued in 1992 under the terms of Chapter 62, P.L. 1992). The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period.

The assumptions used to prepare the information required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB) were the same as those used for funding purposes except that, in the determination of the Annual Required Contribution (ARC), excess assets were not used to offset required normal cost contributions.

In our opinion, the attached schedules of valuation results fairly represent the status of the Police and Firemen's Retirement System and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants, Inc.:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added to and Removed from Rolls
- Schedule of Active Member Valuation Data
- Solvency Test
- Analysis of Past Financial Experience
  Reconciliation of Employer Contribution Rates
- Brief Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

Respectfully submitted,

Buck Consultants, Inc.

Lisa Witlen

Lisa A. Witlen, M.A.A.A., A.S.A., E.A., F.C.A.
Principal & Consulting Actuary

George M. Lovaglio

George M. Lovaglio, M.A.A.A., A.S.A., E.A., F.C.A.
Principal & Consulting Actuary

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Section 13, Subsection (13) of Chapter 255, P.L. 1944 as amended by Chapter 157, P.L. 1972 of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the mortality, service and compensation experience of the members and beneficiaries of the Police and Firemen's Retirement System to assure that the tables used for determining expected liabilities are consistent with recent experience.

There have been changes in the actuarial assumptions and methods since the previous valuation. The assumptions used for the July 1, 2001 actuarial valuation of the Police and Firemen's Retirement System were based on the results of the experience study which covered the period from July 1, 1995 to June 30, 1998.

An outline of the actuarial assumptions and methods used for the July 1, 2000 valuation is as follows:

Valuation Interest Rate: 8-3/4% per annum, compounded annually.

Salary Increases: 5.95% per year.

Separation from Service: Representative values of the assumed annual rates of separation are as follows:

ANNUAL RATES OF						
	SELECT WITHDRAWAL					ULTIMATE WITHDRAWAL
AGE	UP TO THE 1ST YEAR	2ND YEAR	3RD YEAR	4TH YEAR	5 TO 9 YEARS	AFTER 9 YEARS
25	3.15%	2.25%	1.85%	2.32%	1.98%	0.00%
30	3.15	2.25	1.85	2.32	1.76	1.00
35	3.15	2.25	1.85	2.32	1.30	0.60
40	3.15	2.25	1.85	2.32	0.83	0.50
45	3.15	2.25	1.85	2.32	0.59	0.35
50	3.15	2.25	1.85	2.32	0.53	0.30
55	0.00	0.00	0.00	0.00	0.00	0.00

ANNUAL RATES OF								
	DEATH		DISABILITY		SERVICE RETIREMENT — LENGTH OF SERVICE			
AGE	ORDINARY	ACCIDENTAL	ORDINARY	ACCIDENTAL	LESS THAN 21 YEARS*	21 TO 24 YEARS	25 YEARS	26 OR MORE YEARS
25	.050%	.006%	.100%	.029%	0.00%	0.00%	41.00%	15.40%
30	.065	.006	.150	.071	0.00	0.00	41.00	15.40
35	.065	.008	.250	.122	0.00	0.00	41.00	15.40
40	.120	.008	.350	.153	0.00	0.00	41.00	15.40
45	.180	.009	.380	.151	0.00	0.00	41.00	15.40
50	.250	.009	.330	.119	0.00	0.00	41.00	15.40
55	.300	.014	.500	.107	5.00	0.00	41.00	15.40
60	.600	.013	.200	.107	5.00	0.00	41.00	20.71
64	.600	.008	.800	.107	50.00	0.00	41.00	31.50
65 and over	0.000	0.000	0.000	0.000	100.00	100.00	100.00	100.00

**5.00% retirement assumption for any member as of January 18, 2000 upon completion of 20 years of service up to age 54.*

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS, *Continued*

DEATHS AFTER RETIREMENT: Representative values of the assumed annual rates of mortality are as follows:

	SERVICE RETIREMENTS		BENEFICIARIES			
AGE	MEN	WOMEN	MEN	WOMEN	AGE	DISABILITY RETIREMENTS
55	0.90%	0.254%	0.90%	0.699%	35	1.494%
60	1.42	0.424	1.42	1.027	40	1.584
65	2.17	0.706	2.17	1.563	45	1.674
70	2.75	1.238	2.75	1.981	50	1.761
75	4.46	2.399	4.46	2.399	55	2.016
80	7.41	4.294	7.41	4.294	60	2.376
85	11.48	6.992	11.48	6.992	65	2.736

Marriage: Husbands are assumed to be 3 years older than wives. Among the active population, 90% of participants are assumed married. No children are assumed. Neither the percentage married nor the number of children assumptions are necessarily individually explicit, but they are considered reasonable, when viewed as a single combined assumption.

Valuation Method: Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains or losses are recognized in future accrued liability contributions.

COLA: Benefits are assumed to increase 2.4% each year.

Asset Valuation Method: A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period. (In accordance with Chapter 201, P.L. 2001, the July 1, 1999 asset valuation method was changed to recognize additional market value surplus to fully fund the additional unfunded accrued liability due to the Chapter 201 benefit increase. Beginning with the July 1, 2000 valuation, the five year average of market value with mark-up was continued.)

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Police and Firemen's Retirement System

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

STATE

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER*	ANNUAL** ALLOWANCE		
7/1/01	256	$7,604,419	34	$661,393	1,830	$53,224,047	16.06%	$29,084
7/1/00	216	6,208,112	42	732,185	1,608	45,858,348	16.96	28,519
7/1/99	162	4,141,868	35	494,862	1,434	39,207,781	11.24	27,342
7/1/98	124	3,436,860	15	376,632	1,307	35,246,724	11.07	26,968
7/1/97	116	3,185,767	24	567,767	1,198	31,732,931	9.95	26,488
7/1/96	66	3,272,657	17	442,700	1,106	28,860,539	6.43	26,095

LOCAL EMPLOYERS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER**	ANNUAL** ALLOWANCE		
7/1/01	1,618	$62,452,533	553	$12,812,463	22,489	$723,911,119	9.51%	$32,190
7/1/00	1,625	64,489,523	547	17,011,684	21,424	661,062,382	11.83	30,856
7/1/99	1,472	52,069,752	534	11,662,127	20,346	591,154,754	8.23	29,055
7/1/98	1,190	41,740,716	442	8,945,724	19,408	546,209,844	8.05	28,144
7/1/97	1,125	36,737,885	492	10,272,572	18,660	505,517,798	7.46	27,091
7/1/96	1,111	36,310,329	347	8,009,749	18,027	470,405,903	8.71	26,095

TOTAL SYSTEM

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER**	ANNUAL** ALLOWANCE		
7/1/01	1,794	$70,056,952	587	$13,473,856	24,319	$777,135,166	9.93%	$31,956
7/1/00	1,841	70,697,635	589	17,743,869	23,032	706,920,730	12.15	30,693
7/1/99	1,634	56,211,620	569	12,156,989	21,780	630,362,535	8.41	28,942
7/1/98	1,314	45,177,576	457	9,322,356	20,715	581,456,568	8.23	28,069
7/1/97	1,241	39,923,652	516	10,840,339	19,858	537,250,729	7.61	27,055
7/1/96	1,177	39,582,986	364	8,452,449	19,133	499,266,442	8.58	26,095

* *These values include beneficiaries in receipt but exclude deferred vested terminations.*

** *The benefit amounts shown are the annualized benefits as of the valuation date and are not the actual benefits paid during the fiscal year.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Police and Firemen's Retirement System

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

STATE

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	7,835	$414,643,442	$52,922	5.08%
7/1/00	7,503	377,863,772	50,362	0.99
7/1/99	7,507	374,359,999	49,868	4.11
7/1/98	7,419	355,363,473	47,899	3.36
7/1/97	6,978	323,373,137	46,342	(1.70)
7/1/96	6,513	307,042,485	47,143	2.02

LOCAL EMPLOYERS

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	35,184	$2,204,057,642	$62,644	4.59%
7/1/00	34,927	2,091,947,933	59,895	3.98
7/1/99	34,800	2,004,643,544	57,605	3.34
7/1/98	34,128	1,902,362,272	55,742	4.81
7/1/97	33,886	1,802,196,773	53,184	3.74
7/1/96	33,123	1,698,051,421	51,265	3.89

TOTAL SYSTEM

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	43,019	$2,618,701,084	$60,873	4.58%
7/1/00	42,430	2,469,811,705	58,209	3.52
7/1/99	42,307	2,379,003,543	56,232	3.48
7/1/98	41,547	2,257,725,745	54,341	4.47
7/1/97	40,864	2,125,569,910	52,016	2.82
7/1/96	39,636	2,005,093,906	50,588	3.56

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Police and Firemen's Retirement System

SOLVENCY TEST

STATE

VALUATION DATE	ACCRUED LIABILITIES FOR (1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS	NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE (1)	(2)	(3)
7/1/01	$280,381,468	$666,781,730	$918,977,193	$1,897,865,088	100.00%	100.00%	100.00%
7/1/00	259,428,152	570,067,176	837,347,578	1,796,414,245	100.00	100.00	100.00
7/1/99	240,447,593	494,266,204**	799,756,704	1,694,130,762**	100.00	100.00	100.00
7/1/98	216,800,346	442,666,832	718,267,277	1,600,924,704	100.00	100.00	100.00
7/1/97	207,114,009	407,590,268	620,254,888	1,260,128,058	100.00	100.00	100.00
7/1/96	180,260,776	351,177,812	569,217,018	1,090,376,064	100.00	100.00	98.19

