

**NORTH DAKOTA
PUBLIC EMPLOYEES
RETIREMENT SYSTEM**

**Actuarial Valuation Report
as of July 1, 2001**

Copyright © by
The Segal Company
October 2001



THE SEGAL COMPANY

6300 S. Syracuse Way, Suite 750 Englewood, CO 80111-7302
T 303.714.9900 F 303.714.9990 www.segalco.com

October 11, 2001

Board Members
North Dakota Public Employees Retirement System
Bismarck, North Dakota

Members of the Board:

It is a pleasure to submit this report that presents the results of our actuarial valuation of the North Dakota Public Employees Retirement System as of July 1, 2001.

The report indicates that the present rate of employer appropriations exceeds the contribution requirements for the North Dakota Public Employees Retirement System based upon the actuarial assumptions and financing objectives approved by the Board.

The report's actuarial content was prepared in accordance with generally accepted actuarial principles under my direction. The valuation was:

- Prepared by a qualified actuary who is a member of the American Academy of Actuaries and who has experience in performing valuations for public retirement systems;
- Prepared in accordance with standards of practice prescribed by the Actuarial Standards Board; and
- Composed of actuarial calculations that were performed by qualified actuaries in accordance with accepted procedures as defined by the Actuarial Standards Board, based on the current provisions of the Retirement System and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System.

We wish to thank the Retirement Office staff for their cooperation in providing us with the participant census data and financial information necessary to prepare the valuation.

Benefits, Compensation and HR Consulting ATLANTA BOSTON CHICAGO CLEVELAND DENVER HARTFORD HOUSTON LOS ANGELES MINNEAPOLIS
NEW ORLEANS NEW YORK PHILADELPHIA PHOENIX SAN FRANCISCO SEATTLE TORONTO WASHINGTON, DC



Multinational Group of Actuaries and Consultants AMSTERDAM BARCELONA GENEVA HAMBURG LONDON MELBOURNE MEXICO CITY OSLO PARIS

North Dakota Public Employees Retirement System
October 11, 2001
Page 2

We look forward to meeting with you to review this report and to answering any questions you may have.

Sincerely,



Leslie L. Thompson, A.S.A., M.A.A.A., E.A.
Vice President and Consulting Actuary

LLT:cvm

cc: Sparb Collins

119394/01640.001

TABLE OF CONTENTS

	Page
I. INTRODUCTION.....	1
II. HIGHLIGHTS.....	2
III. MEMBER CHARACTERISTICS	3
IV. BENEFIT EXPERIENCE.....	5
V. ASSETS	6
VI. RESULTS OF ACTUARIAL VALUATION.....	17
VII. FUNDING STATUS.....	23
VIII. ACTUARIAL ASSUMPTIONS AND COST METHOD.....	26
APPENDICES	
A. ACTUARIAL VALUATION CERTIFICATE.....	A-1
B. CENSUS TABLES.....	B-1

I. INTRODUCTION

This report summarizes the results of our actuarial valuation as of July 1, 2001. The employer contribution requirements presented in Section VI of the report are based on:

1. The present provisions of the North Dakota Public Employees Retirement System;
2. The characteristics of covered active members, inactive non-retired members, pensioners and beneficiaries as of July 1, 2001;
3. The assets of the System as of June 30, 2001, based on draft financial statements; and
4. Actuarial assumptions regarding investment earnings, salary increases, and rates of retirement, disability, death, etc.

The purpose of the actuarial valuation is to determine the contribution sufficient to meet the long-term obligations to the members covered by the North Dakota Public Employees Retirement System in accordance with the benefit provisions of the System.

If each of the actuarial assumptions is exactly fulfilled, the true actuarial cost of the System will equal the cost projected by the actuarial calculations. However, this result is never achieved because of the length of time for which projections are made and because of the great number of variables that can affect the emerging costs. The cost, expressed as a percentage of payroll, will increase if the System experiences net actuarial losses and will decrease if the System experiences net actuarial gains.

II. HIGHLIGHTS

- The employer actuarial contribution requirements for 2001-2002 are as follows:

	Amount	Percentage of Payroll	Statutory/ Approved Rate
Main System	\$16,441,793	3.83%	4.12%
Judges	\$ 353,408	9.03%	14.52%
National Guard	\$ 16,095	3.30%	8.33%

- A comparison of this year's required contribution rates to last year's rates is as follows:

	2000-2001	Benefit Improvements	2001-2002
Main System	2.32%	1.36%	3.83%
Judges	6.50%	4.43%	9.03%
National Guard	1.74%	1.28%	3.30%

The contribution rates increased primarily due to the benefit improvements that were adopted since the preceding valuation. These benefit improvements are described in Exhibit IV of the Appendix. Without the benefit improvement changes, the actuarial contribution requirement for the Main System would have been 2.47% of payroll.

- The return on the actuarial value of assets for 2000-2001 for the PERS Fund was 9.36% compared to the investment return assumption of 8.00%. As a result, the Fund experienced an investment gain of approximately \$14 million.
- The return on the market value of assets for 2000-2001 for the PERS Fund was - 4.47% compared to 9.43% for the preceding year.
- The ratio of the actuarial value of assets to the market value of assets was 98%. Last year, this ratio was 86%.
- As of July 1, 2001, the assets exceed the accrued liability. A comparison of this year's Benefit Security ratio, reflecting the actuarial value of assets, is as follows:

	July 1, 2001	July 1, 2000
Actuarial Value of Assets	\$1,115,334,400	\$1,027,001,800
Actuarial Accrued Liability	1,008,722,500	891,889,000
Benefit Security Ratio	110.6%	115.1%

- There were no changes in actuarial assumptions since the preceding actuarial valuation.
- There were benefit improvements since the preceding actuarial valuation.

THE SEGAL COMPANY

III. MEMBER CHARACTERISTICS

Detailed information for all non-retired members as of July 1, 2001 was provided by the Retirement Office. The data included name, sex, date of birth, months of service, members' accumulated account balances, and annual salary rate.

Active Members

The age, service, compensation and account balance data for active members is summarized below:

	<u>Main System</u>	<u>Judges</u>	<u>National Guard</u>	<u>Total</u>
Number of active members	16,694*	47	15**	16,756
Average age	45.2	53.9	36.5	45.2
Average years of service (excluding service before transfer)	9.9	10.2	8.1	9.9
Total annual salary	\$428,971,553	\$3,914,240	\$487,614	\$433,373,407
Average annual salary	\$25,696	\$83,282	\$32,508	\$25,864
Total accumulated member contribution account balances	\$256,281,845	\$2,388,937	\$216,060	\$258,886,842

For the Main System, the number of active members represents an increase of 2.3% over the 16,314 active members last year. Among the members continuing in active service since the prior valuation, salaries increased by an average of 8.5%. Total payroll increased 6.0%, which was more than assumed.

Distributions of the active members by sex, age, and service are presented in Tables 8-A, 8-B and 8-C of the Appendix. Tables 9-A, 9-B and 9-C present a distribution of these same members by sex, age, and actual salary. The table on the following page shows a breakdown of the active members who are currently eligible for benefits, as well as those who have not yet met the vesting requirements.

Twenty-six members originally from the Main System continue to be active members in the Judges System; two members from National Guard and four members from Highway Patrol continue to be active members in the Main System. Liabilities for these members are carried in each system based on their service in that system.

* Excludes 26 members with split service in the Main System and the Judges System, and currently in the Judges System.

** Excludes 2 members with split service in the National Guard System and the Main System, and currently in the Main System.

The following table shows the number of active participants eligible for retirement:

Active Members Eligible for:	Main System	Judges	National Guard	Total
Normal Service Retirement:				
Normal	336	2	2	340
Rule of 85	361	3	N/A	364
Early Retirement	<u>1,945</u>	<u>15</u>	<u>2</u>	<u>1,962</u>
Total Eligible for Retirement	2,642	20	4	2,666
Deferred Retirement	<u>9,599</u>	<u>23</u>	<u>4</u>	<u>9,626</u>
Total Vested	12,241	43	8	12,292
Nonvested	<u>4,453</u>	<u>4</u>	<u>7</u>	<u>4,464</u>
Total	16,694	47	15	16,756

Inactive Members

There were 400 inactive members as of July 1, 2001 with vested rights to deferred retirement benefits. The average deferred monthly benefit for this group was \$403. There were also 17 members on leave of absence. For the above two groups, a liability was carried for their deferred retirement benefits. In addition, there were 2,730 inactive members who have not made an election for a deferred annuity or taken a refund of their accumulated contributions. We have assumed 50% of these members will elect a deferred annuity and the remaining 50% will elect a refund of their accumulated contributions.

<u>New Pensions</u>	
Normal	92
Rule of 85	95
Early	109
Disability	<u>23</u>
	319

IV. BENEFIT EXPERIENCE

New Awards

During the fiscal year ended in June 2001, 330 pensions became effective. The average monthly benefit for these pensioners was \$828* and their average age at retirement was 64.4. Last year, the average benefit among new pensioners was \$739. The new pensioners are presented in Tables 10-A, 10-B, 10-C, 11-A, 11-B and 11-C in Appendix B by sex, type of pension, monthly benefit and age on retirement date.

A breakdown of the new pension awards by type compared to last year is as follows:

	<u>July 1, 2001</u>	<u>July 1, 2000</u>
Normal	92	82
Rule of 85	95	105
Early	109	84
Disability	<u>23</u>	<u>27</u>
Total	319	298

Pensioners

Since benefits became payable under the current retirement program, a total of 5,704 retirement pensions have been awarded, of which 4,493 remained on the June 2001 rolls (including eleven retired Judges and three retired members of the National Guard). In addition, 37 pensions were in suspended status as of June 30, 2001. Distributions of the pensioners are presented in Tables 12-A, 12-B, 12-C, 13-A, 13-B and 13-C in Appendix B by sex, type of pension, monthly benefit amount and current age.

For the pensions in force on July 1, 2001, the average monthly benefit was \$693*, an increase from \$641 a year earlier. The average age of these pensioners on the valuation date was 71.4 years.