LOCAL EMPLOYERS

VALUATION DATE	ACCRUED LIABILITIES FOR (1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS	NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE (1)	(2)	(3)
7/1/01	$1,574,607,783	$8,587,173,988	$5,894,664,875	$16,176,404,513	100.00%	100.00%	100.00%
7/1/00	1,475,019,276	7,881,569,163	5,568,111,273	15,809,047,487	100.00	100.00	100.00
7/1/99	1,393,167,721	7,134,170,599**	5,367,613,297	14,384,636,223**	100.00	100.00	100.00
7/1/98	1,295,253,008	6,547,860,747	5,038,728,612	13,137,204,047***	100.00	100.00	100.00
7/1/97	1,191,385,480	6,009,979,903	4,544,804,369	10,854,173,290	100.00	100.00	80.37
7/1/96	1,103,281,282	5,723,944,228	4,148,483,951	9,956,714,344	100.00	100.00	75.44

TOTAL SYSTEM

VALUATION DATE	ACCRUED LIABILITIES FOR (1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) CURRENT INACTIVE MEMBERS	NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE (1)	(2)	(3)
7/1/01	$1,854,989,251	$9,253,955,718	$6,813,642,068	$18,074,269,601	100.00%	100.00%	100.00%
7/1/00	1,734,447,428	8,451,636,339	6,405,458,851	17,605,461,732	100.00	100.00	100.00
7/1/99	1,633,615,314	7,628,436,803**	6,167,370,001	16,078,766,985**	100.00	100.00	100.00
7/1/98	1,512,053,354	6,990,527,579	5,756,995,889	14,738,128,751***	100.00	100.00	100.00
7/1/97	1,410,676,338	6,429,747,020	5,140,705,559	12,114,301,348	100.00	100.00	83.14
7/1/96	1,283,542,058	6,075,122,040	4,717,700,969	11,047,090,408	100.00	100.00	78.18

* *Actuarial Value including receivable amounts.*
** *Revised amounts reflecting the retroactive effect of Chapter 4, P.L. 2001.*
*** *Revised amounts reflecting the retroactive effect of Chapter 44, P.L. 2001.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Police and Firemen's Retirement System

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF EMPLOYER CONTRIBUTION RATES

STATE

VALUATION YEAR	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	JULY 1, 1998	JULY 1, 1997	JULY 1, 1996
Effective Prior Year Contribution Rate	30.43%	29.51%	27.34%	28.96%	26.06%	26.95%
Net Change Due to:						
Current New Entrants	0.02	0.07	0.44	0.13	0.38	0.13
Excess Salary Increases	0.01	0.03	(0.04)	0.02	0.27	0.08
Assumption/Method Changes	0.00	0.00	1.15	1.67	1.63	0.63
COLA	(0.10)	(0.09)	(0.10)	(0.63)	(0.09)	(0.68))
Active and Other Experience	0.57	0.69	1.34	(0.58)	0.83	(0.12)
Retiree Experience	0.10	0.55	0.11	(0.68)	0.58	0.10
Investment Loss/(Gain)	0.60	(0.33)	(0.73)	(1.55)	(0.70)	(1.03)
Net Effect of Chapter 115*	(1.96)	(28.65)	(27.79)	(27.16)	(9.43)	(17.60)
Net Effect of Chapter 8**	(1.77)	(1.78)	(1.72)	(0.18)	0.00	0.00
Actual Contribution Rate	27.90%	0.00%	0.00%	0.00%	19.53%	8.46%

LOCAL EMPLOYERS

VALUATION YEAR	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	JULY 1, 1998	JULY 1, 1997	JULY 1, 1996
Effective Prior Year Contribution Rate	13.82%	13.61%	13.26%	14.59%	15.28%	14.23%
Net Change Due to:						
Current New Entrants	0.01	0.05	0.18	0.15	0.48	0.59
Excess Salary Increases	0.02	0.03	0.34	0.04	0.17	0.03
Assumption/Method Changes	0.00	0.00	0.53	0.85	0.90	0.97
COLA	(0.10)	(0.09)	(0.25)	(0.44)	(0.56)	(0.03)
Active and Other Experience	0.14	0.47	(0.35)	(0.66)	(0.63)	(0.13)
Retiree Experience	0.23	0.59	0.07	(0.24)	(0.13)	0.04
Investment Loss/(Gain)	0.58	(0.85)	(1.58)	(1.03)	(0.92)	(0.42)
Net Effect of Chapter 115*	(0.89)	(12.31)	(7.24)	0.00	0.00	0.00
Net Effect of Chapter 8**	(1.47)	(1.48)	(4.95)	(1.19)	0.00	0.00
Net Effect of Chapter 44***	0.00	0.00	0.00	(8.02)	0.00	0.00
Actual Contribution Rate#	12.34%	0.02%	0.01%	4.05%	14.59%	15.28%

* *Net effect of reduction in normal cost contribution due to use of excess assets and elimination of accrued liability contribution due to surplus position.*

** *Net effect of the change in the calculation of the July 1, 1998 actuarial value of the System assets and elimination of the Local Employers' accrued liability contribution for the period ending June 30, 1997.*

*** *Net effect of the $150,000,000 reduction in the normal contribution due to be paid by local government employers in April of 2001.*

\# *Includes rates attributable to Chapter 204 and Chapter 39 requirements which are billed to specific locations.*

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

ELIGIBILITY FOR MEMBERSHIP

Enrollment is restricted to eligible policemen and firemen who are permanent and full-time and who pass the physical and mental fitness requirements. The maximum enrollment age is 35.

1. DEFINITIONS

Plan Year: The 12-month period beginning on July 1 and ending on June 30.

Credited Service: A year of service is credited for each year an employee is a Member of the Retirement System plus service, if any, covered by a prior service liability.

Average Final Compensation (AFC): The average annual compensation for the three consecutive years of Service immediately preceding retirement or the highest three consecutive fiscal years of Membership Service.

Compensation: Base salary upon which contributions by a Member to the Annuity Savings Fund were based in the last year of Service. For Accidental Death, benefits are computed at the annual rate of salary.

Final Compensation (FC): Annual compensation received by the member in the last 12 months of Credited Service preceding his retirement.

Accumulated Deductions: The sum of all amounts deducted from the compensation of a Member or contributed by him or on his behalf without interest.

2. BENEFITS

Service Retirement: Eligibility means age 55 or 20 years of credited service for an employee who is a member of the Retirement System as of January 18, 2000 and age 55 for an employee who became a member of the Retirement System after January 18, 2000; mandatory at age 65. Benefit is an annual retirement allowance equal to a member annuity plus an employer pension which together equals the greater of:

(i) 1/60th of FC for each year of Credited Service; or

(ii) 2% of FC multiplied by years of Credited Service up to 30 plus 1% of FC multiplied by years of Service over 30. (Prior to January 18, 2000, this benefit was based on AFC rather than FC. However, Policy Memorandum 4-2000, which interpreted the provisions of Chapter 428, P.L. 1999, authorized the change in the salary basis).

(iii) 50% of FC if the member has 20 or more years of Credited Service.

Chapter 428 also requires that, in addition to the 50% of FC benefit, any member as of January 18, 2000 who will have 20 or more years of Credited Service and is required to retire upon attaining age 65, shall receive an additional benefit equal to 3% of FC for each year of Credited Service over 20 years but not over 25 years.

Special Retirement: After completion of 25 years of Credited Service. The annual retirement benefit is equal to a member annuity plus an employer pension which together equal 65% of FC plus 1% of FC for each year of Credited Service over 25. There is a maximum benefit of 70% of FC except for those members with 30 or more years of Credited Service on June 30, 1979.

Vested Termination:

a. Eligible upon termination of service prior to age 55 and prior to 10 years of Service. The benefit equals a refund of Accumulated Deductions less any outstanding loans.

b. Eligible upon termination of service prior to age 55 and after 10 years of Service (but less than 20 years). The benefit is a deferred retirement benefit, commencing at age 55, equal to

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

a member annuity plus an employer pension which together provide a retirement allowance equal to 2% of FC multiplied by years of Credited Service, up to 30 plus 1% of FC multiplied by years of credited service over 30.

Death Benefits:

ORDINARY DEATH BENEFIT - LUMP SUM

(1) If a member dies prior to retirement, the benefit payable is as follows:

A lump sum amount equal to 3-1/2 times FC payable to the member's beneficiary.

(2) After retirement but prior to age 55, the benefit is as follows:

(i) For death while a Disabled Retiree the benefit is equal to 3-1/2 times Compensation.

(ii) For death while a Deferred Retiree the benefit is equal to his Accumulated Deductions.

(iii) For death while a Retiree who has completed 20 years of Service, the benefit is equal to 1/2 times FC.

(3) After retirement and after age 55, the benefit payable is equal to 1/2 times Compensation. (Note: If a Member is not disabled, 10 years of Credited Service is required for Members enrolling after July 1, 1971.)

ORDINARY DEATH BENEFIT - SURVIVOR ANNUITY

(1) If a member dies prior to retirement, the benefit payable to a widow (widower) is equal to 50% of FC (20% of FC payable to one child, 35% of FC payable to two children or 50% of FC payable to three or more children if there is no surviving widow or widower or if the widow or widower dies or remarries or 25% of FC payable to one parent or 40% of FC payable to two parents if no surviving widow, widower, child or parent, the benefit payable to a beneficiary is the aggregate Accumulated Contributions at the time of death).

(2) For any member who retired after December 18, 1967, the benefit payable to widow (widower) is equal to 50% of FC plus 15% of FC for one child and 25% of FC for two or more children.