Beneficiaries

As of July 1, 2001, monthly benefit payments were being made to 445 beneficiaries, including five beneficiaries of Judges. The monthly payments to beneficiaries in payment status total \$220,723*.

Prior Service Pensioners

As of July 1, 2001, there were 137 pensioners receiving monthly benefits of \$7,287* under the Special Prior Service Pension provisions of the Plan. The current average age of Prior Service pensioners was 91.0 years, and the average monthly benefit was \$53. Because of the relatively high average age and low benefits, the liability for the Special Prior Service Pensioners represented only about 0.03% of the total actuarial accrued liability for the System as a whole. Tables 14-A, 14-B, 14-C, 15-A, 15-B, and 15-C in Appendix B provide a breakdown of these pensioners by sex, type of pension, monthly benefit amount, and current age.

* Reflects 6% post-retirement increase effective August 1, 2001.

V. ASSETS

Market Value of Assets

As shown in the draft financial statements as of June 30, 2001, the combined market value of net assets of the North Dakota Public Employees Retirement System (PERS) and Highway Patrolmen's Retirement System (HPRS) was \$1,173,621,357 compared to \$1,236,180,055 a year earlier. This year's combined market value represents a decrease of 5.06% over the market value one year earlier.

Based on schedules provided by the Retirement Office, the breakdown of the market value of net assets allocated to North Dakota PERS follows:

	<u>July 1, 2001</u>	<u>July 1, 2000</u>
Main System	\$ 1,114,635,498	\$ 1,174,383,171
Judges	18,249,497	18,726,629
National Guard	<u>1,293,968</u>	<u>1,344,150</u>
Total	\$ 1,134,178,963	\$ 1,194,453,950

The rate of return on the market value basis for the PERS Fund was - 4.47% for the year ended June 30, 2001.

Actuarial Value of Assets

The actuarial value of assets are determined as follows:

Market appreciation and depreciation are spread over five years beginning with the year of occurrence. Interest and dividends are recognized immediately. This procedure results in recognition of all changes in market value over five years.

The above procedure is applied to the combined assets of PERS and HPRS Retirement Income Funds to determine the combined actuarial value of the Systems. The combined actuarial value was \$1,154,121,448 as of June 30, 2001. The determination of the combined actuarial asset value is shown in Table 1. This table shows that there is approximately \$19 million of appreciation that will be recognized in future years.

The amount of actuarial write-up or write-down recognizes changing market values and is considered part of the investment income for the year. This procedure treats realized and unrealized capital gains or losses equally. In other words, the sale of a security - either at a gain or loss - has no immediate effect on the value of assets for actuarial purposes. If the market value has gone up, the increase is gradually recognized in the value of the fund's assets; it does not have to be sold for the appreciation to be "realized." This "automatic" recognition of market value appreciation or depreciation should eliminate any need for making investment decisions for the explicit purpose of meeting the investment return assumption.

Table 2 summarizes the combined investment results over the previous ten-year period. Over this period, the earnings of \$753,246,000 on an actuarial value basis represented an average annual return of 10.88%. For the 2000-2001 year, the actuarial rate of return on the combined assets was 9.36%.

The total actuarial value of assets is allocated to PERS (Main System, Judges, and National Guard) and HPRS in proportion to the reported market value of assets. This allocation is illustrated in Table 3 and summarized below for the PERS Fund alone.

	<u>July 1, 2001</u>	<u>July 1, 2000</u>
Main System	\$ 1,096,115,648	\$ 1,009,744,796
Judges	17,946,279	16,101,317
National Guard	<u>1,272,469</u>	<u>1,155,712</u>
Total	\$ 1,115,334,396	\$ 1,027,001,825

On an actuarial basis, the rate of return on the PERS Fund was 9.36% for the year ended June 30, 2001.

Chart 1 is a graph showing the historical asset values for the PERS Fund on both actuarial and market value bases. This graph illustrates that the growth of the market value of assets has also been recognized in the actuarial value of assets.

Income and disbursements for 2001 and 2000 on the actuarial value basis are given in Table 4 for the PERS Fund alone. The progress of the PERS Fund for the last several years is provided in Table 5. It shows that assets have increased consistently from year to year, although the amount of the increase has varied with fluctuations in investment income. Benefit payments have also increased consistently over the period, except for the current year.

A picture of the financial development of the PERS Fund over the last ten years is provided in Chart 2. It shows that, until 1998, contributions were greater than benefit payments and expenses. However, over the long term, the excess of contributions over benefit payments and expenses, along with net investment income, served to increase the assets of the System.

Investment results on the actuarial basis are used to determine whether investment experience is meeting the System's actuarially assumed return. They do not, however, necessarily indicate the relative success of the System's investment program. Comparisons of performance with other funds, investment institutions, and market indices are generally based on rates of return that recognize market changes in full.

Investment Return

The investment returns for the last ten years for the combined fund are as follows:

<u>Year Ending June 30</u>	<u>Market Value</u>	<u>Actuarial Value</u>
1992	11.71%	7.03%
1993	14.90	9.42
1994	1.45	7.08
1995	14.25	8.98
1996	15.78	11.65
1997	19.90	13.14
1998	15.65	14.02
1999	10.88	14.72
2000	9.43	13.71
2001	(4.47)	9.36

The above values demonstrate the fact that the volatility of market value returns is reduced by using an actuarial value of assets. Chart 3 illustrates the smoothing effect that results from using an actuarial value of assets. By using an actuarial value that reduces the year-to-year fluctuations in investment return, year-to-year fluctuations in contribution requirements are reduced.

Investment return rates on the market value basis include all capital appreciation and depreciation. The returns on the actuarial value reflect only a portion of the capital appreciation and depreciation based on the adopted valuation method.

TABLE 1

Determination of Combined Write-Up/(Down) Amount and Actuarial Value of Assets (for PERS and HPRS) as of June 30, 2001 and 2000

<u>Year Ending</u>	<u>Total Appreciation (Depreciation)</u>	<u>Of Total Appreciation</u>			
		<u>June 30, 2001</u>		<u>June 30, 2000</u>	
		<u>Percent Deferred</u>	<u>Amount Deferred</u>	<u>Percent Deferred</u>	<u>Amount Deferred</u>
6/30/1997	\$ 124,261,122	0%	\$ 0	20%	\$ 24,852,224
6/30/1998	109,670,932	20%	21,934,186	40%	43,868,373
6/30/1999	80,332,335	40%	32,132,934	60%	48,199,401
6/30/2000	70,477,207	60%	42,286,324	80%	56,381,766
6/30/2001	(96,066,919)	80%	(76,853,535)	0%	0
(a) Total Deferred as of Valuation Date			\$19,499,909		\$ 173,301,764
(b) Total Appreciation (Depreciation) for last five Plan Years			288,674,677		461,223,673
(c) Write-Up/(Down) Amount for the year - equals 20% of (b)			57,734,935		92,244,735
			<u>July 1, 2001</u>		<u>July 1, 2000</u>
Market Value of Assets			\$1,173,621,357		\$1,236,180,055
Less: Deferred Appreciation (Depreciation)			<u>19,499,909</u>		<u>173,301,764</u>
Actuarial Value of Assets			\$1,154,121,448		\$1,062,878,291
Actuarial Value as a Percent of Market Value			98.34%		85.98%

TABLE 2

Summary of Combined Investment Results for PERS and HPRS on Actuarial Value of Assets

Year Ended June 30	Net Interest and Dividend Income*		Other Income**		Total Net Investment Income	
	Amount	Yield	Amount	Yield	Amount	Yield
1992	\$16,830,700	4.15%	\$11,647,400	2.88%	\$28,478,100	7.03%
1993	17,223,000	3.91	24,236,200	5.51	41,459,200	9.42
1994	17,973,900	3.70	16,387,100	3.38	34,361,000	7.08
1995	21,096,800	4.03	25,927,800	4.95	47,024,600	8.98
1996	24,776,500	4.32	42,002,100	7.33	66,778,600	11.65
1997	23,919,600	3.73	60,428,700	9.41	84,348,300	13.14
1998	29,988,300	4.13	71,787,700	9.89	101,776,000	14.02
1999	31,722,100	3.84	89,864,100	10.89	121,586,200	14.73
2000	36,367,600	3.88	92,244,700	9.83	128,612,300	13.71
2001	41,086,800	3.89	57,734,900	5.47	98,821,700	9.36
Total for Last Ten Years	\$260,985,300		\$492,260,700		\$753,246,000	
Average Yield for last Ten Years***					10.88%	

* Net of investment expenses.

** Includes write-up (down).

*** Each year's yield weighted by average fund in that year

TABLE 3***Allocation of Combined (PERS and HPRS) Actuarial Value of Assets***

	July 1, 2001		July 1, 2000	
	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Market Value</u>	<u>Actuarial Value</u>
PERS Main System	\$1,114,635,498	\$1,096,115,648	\$1,174,383,171	\$1,009,744,796
PERS Judges	18,249,497	17,946,279	18,726,629	16,101,317
PERS National Guard	<u>1,293,968</u>	<u>1,272,469</u>	<u>1,344,150</u>	<u>1,155,712</u>
PERS Combined	\$1,134,178,963	\$1,115,334,396	\$1,194,453,950	\$1,027,001,825
HPRS	<u>39,442,394</u>	<u>38,787,052</u>	<u>41,726,105</u>	<u>35,876,466</u>
Total	\$1,173,621,357	\$1,154,121,448	\$1,236,180,055	\$1,062,878,291

Note: Allocation of the actuarial value of assets is in proportion to the market value of assets.