If no spouse, or spouse remarries, the benefit is equal to 20% of FC for one child, 35% for two children, and 50% for three or more children.

There is also a minimum benefit payable to widows (widowers) of $4,500 a year.

(3) For any member who retired with an Accidental Disability Benefit, the benefit payable is equal to $4,500 a year to the widow (widower). If there is no widow (widower) the benefit payable is $600 a year for 1 child, $960 a year for 2 children, and $1,500 a year for 3 or more children. The benefit for children is payable until age 18.

ACCIDENTAL DEATH BENEFIT

A death while active resulting from injuries received from an accident during performance of duty is eligible for a lump sum equal to the Accumulated Deductions plus 3-1/2 times Compensation plus an annuity benefit payable is as follows:

(i) The benefit to a widow or widower is equal to 70% of Compensation.

(ii) The benefit, when there is no spouse, or spouse is remarried, is equal to 20% of Compensation for one child, 35% for two children, 50% for three or more children. The benefit is payable while the children are under age 18, or until age 24 if they are full-time students, or it is payable for life if they are disabled.

(iii) The benefit, when there is no spouse or chil-

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

dren, is equal to 25% of Compensation for one parent and 40% for two parents.

(iv) The benefit, when there is no relation as stated above, is equal to the Accumulated Deductions and is payable to a beneficiary or to the Member's estate. This is also the minimum benefit payable under (i), (ii) and (iii).

Disability Benefits:

ORDINARY DISABILITY RETIREMENT

A Member is eligible for Ordinary Disability Retirement if he (she) has 4 years of Service and is totally and permanently incapacitated from the performance of usual or available duties. The benefit is equal to the greater of:

(i) 1-1/2% of FC times the number of years of Credited Service; or

(ii) 40% of FC.

In addition, a member who has at least 20 years but less than 25 years of Credited Service and who is required to retire upon application by the employer on or after January 18, 2000 shall receive a benefit equal to a member annuity plus an employer pension which together provide a total retirement allowance equal to 50% of FC plus 3% of FC multiplied by the number of years of Credited Service over 20 but not over 25.

ACCIDENTAL DISABILITY RETIREMENT

A Member is eligible upon total and permanent incapacitation from the performance of usual or available duties as a result of injury during the performance of regular duties. The benefit payable is equal to a Member annuity plus an employer pension which together equals 2/3 of the Compensation at date of injury.

SPECIAL DISABILITY RETIREMENT

A member is eligible for Special Disability Retirement if he (she) has 5 years of Credited Service, is under age 55, and has received a heart transplant. The benefit payable is equal to a Member annuity plus an employer pension which together equals 50% of FC.

3. MEMBER CONTRIBUTIONS

Each member contributes 8-1/2% of Compensation.

BUCK CONSULTANTS

July 24, 2002

Board of Trustees
State Police Retirement System
of New Jersey

Re: Actuary's Certification Letter

Members of the Board:

An actuarial valuation of the State Police Retirement System is performed annually to measure the ongoing costs of the System and the progress towards the funding goals of the System over time. In general, the financial goals of the State Police Retirement System are a pattern of contributions which is relatively stable over time as a percentage of pay for a stationary employee population.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution for basic allowances and cost of living adjustments (COLA's) is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. The unfunded accrued liability contribution for basic allowances and COLA's is determined as a level percentage of pay required to amortize the unfunded accrued liability in annual payments increasing by 5.95% per year and paid annually for a specific time as determined by the State Treasurer.

The provisions of Chapter 115, P.L. 1997 of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds and to use any excess valuation assets to reduce required normal contributions payable by the System up to 100% of excess assets through the July 1, 2001 valuation, and on a declining maximum percentage of excess assets basis thereafter.

No contributions were required for the fiscal year beginning July 1, 2002. There were no required unfunded accrued liability payments due to the fact that a net surplus existed as of July 1, 2001 and the required normal contributions were reduced to $0 due to the recognition of a portion of excess assets.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

As stipulated in the statutes, an actuarial investigation of the mortality, service and compensation experience of the members and beneficiaries of the State Police Retirement System is made once in every three-year period. The contributions for the fiscal year beginning July 1, 2002 were calculated using the revised actuarial assumptions that were determined from the July 1, 1996 to June 30, 1999 Experience Study, projected unit credit funding, a salary scale assumption which averages 5.95% per year and an interest rate of 8.75% (which was used in accordance with the directive of the State Treasurer as enacted by Senate Bill 540 in 1992). The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period.

The assumptions used to prepare the information required by Statements No. 25 and No. 27 of the Governmental

Accounting Standards Board (GASB) were the same as those used for funding purposes.

In our opinion, the attached schedules of valuation results fairly represent the status of the State Police Retirement System and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants, Inc.:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added To and Removed from Rolls
- Schedule of Active Member Valuation Data
- Solvency Test
- Analysis of Past Financial Experience
  Reconciliation of Employer Contribution Rates
- Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

Respectfully submitted,

Buck Consultants, Inc.

Lisa Witlen

Lisa A. Witlen, M.A.A.A., A.S.A., E.A., F.C.A.
Principal & Consulting Actuary

George M. Lovaglio

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Principal & Consulting Actuary

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
State Police Retirement System

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Section 32 of Chapter 89, P.L. 1965 of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the mortality, service and compensation experience of the members and beneficiaries of the State Police Retirement System to assure that the tables used for determining expected liabilities are consistent with recent experience.

The assumptions used for the July 1, 2001 actuarial valuation of the State Police Retirement System were based on the results of the experience study which covered the period from July 1, 1996 to June 30, 1999.

There were no changes in actuarial assumptions and methods since the previous valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2001 valuation is as follows:

Valuation Interest Rate: 8.75% per annum, compounded annually.

COLA: 4.0% per annum, compounded annually. The COLA is 60% of the cumulative increase.

Salary Increases: Salaries are assumed to increase by 5.95% per year.

Termination: Withdrawal rates vary by length of service. Illustrative rates are shown below:

	LIVES PER THOUSAND	
AGE	LESS THAN 5 YEARS OF SERVICE	FIVE TO NINETEEN YEARS OF SERVICE
25	8.3	4.0
30	11.0	4.0
35	11.0	4.0
40	11.0	4.0
45	11.0	4.0
50	11.0	4.0

Separations from Service: Representative mortality, disability and retirement rates are as follows:

	ANNUAL RATES OF*			
AGE	ORDINARY DEATH	ACCIDENTAL DEATH	ORDINARY DISABILITY	ACCIDENTAL DISABILITY
25	0.6	.4	0.6	0.3
30	0.7	.5	0.9	0.4
35	1.0	.5	1.2	0.5
40	1.4	.5	1.8	0.7
45	1.8	.6	3.1	1.3
50	2.5	.9	5.4	2.2

**Per one thousand lives.*

Marriage: Husbands are assumed to be 3 years older than wives. Among the active population, 83.3% of participants are assumed married. No children are assumed. Neither the percentage married or number of children assumptions are individually explicit but they are considered as a single combined assumption.

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS, *Continued*

Valuation Method: Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions.

Asset Valuation Method: A five year average of market values with write-up. (This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period).

Health Insurance Benefits: Retiree Health Insurance benefits are funded by the State on a pay-as-you-go basis and are not included in the actuarial valuation.

Deaths After Retirement: For Healthy Inactive Mortality the 1983 Group Annuity Mortality Table for males and females is used. Illustrative rates of mortality for retired members are shown below:

	LIVES PER THOUSAND				
	RETIRED MEMBERS		BENFICIARIES OF DECEASED MEMBERS		DISABLED MALES AND FEMALES
AGE	MALES	FEMALES	MALES	FEMALES	
55	6.1	2.5	6.1	2.5	9.6
60	9.2	4.2	9.2	4.2	13.6
65	15.6	7.1	15.6	7.1	19.8
70	27.5	12.4	27.5	12.4	29.5
75	44.6	24.0	44.6	28.8	44.5
80	74.1	42.9	74.1	51.5	67.3
85	114.8	69.9	114.8	83.9	101.1
90	166.3	111.8	166.3	134.1	149.4

Rates of Retirement: Rates of retirement vary by length of service and age (if more than 25 years of service) with 100% of those remaining at age 55 retiring at age 55. The rates are shown below:

SERVICE	LIVES PER 100
20	5
21	1
22	0
23	0
24	0
25	35
greater than 25:	
(a) through age 47	5
(b) ages 48-52	15
(c) ages 53-54	22

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN AVERAGE ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER*	ANNUAL ALLOWANCE**		
7/1/01	123	$6,007,487	31	$697,270	1,906	$69,952,007	10.25%	$36,701
7/1/00	115	5,342,514	31	836,813	1,814	63,449,663	9.23	34,978
7/1/99	103	4,572,188	38	402,070	1,730	58,086,934	7.73	33,576
7/1/98	97	3,920,472	38	901,116	1,665	53,916,816	7.53	32,382
7/1/97	124	5,402,747	18	226,182	1,606	50,142,995	13.47	31,222
7/1/96	100	4,276,950	30	299,393	1,500	44,188,587	11.44	29,459

** These values include beneficiaries in receipt but excludes deferred vested terminations.*

*** The benefit amounts shown are the annualized benefit as of the valuation date and are not the actual benefits paid during the fiscal year.*

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	2,675	$199,727,203	$74,664	3.36%
7/1/00	2,609	188,466,237	72,237	8.68
7/1/99	2,698	179,329,453	66,468	4.67
7/1/98	2,632	167,145,161	63,505	15.13
7/1/97	2,586	142,636,260	55,157	(0.29)
7/1/96	2,574	142,390,519	55,319	4.80