Chart 1
Value of Assets for PERS

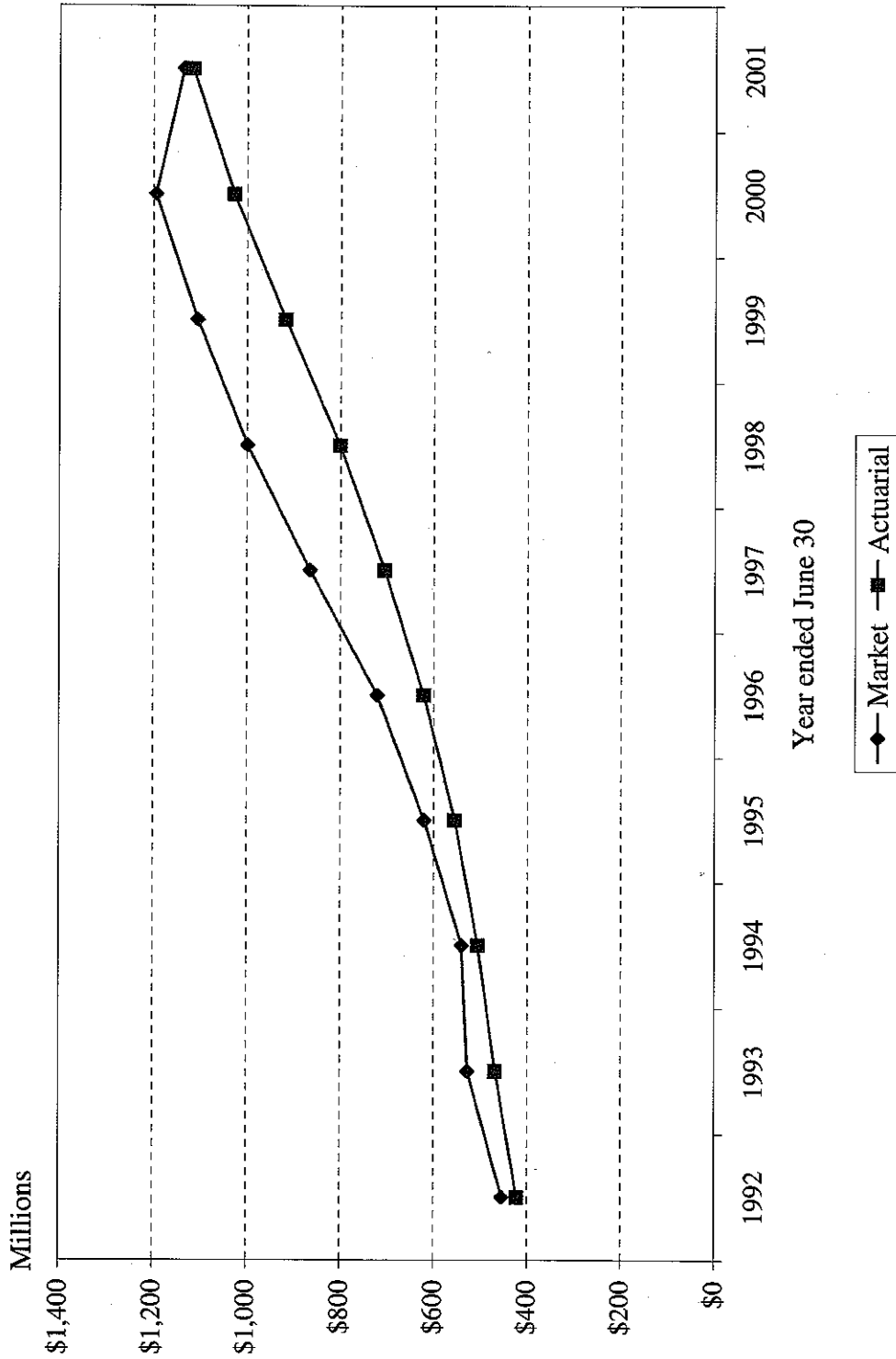


TABLE 4

**Summary Statement of Income and Disbursements for PERS
for the Years Ended June 30, 2001 and 2000
(Actuarial Value Basis)**

	<u>June 30, 2001</u>	<u>June 30, 2000</u>
Contribution Income:		
Employer Contributions	\$ 17,101,628	\$ 16,521,248
Member Contributions	16,273,260	15,693,237
Service Credit Repurchases	<u>1,080,008</u>	<u>925,534</u>
Total Contribution Income	\$ 34,454,896	\$ 33,140,019
Less: Administrative Expenses	<u>(894,868)</u>	<u>(800,529)</u>
Net Contribution Income	<u>\$ 33,560,028</u>	<u>\$ 32,339,490</u>
Investment Income:		
Interest and Dividends	\$ 49,343,023	\$ 44,185,353
Miscellaneous Income	7,570	10,531
Less: Investment Expenses	<u>(9,654,269)</u>	<u>(9,056,600)</u>
Net Interest and Dividends	\$ 39,696,324	\$ 35,139,284
Write-up of Assets	<u>55,803,501</u>	<u>89,141,795</u>
Net Investment Income	<u>\$ 95,499,825</u>	<u>\$ 124,281,079</u>
Total Income Available for Benefit Payments and Reserves	<u>\$ 129,059,853</u>	<u>\$ 156,620,569</u>
Benefit Payments:		
Pension Benefits	\$ (36,676,998)	\$ (34,026,828)
Transfers to Other Plans	(314,930)	(8,693,091)
Refunds	<u>(3,735,354)</u>	<u>(3,852,102)</u>
Total Benefit Payments	<u>\$ (40,727,282)</u>	<u>\$ (46,572,021)</u>
Addition to Reserve for Future Benefit Payments	\$ 88,332,571	\$ 110,048,548
Actuarial Value of Assets, Start of Year	<u>1,027,001,825</u>	<u>916,953,277</u>
Actuarial Value of Assets, End of Year	<u>\$1,115,334,396</u>	<u>\$ 1,027,001,825</u>

TABLE 5

Progress of the PERS Fund through June 30, 2001
(Actuarial Value Basis)

Year Ended June 30	Employer Contributions	Member Contributions*	Administrative Expenses	Net Investment Income	Benefit Payments	Fund at End Of Year
1991	-	-	-	-	-	\$387,647,960
1992	\$11,670,026	\$12,762,153	\$566,880	\$27,434,199	\$17,303,894	421,643,564
1993	12,450,932	12,684,825	622,049	39,884,292	18,056,383	467,985,181
1994	12,685,083	13,044,203	519,659	33,148,687	20,566,725	505,776,770
1995	13,257,600	13,164,344	528,430	45,345,492	22,372,635	554,643,141
1996	13,815,784	13,831,828	555,421	64,398,234	24,470,794	621,662,772
1997	14,435,989	14,320,237	565,778	81,409,263	26,791,639	704,470,844
1998	15,078,427	15,061,818	605,241	98,273,502	30,988,902	801,290,448
1999	15,873,917	16,152,785	718,396	117,425,238	33,070,715	916,953,277
2000	16,521,248	16,618,771	800,529	124,281,079	46,572,021	1,027,001,825
2001	17,101,628	17,353,268	894,868	95,499,825	40,727,282	1,115,334,396
Total for Last Ten Years	\$142,890,634	\$144,994,232	\$6,377,251	\$ 727,099,811	\$280,920,990	\$1,115,334,396

* Includes repurchases of service credit.