SOLVENCY TEST

VALUATION DATE	ACCRUED LIABILITIES FOR			NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE		
	(1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS		(1)	(2)	(3)
7/1/01	$118,427,463	$856,126,296	$652,077,897	$1,829,414,353	100.00%	100.00%	100.00%
7/1/00	112,610,765	779,919,713	620,379,327	1,752,423,441	100.00	100.00	100.00
7/1/99	106,193,262	726,980,559	635,970,327	1,600,165,104	100.00	100.00	100.00
7/1/98	99,603,112	678,442,737	591,232,119	1,458,600,992	100.00	100.00	100.00
7/1/97	90,145,221	633,274,208	548,823,022	1,322,406,703	100.00	100.00	100.00
7/1/96	83,871,571	558,336,348	545,179,114	1,260,428,705	100.00	100.00	100.00

**Actuarial value including receivable amounts.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
State Police Retirement System

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF EMPLOYER CONTRIBUTION RATES

VALUATION DATE	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	JULY 1, 1998	JULY 1, 1997	JULY 1, 1996
Effective Prior Year Contribution Rate	18.61%	21.80%	21.26%	23.20%	22.78%	30.50%
Net Change Due to:						
Current New Entrants	0.49	0.00	0.65	0.59	0.96	0.50
Excess Salary Increases	0.06	0.65	0.27	(1.10)	(1.00)	0.27
Assumption/Method Changes	N/A	(3.44)	N/A	N/A	N/A	N/A
COLA	0.00	0.00	0.00	0.00	(0.45)	
Retiree Mortality	0.00	0.00	0.00	0.00	0.00	0.10
Active and Other Experience	(0.36)	(0.40)	(0.38)	(1.43)	0.46	(2.24)
Investment Loss/(Gain)	0.00	0.00	0.00	0.00	0.00	(1.51)
Net Effect of Chapter 115*	(18.80)	(18.61)	(21.80)	(21.26)	(23.20)	(27.17)
Actual Contribution Rate	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

* *Net effect of reduction in normal cost contribution due to use of excess assets and elimination of accrued liability contribution due to surplus position.*

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

ELIGIBILITY FOR MEMBERSHIP

All members of the former State Police and Benevolent Fund: full-time commissioned officers, non-commissioned officers or troopers of the Division of State Police. Membership is a condition of employment.

1. DEFINITIONS

Plan Year: The 12-month period beginning on July 1 and ending on June 30.

Service: Service rendered while a member as described above.

Credited Service: A year is credited for each year of service as an officer or trooper in the State Police. Service with other State Retirement Systems is included in the calculation of the retirement benefit at the rate of 1% of final compensation for each year of service credit.

Compensation: Based on contractual salary, including maintenance allowance, received by the member in the last 12 months of credited service preceding retirement, termination or death. Compensation does not include individual salary adjustments granted primarily in anticipation of the retirement or for temporary or extracurricular duties beyond the ordinary work day. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)

Final Compensation: Average compensation received by member in last 12 months of credited service preceding retirement or death. Such term includes the value of the member's maintenance allowance for the same period.

Aggregate Contributions: The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf. For contribution purposes, compensation does not include overtime, bonuses, maintenance or any adjustments before retirement.

2. BENEFITS

Service Retirement: Mandatory retirement at age 55. Voluntary retirement prior to age 55 with 20 years of credited service. Benefit is an annual retirement allowance equal to the greater of (a), (b), or (c), as follows:

a. 50% of final compensation;

b. For members retiring with 25 or more years of service, 65% of final compensation, plus 1% for each year of service in excess of 25 years, to a maximum of 70% of final compensation.

c. For members as of August 29, 1985 who would not have 20 years of service by age 55, benefit as defined in (a) above. For members as of August 29, 1985 who would have 20 years of service but would not have 25 years of service at age 55, benefit as defined in (a) above plus 3% for each year of service in excess of 20 years.

Vested Termination: Termination of service prior to age 55. Benefit for 10 to 20 years of Service - Refund of aggregate contributions, or a deferred life annuity beginning at age 55 equal to 2% of final compensation for each year of service up to 20 years.

Ordinary Death:

BEFORE RETIREMENT

Death of an active member of the plan. Benefit is equal to:

a. Lump sum payment equal to 3-1/2 times final compensation, plus

b. Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 20%, 35% or 50% of final compensation payable to one, two or

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

three dependent children. If there is no surviving spouse (or dependent children), 25% or 40% of final compensation to one or two dependent parents.

Minimum benefit: Aggregate contributions.

AFTER RETIREMENT

Death of a retired member of the plan. The benefit is equal to:

a. Lump sum of 50% of final compensation, plus
b. Spousal life annuity of 50% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 20%, 35% or 50% of final compensation payable to one, two or three dependent children, respectively.

Accidental Death: Death of an active member of the plan resulting during performance of duties. Benefit is equal to:

a. Lump sum payment equal to 3-1/2 times final compensation, plus
b. Spousal life annuity of 70% of final compensation payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 20%, 35% or 50% of final compensation payable to one, two, or three dependent children, respectively. If there is no surviving spouse (or dependent children), 25% or 40% of final compensation to one or two dependent parents, respectively.

Ordinary Disability Retirement: Mentally or physically incapacitated for the performance of his usual duty and of any other available duty in the Division of State Police and such incapacity is likely to be permanent.

a. The benefit for members with less than four years of service is a refund of the member's aggregate contributions.
b. For members with four but less than twenty years of service, the benefit is an immediate life annuity equal to 40% of final compensation plus 1-1/2% of final compensation for years of creditable service in excess of 26-2/3.
c. For members with 20 but less than 25 years of service, the benefit is 50% of the member's final compensation plus 3% of final compensation for each year of service in excess of 20 years, to a maximum of 65% of final compensation.

   For death following disability retirement, a lump sum equal to 3-1/2 times final compensation if death occurs prior to age 55 or 1/2 of final compensation after age 55.

Accidental Disability Retirement: Totally and permanently disabled as a direct result of a traumatic event occurring during and as a result of his regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of final compensation. Upon death after disability retirement, lump sum benefit of 3-1/2 times final compensation if death occurs before 55 and 1/2 times final compensation if death occurs after 55.

Loan Provision: Eligible if an active member of the State Police Retirement System with at least 3 years of contributory service. If eligible, a member may borrow an amount which is greater than $50, but not more than 50% of aggregate contributions. The loan accrues interest at 4% per annum.

BUCK CONSULTANTS

July 24, 2002

State House Commission
Judicial Retirement System
of New Jersey

Re: Actuary's Certification Letter

Members of the Commission:

An actuarial valuation of the Judicial Retirement System is performed annually to measure the ongoing costs of the System and the progress towards the funding goals of the System over time. In general, the financial goals of the Judicial Retirement System are a pattern of contributions which is relatively stable over time as a percentage of pay for a stationary employee population.

In accordance with the New Jersey statutes, employers are required to make two contributions to the System, a normal contribution and an accrued liability contribution. The normal contribution for basic allowances and cost of living adjustments (COLA's) is defined under the Projected Unit Credit funding method as the present value of the benefits accruing during the current year. The unfunded accrued liability contribution for basic allowances and COLA's is determined as a level percentage of pay required to amortize the unfunded accrued liability in annual payments increasing by 5.95% per year and paid annually for a specific time as determined by the State Treasurer.

The provisions of Chapter 115, P.L. 1997 of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds and to use any excess valuation assets to reduce required normal contributions payable by the System up to 100% of excess assets through the July 1, 2001 valuation, and on a declining maximum percentage of excess assets basis thereafter.

A required contribution of $8,467,287 was required for the fiscal year beginning July 1, 2002. There was no required unfunded accrued liability payment due to the fact that a net surplus existed as of July 1, 2001 and the required normal contribution was reduced to $8,467,287 due to the recognition of a portion of excess assets.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

As stipulated in the statutes, an actuarial investigation of the mortality, experience of the members and beneficiaries of the Judicial Retirement System is made once in every three-year period. The contributions for the fiscal year beginning July 1, 2002 were calculated using the revised actuarial assumptions that were determined from the July 1, 1996—June 30, 1999 Experience Study, projected unit credit funding method, a salary scale assumption which averages 5.95% per year and an interest rate of 8.75% (which was used in accordance with the directive of the State Treasurer issued in 1994 under the terms of chapter 62, P.L. 1994). The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period.

The assumptions used to prepare the information required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB) were the same as those used for funding purposes.

In our opinion, the attached schedules of valuation results fairly represent the status of the Judicial Retirement System and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the System.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants, Inc.:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added To and Removed from Rolls
- Schedule of Active Member Valuation Data
- Solvency Test
- Analysis of Past Financial Experience
  Reconciliation of Employer Contribution Rates
- Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

Respectfully submitted,

Buck Consultants, Inc.

Lisa Witlen

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Principal & Consulting Actuary

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Principal & Consulting Actuary

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

Section 31 of Chapter 40, P.L. 1973 of the New Jersey Statutes provides that once in every three-year period the actuary shall examine in detail the mortality, service and compensation experience of the members and beneficiaries of the Judicial Retirement System to assure that the tables used for determining expected liabilities are consistent with recent experience.

The assumptions used for the July 1, 2001 actuarial valuation of the Judicial Retirement System were based on the results of the experience study which covered the period from July 1, 1996 to June 30, 1999.

There were no changes in actuarial assumptions and methods since the previous valuation.

An outline of the actuarial assumptions and methods used for the July 1, 2001 valuation is as follows:

Valuation Interest Rate: 8.75% per annum, compounded annually.