Chart 2
Income and Disbursements for PERS

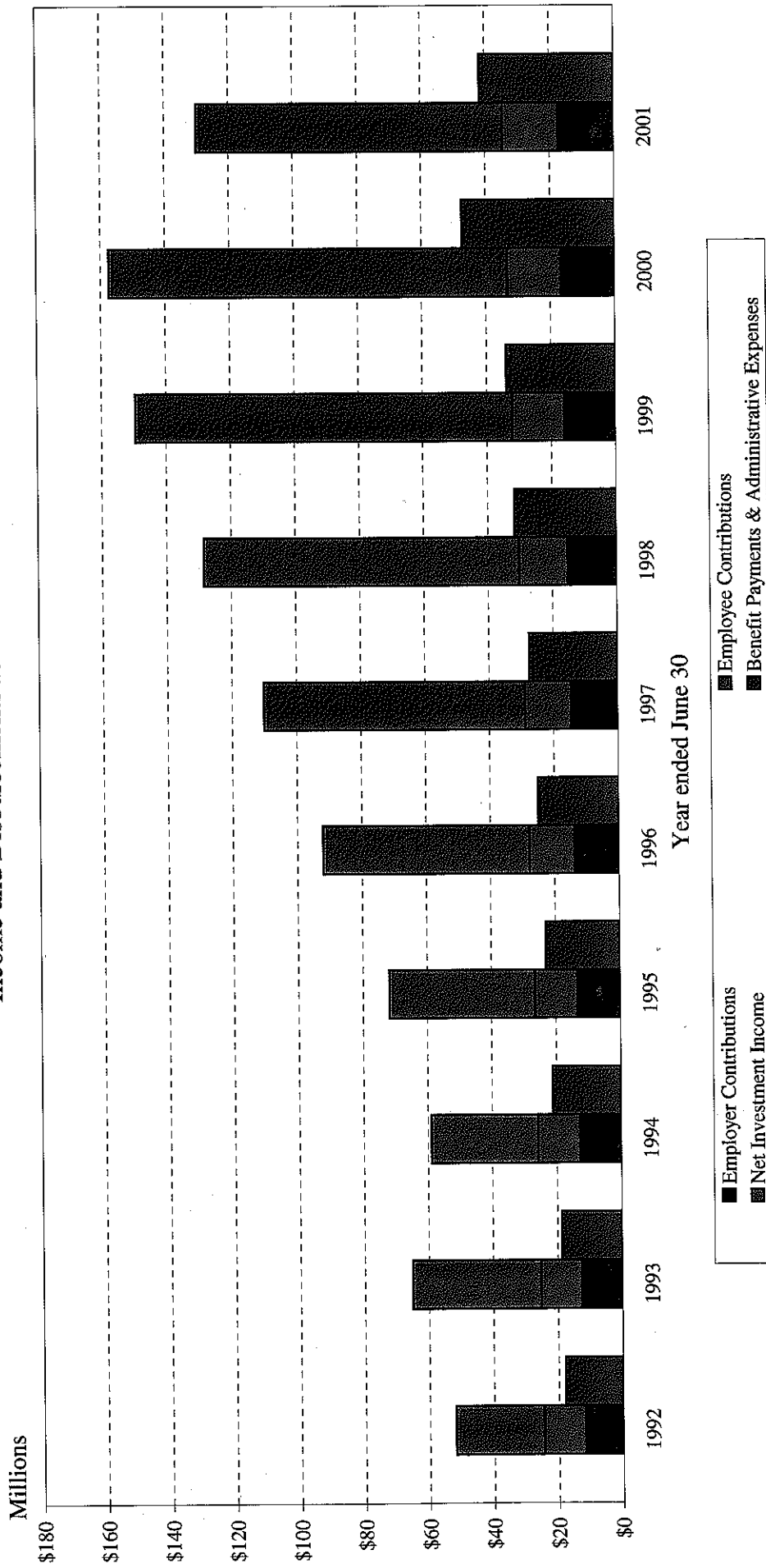
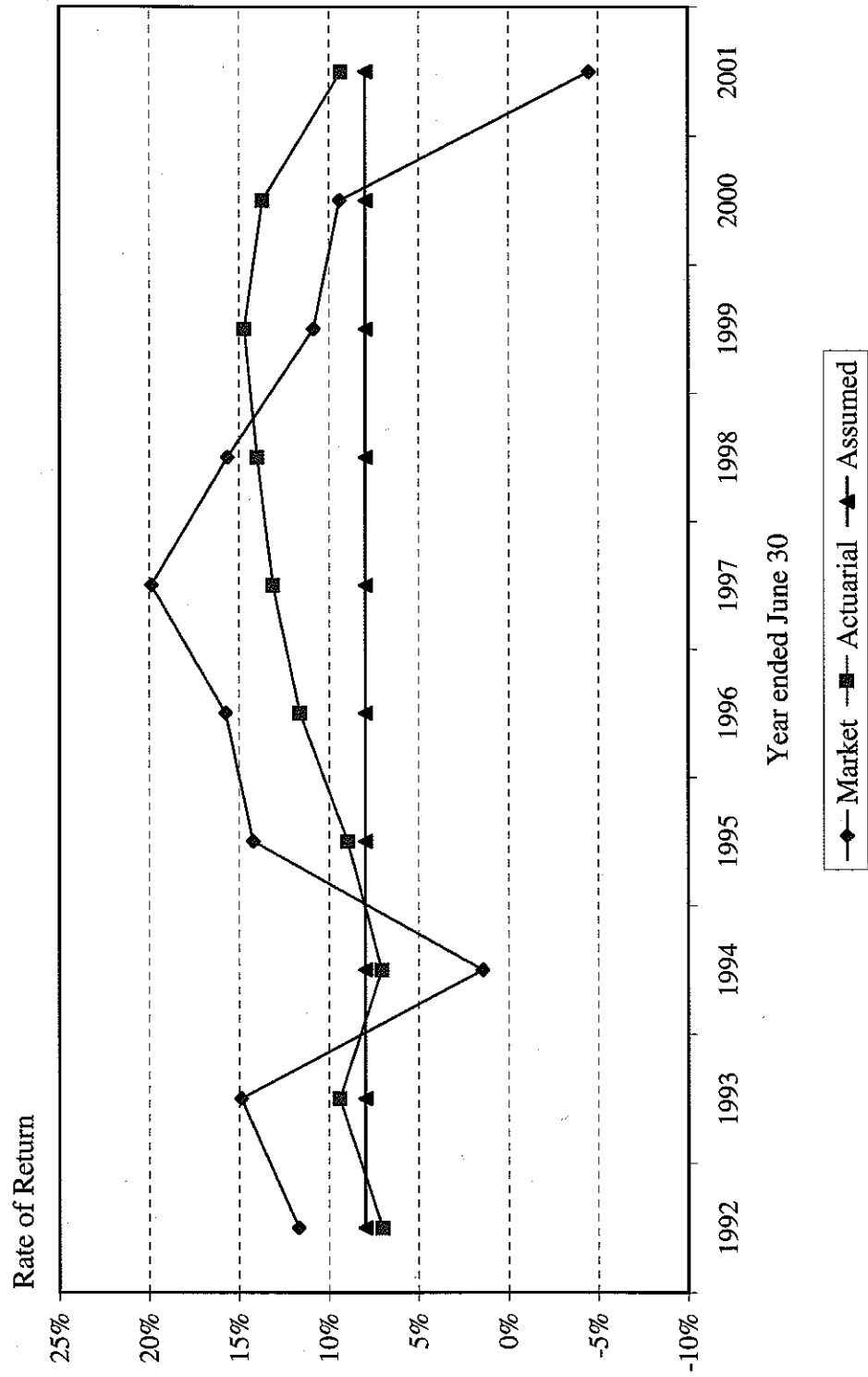


Chart 3
 Investment Returns
 (PERS and HPRS Combined)



VI. RESULTS OF ACTUARIAL VALUATION

The contribution requirement consists of the normal cost, administrative expense allowance, plus the cost of amortizing the unfunded liability over a scheduled period of years. The Board has adopted an open amortization schedule of 20 years. The calculated employer contribution requirements on this basis for fiscal year 2001-2002 are shown below as a dollar amount and as a percentage of the total compensation of contributing employees.