COLA: 4.0% per annum, compounded annually. The COLA is 60% of the cumulative increase.

Salary Increases: Salaries are assumed to increase by 5.95% per year for inflation.

Disability: The assumed rate of disability varies by age, as illustrated below:

AGE	DISABILITIES PER 1,000 LIVES
30	0.22
35	0.26
40	0.33
45	0.64
50	1.14
55	1.97
60	3.26
65	4.73

Mortality: It was assumed that mortality would follow the 1983 Group Annuity Mortality Table except for retired males, male beneficiaries and disabled lives. For retired males and male beneficiaries, the 1983 Group Annuity Mortality Table for males with ages set back 3 years was used. For disabled lives, the 1983 Group Annuity Table for males with ages set forward 7 years was used for both males and females.

Retirement: It was assumed that the probability of retirement at age 65 for those judges who have 12 or more years of judicial service at age 65 is at 25% per year. In addition, retirement for members who have attained age 60 with 20 years of judicial service or attained age 65 with 15 years judicial service is at 30% at age 60, 25% at age 65 and 10% for all other ages between ages 60 and 70. At age 70, all remaining active members are assumed to retire.

Valuation Method: Projected Unit Credit Method. This method essentially funds the System's benefits accrued to the valuation date. Experience gains and losses are recognized in future accrued liability contributions.

Health Insurance Benefits: Retiree Health Insurance benefits are funded by the State on a pay-as-you-go basis and are not included in the actuarial valuation.

Asset Valuation Method: A five year average of market values with write-up was used. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five-year period.

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER*	ANNUAL ALLOWANCE**		
7/1/01	31	$2,395,394	23	$ 979,909	368	$22,895,875	8.33%	$62,217
7/1/00	42	2,945,702	23	1,398,405	360	21,135,815	8.99	58,711
7/1/99	23	1,481,748	25	1,219,077	341	19,392,375	1.37	56,869
7/1/98	18	1,140,084	22	765,780	343	19,129,704	3.27	55,772
7/1/97	28	1,745,210	13	728,392	347	18,523,397	7.51	53,382
7/1/96	18	1,138,339	9	301,250	332	17,229,020	6.37	51,895

* *These values include beneficiaries in receipt but excludes deferred vested terminations.*

** *The benefit amounts shown are the annualized benefit as of the valuation date and are not the actual benefits paid during the fiscal year.*

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	ANNUAL COMPENSATION	AVERAGE COMPENSATION	% INCREASE IN AVERAGE COMPENSATION
7/1/01	418	$57,800,334	$138,278	3.12%
7/1/00	414	55,514,214	134,092	15.48
7/1/99	421	48,886,350	116,120	(0.01)
7/1/98	415	48,196,350	116,136	0.01
7/1/97	404	46,912,950	116,121	0.05
7/1/96	410	47,587,950	116,068	14.79

SOLVENCY TEST

VALUATION DATE	ACCRUED LIABILITIES FOR			NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE		
	(1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS		(1)	(2)	(3)
7/1/01	$9,728,331	$203,342,902	$159,688,836	$379,592,346	100.00%	100.00%	100.00%
7/1/00	8,655,005	186,540,969	155,724,371	374,486,433	100.00	100.00	100.00
7/1/99	7,963,661	161,315,303	144,594,695	352,858,160	100.00	100.00	100.00
7/1/98	6,901,748	158,135,843	140,741,626	333,437,794	100.00	100.00	100.00
7/1/97	6,217,765	153,443,468	135,489,405	317,289,094	100.00	100.00	100.00
7/1/96	5,628,754	143,071,469	134,499,511	290,545,219	100.00	100.00	100.00

**Actuarial value including receivable amounts.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Judicial Retirement System

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF EMPLOYER CONTRIBUTION RATES

VALUATION YEAR	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	JULY 1, 1998	JULY 1, 1997	JULY 1, 1996
Effective Prior Year Contribution Rate	28.24%	28.25%	28.65%	28.79%	28.39%	42.50%
Net Change Due to:						
Current New Entrants	1.26	0.94	1.31	0.92	0.49	0.10
Excess Salary Increases	(0.68)	1.22	(1.59)	(1.03)	(0.87)	.96
Assumption/Method Changes	0.00	0.28	0.00	0.00	0.00	0.00
COLA	0.00	0.00	0.00	0.00	0.00	(0.79)
Retiree Mortality	0.00	0.00	0.00	0.00	0.00	(0.23)
Active and Other Experience	(0.99)	(2.45)	(0.12)	(0.03)	0.78	(2.04)
Investment Loss/(Gain)	0.00	0.00	0.00	0.00	0.00	(2.34)
Net Effect of Chapter 115*	(13.01)	(28.24)	(28.25)	(28.65)	(28.79)	(9.77)
Actual Contribution Rate	14.82%	0.00%	0.00%	0.00%	0.00%	28.39%

** Net effect of reduction in normal cost contribution due to use of excess assets and elimination of accrued liability contribution due to surplus position.*

SUMMARY OF THE BENEFITS AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

ELIGIBILITY FOR MEMBERSHIP

Chief Justice and associate justices of the Supreme Court, judges of the Superior Court and tax courts of the State of New Jersey.

1. DEFINITIONS

Plan Year: The 12-month period beginning on July 1 and ending on June 30.

Service: A year is credited for each year of service as a public employee in the State of New Jersey. Any service, for which member did not receive annual salary of at least $500, shall be excluded.

Final Salary: Annual salary received by the member at the time of retirement or other termination of service. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code).

Accumulated Deductions: The sum of all amounts deducted from the compensation of a member or contributed by him or on his behalf.

Retirement Allowance: Pension derived from contributions of the State plus the annuity derived from employee contributions.

2. BENEFITS

Service Retirement:

a. Mandatory retirement at age 70. Voluntary retirement prior to age 70 as follows:

   (1) Age 70 and 10 years of judicial service;

   (2) Age 65 and 15 years of judicial service; or

   (3) Age 60 and 20 years of judicial service.

   Benefit is an annual retirement allowance equal to 75% of final salary

b. Age 65 while serving as a judge, 5 consecutive years of judicial service and 15 years in the aggregate of public service; or

   Age 60 while serving as a judge, 5 consecutive years of judicial service and 20 years in the aggregate of public service.

   Benefit is an annual retirement allowance equal to 50% of final salary.

c. Age 60 while serving as a judge, 5 consecutive years of judicial service and 15 years in the aggregate to public service. Benefit is an annual retirement allowance equal to 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year in excess of 25 years.

d. Age 60 while serving as a judge. Benefit is an annual retirement allowance equal to 2% of final salary for each year of judicial service up to 25 years plus 1% for each year in excess of 25 years.

Early Retirement: Prior to age 60 while serving as a judge, 5 consecutive years of judicial service and 25 or more years in the aggregate of public service. Benefit is an annual retirement allowance equal to 2% of final salary for each year of public service up to 25 years plus 1% of final salary for each year of public service in excess of 25 years, actuarially reduced for commencement prior to age 60.

Vested Termination: Termination of service prior to age 60, with 5 consecutive years of judicial service and 10 years in the aggregate of public service. Benefit is a refund of accumulated deductions, or a deferred life annuity beginning at age 60 equal to 2% of final salary for each year of public service up to 25 years, plus 1% for service in excess of 25 years.

SUMMARY OF THE BENEFITS AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

Death Benefits:

BEFORE RETIREMENT: Death of an active member of the plan. Benefit is equal to:

a. Lump sum payment equal to 1-1/2 times final salary, plus

b. Spousal life annuity of 25% of final salary plus 10% (15%) to one (two or more) surviving children payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of final salary payable to one (two, three or more) dependent child (children). If there is no surviving spouse (or dependent children), 20% or 30% of final salary to one or two dependent parents.

AFTER RETIREMENT: Death of a retired member of the plan. Benefit is equal to:

a. Lump sum of 25% of final salary for a member retired under normal or early retirement. If a member were receiving a disability benefit, a lump sum 1-1/2 times final salary if death occurred before the member attained age 60 and ¼ times final salary if death occurred after age 60.

b. Spousal life annuity of 25% of final salary plus 10% (15%) to one (two or more) surviving children payable until spouse's death or remarriage. If there is no surviving spouse, or upon death or remarriage, a total of 15% (20%, 30%) of final salary payable to one (two, three or more) dependent child (children).

Disability Retirement: Physically or otherwise incapacitated for a full and efficient service to State in his judicial capacity and such incapacity is likely to be permanent. Benefit is an annual retirement allowance of 75% of final salary.

3. MEMBER CONTRIBUTIONS

Any member enrolled prior to January 1, 1996 contributes 3% of the difference between current salary and salary for that position on January 18, 1982. Members enrolled on and after January 1, 1996 contribute 3% of their full salary.

BUCK CONSULTANTS

July 24, 2002

Commission
Consolidated Police and Firemen's Pension Fund
of New Jersey

Re: Actuary's Certification Letter

Members of the Commission:

An actuarial valuation of the Consolidated Police and Firemen's Pension Fund is performed annually to measure the ongoing costs of the Fund and the progress towards the funding goals of the Fund over time. Since the Retirement System is closed to new entrants and there are no active participants, the financial goals of the Consolidated Police and Firemen's Pension Fund are to ensure that the combination of future State appropriations and current Trust assets, both projected forward with expected investment earnings, are sufficient to provide for all future benefit payments.

The unfunded accrued liability for basic allowances was initially determined as of June 30, 1990 and was to be amortized over a 9 year period. However, the provisions of Chapter 115, P.L. 1997 of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds.

A contribution of $2,713,914 was required for the fiscal year beginning July 1, 2002. The required normal cost contribution is $0 and the unfunded accrued liability contribution is $2,713,914. As noted above, the latest unfunded accrued liability payment schedule required the amortization of any plan gains or losses over the remainder of the 9 year period that began on June 30, 1991. Without additional guidance, we have assumed the immediate payment of any unfunded accrued liability.

The contribution requirement for the fiscal year beginning July 1, 2002 was based on the method described above using an interest rate of 8.75% per annum and reflects the provisions of Chapter 4, P.L. 2001 which provided for an increase in the pension allowance payable to certain retired members of the System. The asset valuation method used was a five-year average of market values with write-up. This method takes into account appreciation (depreciation) in investments in order to smooth asset values by averaging the excess of the actual over the expected income, on a market value basis, over a five year period.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

The assumptions used to prepare the information required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB) were the same as those used for funding purposes.

In our opinion, the attached schedules of valuation results fairly represent the status of the Consolidated Police and Firemen's Pension Fund and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the Fund.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants, Inc.:

- Summary of Actuarial Assumptions and Methods
- Schedule of Retired Members and Beneficiaries Added To and Removed from Rolls
- Schedule of Active Member Valuation Data
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  Reconciliation of Unfunded Accrued Liability/(Surplus)
- Summary of the Benefit and Contribution Provisions as Interpreted for Valuation Purposes

Respectfully submitted,

Buck Consultants, Inc.

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SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

An outline of the actuarial assumptions and methods used for the July 1, 2001 valuation is as follows:

Valuation Interest Rate: 8.75% per annum, compounded annually for development of costs.

Deaths After Retirement: Rates vary by age. Representative values of the assumed rates of mortality are as follows:

AGE	LIVES PER 1,000		
	SERVICE PENSIONERS	DISABILITY PENSIONERS	WIDOWS
50	6.2	12.8	2.2
55	9.9	17.4	3.3
60	15.6	24.5	5.5
65	23.9	35.7	9.6
70	30.3	53.2	16.5
75	49.1	80.2	32.4
80	81.5	121.1	56.1
85	126.3	182.0	89.2

Marriage: Males are assumed to be 4 years older than females, no assumption was made as to children.

For those participants with listed beneficiaries, the beneficiary allowance was assumed to be the greater of twice the amount contained in the record or the minimum benefit of $4,500/yr. (The information contained in the record has not been updated for the change from 25% to 50% payment to the survivor).

For those participants without listed beneficiaries, 65% were assumed to be married and the beneficiary amount was assumed to be the minimum benefit payable ($4,500/yr.).

Actuarial Method: The unfunded accrued liability was measured as of June 30, 1990 and the accrued liability contribution rate was then determined such that the unfunded accrued liability was to be amortized over a period of 9 years with contributions expected to remain constant.

In determining the unfunded accrued liability and the contribution rate, the actuarial value of assets as of June 30, 1990 was based upon 100% of the market value of system assets. For subsequent actuarial valuations, the actuarial value of assets is adjusted to reflect actual contributions and benefit payments, an assumed rate of return on the previous years' assets and current years' cash flow at an annual rate of 8.75% with an adjustment to reflect 20% of the difference between the resulting value and the actual market value of Fund assets.

In developing the unfunded accrued liability contribution rate as of June 30, 1991 and subsequent years, the contribution rate is adjusted to amortize any gains or losses over the remainder of the 9-year period. (Without additional guidance, we have assumed that the unfunded accrued liability determined as of June 30, 2001 will be amortized over 1 year.)

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE (DECREASE) IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE*		
7/1/01	20	$148,516	154	$1,035,622	1,364	$9,098,678	(7.25)%	$6,671
7/1/00	28	169,790	187	1,076,510	1,498	9,809,706	(8.46)	6,549
7/1/99	32	200,528	240	1,391,030	1,657	10,716,426	(10.00)	6,467
7/1/98	37	252,120	223	1,264,980	1,865	11,906,928	(7.84)	6,384
7/1/97	47	310,724	282	1,520,818	2,051	12,919,373	(8.56)	6,299
7/1/96	48	308,493	259	1,490,760	2,286	14,129,460	(7.37)	6,181

* *The benefit amounts shown are the annualized benefit as of the valuation date and are not the actual benefits paid during the fiscal year.*

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

There have been no active participants in the Fund since July 1, 1992.

SOLVENCY TEST

VALUATION DATE	ACCRUED LIABILITIES FOR			NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE		
	(1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS		(1)	(2)	(3)
7/1/01	$ —	$41,658,355	$ —	$ 39,162,802	N/A	94.01%	N/A
7/1/00	—	46,544,429	—	46,078,644	N/A	99.00	N/A
7/1/99	—	52,226,208	—	54,018,660	N/A	100.00	N/A
7/1/98	—	59,272,789	—	62,205,001	N/A	100.00	N/A
7/1/97	—	66,004,245	—	70,420,937	N/A	100.00	N/A
7/1/96	—	73,694,514	—	78,769,717	N/A	100.00	N/A

Actuarial value including receivable amounts.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Consolidated Police and Firemen's Pension Fund

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF UNFUNDED ACCRUED LIABILITY/(SURPLUS)

VALUATION YEAR	JULY 1 2001	JULY 1, 2000	JULY 1, 1999	JULY 1, 1998	JULY 1, 1997	JULY 1, 1996
Prior Year Unfunded/(Surplus)	$465,785	$(1,792,452)	$(2,932,212)	$(4,416,692)	$(5,075,203)	$31,695,081
Net Change Due to:						
Interest on Prior Year Unfunded/(Surplus)	40,756	(156,840)	(256,569)	(386,461)	(587,733)	(6,956,329)
Investment Loss/(Gain)	1,767,982	1,923,399	1,793,342	1,556,742	1,325,251	1,268,801
Retiree Experience	(366,931)	491,678	(397,013)	314,199	(79,007)	(356,545)
Assumption, Benefit or Method Changes	587,961*	N/A	N/A	N/A	N/A	N/A
Net Effect of Chapter 115	N/A	N/A	N/A	N/A	N/A	(30,726,211)
Actual Unfunded/(Surplus)	$2,495,553	$465,785	$(1,792,452)	$(2,932,212)	$(4,416,692)	$ (5,075,203)

* *Increase in the unfunded accrued liability due to recognition of Chapter 4, P.L. 2001.*

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Consolidated Police and Firemen's Pension Fund

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

ELIGIBILITY FOR MEMBERSHIP

Member of a municipal police department, municipal paid or part-paid fire department or county police department, or a paid or part-paid fire department of a fire district located in a township who has contributed to this pension fund; and who is not covered by the Police and Firemen's Retirement System which became effective on July 1, 1994.

Active Member: Any member who is a policeman, fireman, detective, lineman, driver of police van, fire alarm operator, or inspector of combustibles and who is subject to call for active service as such.

Employee Member: Any member who is not subject to active service or duty.

1. DEFINITIONS

Plan Year: The 12-month period beginning on July 1 and ending on June 30.

Service: Service rendered while a member as described above.

Compensation: Base salary; not including individual salary adjustments which are granted primarily in anticipation of retirement or additional remuneration for performing temporary duties beyond the regular work day. (Effective June 30, 1996 Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)

Final Compensation: Compensation received during the last 12 months of service preceding retirement or termination of service.

Average Salary: Salary averaged over the last three years prior to retirement or other termination of service.

2. BENEFITS

Service Retirement: Mandatory retirement at age 65 with 25 years of service (a municipality may retain the Chief of Police until age 70). Voluntary retirement after 25 years of service for an active member and after age 60 with 25 years of service for an employee member. Benefit is life annuity equal to 60% of final compensation, plus 1% of final compensation for years of service in excess of 25.

Death benefit:

WHILE ON DUTY: Immediate life annuity equal to 70% of average salary payable to the spouse. If there is no spouse or if the spouse dies or remarries, 20% of final compensation will be payable to one surviving child and 35% (50%) of final compensation will be payable, to two (three) surviving children. If there is no surviving spouse or child, 25% (40%) of final compensation will be payable to one (two) surviving dependent parent(s). The minimum spousal annuity is $4,500 per annum.

WHILE NOT ON DUTY AFTER RETIREMENT: Life annuity equal to 50% of the member's average salary payable to the spouse, plus 15% (25%) to one (two or more) surviving child (children). If there is no surviving spouse or if the surviving spouse dies or remarries, 20% (35%, 50%) of the member's average salary to one (two, three or more) surviving child (children). In the event that there is no surviving spouse or child, 25% (40%) of the member's average salary will be payable to one (two) dependent parent(s). The minimum spousal annuity is $4,500 per annum.

Ordinary Disability Retirement: Totally and permanently incapacitated from service for any cause other than as a direct result of a traumatic event occurring during the performance of duty. Benefit is an immediate life annuity equal to 1/2 of average salary.

Accidental Disability Retirement: Totally and permanently incapacitated as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of average salary.

3. CONTRIBUTIONS

Each member contributes 7% of his salary to the pension fund.

BUCK CONSULTANTS

July 24,2002

Board of Trustees
Prison Officers' Pension Fund
of New Jersey

Re: Actuary's Certification Letter

Members of the Board:

An actuarial valuation of the Prison Officers' Pension Fund is performed annually to measure the ongoing costs of the Fund and the progress towards the funding goals of the Fund over time. Since the retirement system is closed to new entrants and there are no active participants, the financial goals of the Prison Officers' Pension Fund are to ensure that the combination of future State appropriations and current Trust assets, both projected forward with expected investment earnings, are sufficient to provide for all future benefit payments.

The unfunded accrued liability for basic allowances was initially determined as of July 1, 1989 and was to be amortized over the 14-year period beginning July 1, 1989 and ending on July 1, 2002. However, the provisions of Chapter 115, P.L. 1997 of the Pension Security Legislation permitted the State to pay off the unfunded accrued liabilities from the proceeds of pension obligation bonds. The net effect of this legislation and plan experience was that no contributions were required for the fiscal year beginning July 1, 2002. (There were no required unfunded accrued liability payments due to the fact that a net surplus existed as of July 1, 2001.)

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

The contribution requirement for the fiscal year beginning July 1, 2002 was based on the method described above using an interest rate of 5.00%. Assets are valued at book value which is equivalent to market value.

The assumptions used to prepare the information required by Statements No. 25 and No. 27 of the Governmental Accounting Standards Board (GASB) were the same as those used for funding purposes.

In our opinion, the attached schedules of valuation results fairly represent the status of the Prison Officers' Pension Fund and present an accurate view of historical data. The underlying assumptions and methods used for both funding and GASB disclosure purposes are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the Fund.

The following supporting schedules in the Actuarial Section were prepared by Buck Consultants, Inc.:

- Summary of Actuarial Assumptions and Methods
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Respectfully submitted,

Buck Consultants, Inc.

Lisa Witlen

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STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Prison Officers' Pension Fund

SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

An outline of the actuarial assumptions and methods used for the July 1, 2001 valuation is as follows:

Valuation Interest Rate: 5.0% per annum, compounded annually.

Deaths After Retirement: Representative values of the assumed annual rates of mortality for current retiree's are as follows:

AGE	SERVICE RETIREMENT	DISABILITY RETIREMENT	WIDOWS
40	.21%	.90%	.56%
45	.34	1.10	.68
50	.56	1.42	.87
55	.90	1.93	1.18
60	1.42	2.72	1.67
65	2.17	3.97	2.43
70	2.75	5.91	3.63
75	4.46	8.91	5.50
80	7.41	13.46	8.39
85	11.48	20.22	12.80

Marriage: Husbands are assumed to be 3 years older than wives.

Valuation Method: The unfunded accrued liability (the difference between the present value of benefits and the valuation assets) was determined as of July 1, 1988. This liability is to be amortized over the 14-year period beginning July 1, 1989, and ending on July 1, 2002. Each year the amortization payments are adjusted to reflect any experience gains or losses that have occurred during the previous plan year. All gains and losses will be amortized over the remaining original amortization period.

Asset Valuation Method: Assets are valued at book value which is equivalent to market value.

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE ANNUAL ALLOWANCE
	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE	NUMBER	ANNUAL ALLOWANCE*		
7/1/01	10	$51,395	19	$147,997	249	$1,741,218	(5.26)%	$6,993
7/1/00	6	28,174	16	103,882	258	1,837,820	(3.96)	7,123
7/1/99	5	23,456	18	103,344	268	1,913,528	(4.01)	7,140
7/1/98	6	24,504	13	88,833	281	1,993,416	(3.13)	7,094
7/1/97	5	17,537	17	97,384	288	2,057,745	(3.74)	7,145
7/1/96	5	10,892	12	56,358	300	2,137,592	(2.08)	7,125

** The benefit amounts shown are the annualized benefit as of the valuation date and are not the actual benefits paid during the fiscal year.*

SCHEDULE OF ACTIVE MEMBER VALUATION DATA

There have been no active participants in the Fund since July 1, 1994.

SOLVENCY TEST

VALUATION DATE	ACCRUED LIABILITIES FOR			NET ASSETS AVAILABLE FOR BENEFITS*	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE		
	(1) AGGREGATE MEMBER CONTRIBUTIONS	(2) CURRENT RETIREES & BENEFICIARIES	(3) ACTIVE & INACTIVE MEMBERS		(1)	(2)	(3)
7/1/01	$ —	$12,994,567	$ —	$18,269,899	N/A	100.00%	N/A
7/1/00	—	14,216,588	—	18,268,489	N/A	100.00	N/A
7/1/99	—	15,292,629	—	19,137,919	N/A	100.00	N/A
7/1/98	—	16,430,313	—	20,096,072	N/A	100.00	N/A
7/1/97	—	17,479,545	—	20,977,035	N/A	100.00	N/A
7/1/96	—	18,654,334	—	21,463,481	N/A	100.00	N/A

**Market value including receivable amounts.*

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF UNFUNDED ACCRUED LIABILITY (SURPLUS)

VALUATION YEAR	JULY 1, 2001	JULY 1, 2000	JULY 1, 1999	JULY 1, 1998	JULY 1, 1997	JULY 1, 1996
Prior Year Unfunded/(Surplus)	$(4,051,901)	$(3,845,290)	$(3,665,759)	$(3,497,490)	$(2,809,147)	$16,254,775
Net Change Due to:						
Interest on Prior Year Unfunded/(Surplus)	$(202,595)	(192,265)	(183,288)	(174,875)	(140,457)	(1,996,408)
Investment Loss (Gain)	(888,341)	(65,701)	(47,498)	(154,757)	(583,645)	(14,799)
Retiree Experience	(132,495)	51,355	51,255	161,363	37,759	307,351
Assumption/Method Changes	N/A	N/A	N/A	N/A	N/A	N/A
Net Effect of Chapter 115	N/A	N/A	N/A	N/A	N/A	(17,360,066)
Actual Unfunded/(Surplus)	$(5,275,332)	$(4,051,901)	$(3,845,290)	$(3,665,759)	$(3,497,490)	$(2,809,147)

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Prison Officers' Pension Fund

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

Eligibility for Membership

Employees of State penal institutions, employed prior to January 1, 1960 who did not transfer to the Police & Firemen's Retirement System in accordance with Chapter 205 of Public Law 1989. The System no longer accepts new members.

1. DEFINITIONS

Plan Year: The 12-month period beginning on July 1 and ending on June 30.

Service: A year is credited for each year an employee is a member of the retirement system.

Average Final Compensation (AFC): Average annual compensation (or base salary) for 3 years of Service immediately preceding retirement. (Effective June 30, 1996, Chapter 113, P.L. 1997 provided that the amount of compensation used for employer and member contributions and benefits under the program cannot exceed the compensation limitation of Section 401(a)(17) of the Internal Revenue Code.)

Accumulated Deductions: The sum (without interest) of all required amounts deducted from the compensation of a member or contributed by him or on his behalf.

2. BENEFITS

Service Retirements: 25 years of service, or age 55 and 20 years of service. The benefit is a life annuity equal to the greater of (a), (b), and (c) below:

a. 2% of AFC up to 30 years of service plus 1% for each year in excess of 30 and prior to age 65;

b. 50% of final pay; and

c. For member with 25 years of service, 2% of AFC up to 30 years of service plus 1% for each year in excess of 30.

Vested Retirements: Eligible upon termination of employment. Benefits are summarized as follows:

Termination with 10 or more years of service: Benefit is a deferred life annuity equal to 2% of AFC for service up to 30 years plus 1% for service over 30 years.

Termination with less than 10 years of service: Refund of accumulated deductions.

Ordinary Disability Retirement: Permanent and total disability for causes other than as a direct result of a traumatic event occurring during the performance of regular or assigned duties. Benefit is an immediate life annuity equal to 1/2 of AFC.

Accidental Disability Retirement: Permanent and total disabled as a direct result of a traumatic event occurring while performing regular or assigned duties. Benefit is an immediate life annuity equal to 2/3 of AFC.

Death Benefits: Death of member of system. Spouse must be married to member prior to retirement, or at least five years before member's death. Benefit is an annuity equal to 25% of member's AFC plus an additional 15% (25%) for one (two or more) surviving dependent child (children). If there is no spouse or if the spouse dies or remarries, 20% (35%, 50%) of AFC to one (two, three or more) surviving child (children). If there is no surviving spouse or children, 25% (40%) of AFC to one (two) dependent parent(s). The provision for a survivor annuity payable to dependent parents does not apply in the death of a retired member of the system.

Minimum benefits: Minimum spousal annuity is $1,600 per annum. If no other benefit is payable prior to retirement, the member's beneficiary shall receive the accumulated deductibles.

3. EMPLOYEE CONTRIBUTIONS

Each member contributes 6% of compensation.

BUCK CONSULTANTS

September 5, 2002

Council
Supplemental Annuity Collective Trust
of New Jersey

Re: Actuary's Certification Letter

Members of the Council:

An actuarial valuation of the Supplemental Annuity Collective Trust is performed at least once in every three-year period to measure the ongoing costs of the Trust and the progress towards the funding goals of the Trust over time. The financial goals of the Supplemental Annuity Collective Trust are to ensure that current Trust assets are sufficient to provide for all future annuity payments. The most recent valuation was prepared as of June 30, 2000.

The Supplemental Annuity Collective Trust of New Jersey was established under the provisions of Chapter 123, P.L. 1963, which was approved July 1, 1963. The act permits active members of the following retirement systems administered by the State of New Jersey to make voluntary additional contributions through their retirement systems to purchase either a variable or fixed annuity to supplement the benefits provided by their systems:

Public Employees' Retirement System
Teachers' Pension and Annuity Fund
The Police and Firemen's Retirement System
Consolidated Police and Firemen's Pension Fund
Prison Officers' Pension Fund
State Police Retirement System
Judicial Retirement System

As of the July 1, 2000 valuation, only the variable annuity program was in operation. It was inaugurated July 1, 1964. Chapter 123, P.L. 1963 was amended June 6, 1965 by Chapter 90, P.L. 1965, to permit eligible employees to enter into an agreement with their employers to reduce their salaries and purchase annuities on their behalf which will qualify for the tax sheltered treatment permitted under Section 403(b) of the Internal Revenue Code of 1954, as amended. The rules were revised in 1982 to permit contributions in the form of qualified voluntary employee contributions. These contributions are treated as IRA contributions for tax purposes.

The underlying demographic data is maintained and provided by the New Jersey Division of Pensions and Benefits. The data is analyzed by Buck for internal completeness and consistency and compared with the prior valuation data to again ensure consistency.

The Trust status as of the fiscal year beginning July 1, 2000 was based on the actuarial assumptions and methods summarized on the following page. The Male Service Retirement mortality table was changed based on the results of an investigation of mortality experience covering the period July 1, 1997 to June 30, 2000. There were no other changes in actuarial assumptions and methods since the previous valuation.

In our opinion, the attached schedules of valuation results fairly represent the status of the Supplemental Annuity Collective Trust and present an accurate view of historical data. The underlying assumptions and methods used for the valuation are consistent with the statutory specifications and represent a best estimate of the aggregate future experience of the Trust.

Respectfully submitted,

Buck Consultants, Inc.

Lisa Witlen

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SUMMARY OF ACTUARIAL ASSUMPTIONS AND METHODS

An outline of the actuarial assumptions and methods used for the July 1, 2000 valuation is as follows:

In valuing the liabilities of the Variable Benefit Account for service annuitants and dependent beneficiaries, an interest rate of 4% per year was used. Illustrative rates of mortality (varying by age) used for valuation purposes are as follows:

	RATE PER 1,000			
	SERVICE RETIREMENT		DISABILITY	
AGE	MALE	FEMALE	MALE	FEMALE
40	0.97	0.84	33.17	10.02
45	1.53	1.45	34.91	11.12
50	2.79	2.45	37.64	13.37
55	4.76	3.75	41.98	16.90
60	7.14	5.46	48.81	22.49
65	11.13	8.60	59.52	31.27
70	19.80	14.23	76.29	45.02
75	33.37	24.02	102.24	66.44
80	54.76	40.79	141.72	99.38
85	89.32	68.28	200.93	149.23
90	133.87	109.97	286.68	222.62
95	190.46	163.28	403.95	326.18

The Male Service Retirement mortality table was changed based on the results of an investigation of mortality experience covering the period July 1, 1997 to June 30, 2000. There were no other changes in actuarial assumptions and methods since the previous valuation.

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Supplemental Annuity Collective Trust

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES ADDED TO AND REMOVED FROM ROLLS

VALUATION DATE	ADDED TO ROLLS		REMOVED FROM ROLLS		ROLLS AT END OF YEAR		% INCREASE IN ANNUAL ALLOWANCE	AVERAGE NUMBER OF ANNUAL VARIABLE EQUITY UNITS
	NUMBER	NUMBER OF ANNUAL VARIABLE EQUITY UNITS	NUMBER	NUMBER OF ANNUAL VARIABLE EQUITY UNITS	NUMBER	NUMBER OF ANNUAL VARIABLE EQUITY UNITS*		
6/30/00	57	5,584.7820	122	10,275.5556	739	68,279.9496	(6.43)%	92.3951
6/30/97	53	2,282.7816	108	5,385.3372	804	72,970.7232	(4.08)	90.7596
6/30/94	101	8,683.0407	23	1,977.3261	859	76,073.2788	16.82	88.5603
6/30/91	97	7,805.7598	43	3,460.2853	781	65,120.6028	N/A	83.3811

** The monthly number of variable equity units shown are the benefits of the valuation date and are not the actual benefits paid during the succeeding three fiscal years.*

SCHEDULE OF ACTIVE MEMBER VALUATION DATA**

VALUATION DATE	NUMBER OF ACTIVE MEMBERS	EQUITY SHRES	AVERAGE UNITS PER PERSON	% INCREASE IN AVERAGE EQUITY UNITS
6/30/00	4,023	2,158,681.7328	536.5851	(21.74)%
6/30/97	3,907	2,678,839.2241	685.6512	(8.15)
6/30/94	4,137	3,088,303.4047	746.5080	(14.55)
6/30/91	5,034	4,397,944.4245	873.6481	N/A

*** These values exclude suspended members.*

SOLVENCY TEST

VALUATION DATE	PRESENT VALUE OF BENEFITS FOR			(4) FUND BALANCES	PERCENTAGE OF ACCRUED LIABILITIES COVERED BY NET ASSETS AVAILABLE		
	(1) AGGREGATE CONTRIBUTIONS	(2) CURRENT BENEFICIARIES	(3) ACTIVE & INACTIVES		(1)	(2)	(3)
6/30/00	$45,026,249	$46,341,126	$124,548,634	$216,985,359	100.00%	100.00%	100.00%
6/30/97	40,015,582	36,811,600	98,695,306	176,280,772	100.00	100.00	100.00
6/30/94	25,682,515	22,939,117	63,343,916	111,595,383	100.00	100.00	99.42
6/30/91	33,038,297	15,902,423	81,846,377	129,536,326	100.00	100.00	98.91

ANALYSIS OF PAST FINANCIAL EXPERIENCE
RECONCILIATION OF UNFUNDED ACCRUED LABILITY/(SURPLUS)

VALUATION YEAR	JULY 1, 2000	JULY 1, 1997	July 1, 1994
Prior Valuation Deficit/(Surplus)	$(758,284)	$370,165	$890,771
Net Change Due to:			
Retiree Experience	$1,919,537	$(1,128,449)	$(250,000)
Assumption/Method Changes	(2,230,603)	N/A	(270,606)
Current Valuation Deficit/(Surplus)	$(1,069,350)	$(758,284)	$370,165

STATE OF NEW JERSEY
DIVISION OF PENSIONS AND BENEFITS
Supplemental Annuity Collective Trust

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES

A summary of the benefit and contribution provisions of the Trust in effect on the valuation date is presented in the following digest. Participants' accounts are expressed in terms of equity units. The value of an equity unit was initially set at $10. The dollar value of the unit is computed at the end of each month. It varies as a result of mortality experience and gains and losses and dividend earnings on the Variable Division's investments.

Eligibility: Member of a State-administered retirement system may become a participant upon filing an application for enrollment.

Participant Accounts: Although contributions are permitted in either fixed or variable accounts, only the variable system is currently in place.

(a) Three optional participant accounts:
- (1) Variable annuity account.
- (2) Tax sheltered annuity account under Section 403(b) of the Internal Revenue Code.
- (3) Qualified voluntary employee contribution account (QVEC) – eliminated January 1, 1987.

(b) Value of Account: The total number of equity units in force in the variable account at the end of each month shall be determined as follows:
- (1) The number of equity units in force at the start of the month; plus
- (2) The number of equity units credited as of the first of the month for participant's contributions received during the preceding quarter, if any; less
- (3) The number of equity units paid out in the current month on account of terminations for death or withdrawal during the preceding month; less
- (4) The number of equity units transferred as of the first of the month for retirement during the preceding month; plus
- (5) One third of one percent of the balance so obtained.

BENEFITS

Retirement: Upon retirement a participant is paid a life annuity which is the fixed number of variable equity units per month computed as the actuarial equivalent of the number of equity units in his account at the close of the month of retirement, multiplied by the value of each unit as of the end of the quarter preceding the month of payment.

At retirement the participant may elect in lieu of the variable life annuity either (1) a single cash payment, or (2) an equivalent reduced annuity with the provision that:

(a) In case of death prior to 5 years from the effective date of the annuity, the annuity will be continued to his designated beneficiary for the remainder of the 5-year period, or

(b) In case of death prior to 10 years from the effective date of the annuity, the annuity will be continued to his designated beneficiary for the remainder of the 10-year period, or

(c) At the death of the participant, his variable annuity will be continued throughout the life of such other person as the participant shall have designated at the time of retirement, or

(d) At the death of the participant, one-half of his variable annuity will be continued throughout the life of such other person as the participant shall have designated at the time of retirement.

In the event the value of the participant's account at retirement results in an annuity with initial monthly payments of less than $10, the benefit shall be paid in a single cash payment.

Death Before Retirement: If a participant dies before retirement, a lump sum payment equal to the value of his account on the last day of the month of his death

SUMMARY OF THE BENEFIT AND CONTRIBUTION PROVISIONS AS INTERPRETED FOR VALUATION PURPOSES, *Continued*

is paid to his designated beneficiary or to his estate. If the beneficiary is a natural person, he may elect, in lieu of a lump sum payment, an annuity under any of the methods of settlement available to a retirant.

Withdrawal: Withdrawal is permitted only if membership in the basic State administered retirement system is terminated. However, the Council may terminate an inactive account if the value of the account is less than $100. The amount paid on withdrawal is the value of the participant's account as of the end of the month of termination.

CONTRIBUTIONS

Participants: Each participant contributes through payroll deductions integral dollar amounts not in excess of 10% of his salary. He may also make lump sum contributions by direct payments in integral dollar amounts of not less than $50, provided that total contributions for any one year may not exceed 10% of his annual salary. Up to $2,000 per year may be contributed in the form of qualified voluntary employee contributions.

Employers: Employers may contribute, on behalf of eligible employees who agree to a salary reduction equivalent to the amount of the contribution, even dollar amounts which shall be from 1% to 10% of base salary.

The amounts by which the employee's salary is reduced must be within the exclusion allowance provided under Section 403(b) of the Internal Revenue Code.

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