Main System

The components of the actuarial contribution requirements are shown below:

	<u>Amount for 2001-2002</u>	<u>Percentage of Payroll</u>
Total normal cost	\$ 40,027,676	9.33%
Less: Member contributions	<u>(17,158,862)</u>	<u>(4.00)</u>
Net employer normal cost	\$ 22,868,814	5.33%
Administrative expense allowance	710,000	0.17
Amortization payment (credit)	<u>(7,137,021)</u>	<u>(1.67)</u>
Total employer contribution requirement	\$ 16,441,793	3.83%

Covered payroll is \$428,971,553.

The statutory contribution rate is 4.12% of payroll. Hence, statutory contributions exceed the actuarial contribution requirement shown above by 0.29% of payroll.

The total employer actuarial contribution requirement was 2.32% of payroll last year. Since then, actual experience of the System during 2000-2001 has changed the actuarial contribution requirement. Table 6 presents a detailed explanation of these factors that changed the contribution requirement from July 1, 2000 to July 1, 2001.

The net employer normal cost plus the administrative expense allowance of 5.50% of payroll is greater than the statutory contribution rate of 4.12%. However, due to the amortization credit, statutory contributions exceed the actuarial contribution requirement. If the past gains are drawn down, then the employer contribution requirement may exceed the statutory rate.

Judges

The components of the actuarial contribution requirement are shown below:

	<u>Amount for 2001-2002</u>	<u>Percentage of Payroll</u>
Total normal cost	\$ 841,430	21.50%
Less: Member contributions	<u>(195,712)</u>	<u>(5.00)</u>
Net employer normal cost	\$ 645,718	16.50%
Administrative expense allowance	5,000	0.13
Amortization payment (credit)	<u>(297,310)</u>	<u>(7.60)</u>
Total employer contribution requirement	\$ 353,408	9.03%

Covered payroll is \$3,914,240.

The statutory contribution rate is 14.52% of payroll. Hence, statutory contributions exceed the actuarial contribution requirement shown above by 5.49% of payroll.

The net employer normal cost plus the administrative expense allowance of 16.63% of payroll is more than the statutory contribution rate of 14.52% of payroll. However, due to the amortization credit, statutory contributions exceed the actuarial contribution requirement. If the past gains are drawn down, then the employer contribution requirement may exceed the statutory rate.

A reconciliation of the change in the cost rate since the previous valuation follows:

	<u>Percentage of Payroll</u>
Employer Cost Rate as of July 1, 2000	6.50%
Plan experience during the year	(2.17)
Benefit improvements	4.43
Change in actuarial assumptions	0.00
Effect of maintaining 20 year amortization schedule	<u>0.27</u>
Employer Cost Rate as of July 1, 2001	9.03%

National Guard

The components of the actuarial contribution requirement are shown below:

	<u>Amount for 2001-2002</u>	<u>Percentage of Payroll</u>
Total normal cost	\$ 48,394	9.92%
Less: Member contributions	<u>(19,505)</u>	<u>(4.00)</u>
Net employer normal cost	\$ 28,889	5.92%
Administrative expense allowance	5,000	1.03
Amortization payment (credit)	<u>(17,794)</u>	<u>(3.65)</u>
Total employer contribution requirement	\$ 16,095	3.30%

Covered payroll is \$487,614.

The contribution rate set by the Board is currently 8.33% of payroll. Hence, the established contribution rate exceeds the cost for the National Guard plan based on the actuarial assumptions and financing objectives adopted by the Board by 5.03% of payroll. Also, the net employer normal cost plus the administrative expense allowance of 6.95% of payroll is less than the statutory contribution rate of 8.33% of payroll.

A reconciliation of the change in the cost rate since the previous valuation follows:

	<u>Percentage Of Payroll</u>
Employer Cost Rate as of July 1, 2000	1.74%
Plan experience during the year	0.14
Benefit improvements	1.28
Change in actuarial assumptions	0.00
Effect of maintaining 20 year amortization schedule	<u>0.14</u>
Employer Cost Rate as of July 1, 2001	3.30%

Main System, Judges, and National Guard Combined

The components of the actuarial contribution requirement are shown below.

	<u>Amount for</u> <u>2001-2002</u>	<u>Percentage</u> <u>of Payroll</u>
Total normal cost	\$ 40,917,500	9.44%
Less: Member contributions	<u>(17,374,079)</u>	<u>(4.01)</u>
Net employer normal cost	\$ 23,543,421	5.43%
Administrative expense allowance	720,000	0.17
Amortization payment	<u>(7,452,125)</u>	<u>(1.72)</u>
Total employer contribution	\$ 16,811,296	3.88%

Covered payroll is \$433,373,407.

TABLE 6

Main System
Explanation of Change in Employer Cost Rate

	Percent of Payroll
Employer Cost Rate as of July 1, 2000	2.32%
<i>Retired Life Mortality</i>	0.04%
The release of liability due to deaths among retirees and beneficiaries was less than expected, hence, increasing the employer cost rate.	
<i>Active Life Mortality</i>	0.01%
The release of liability due to deaths among active members was less than expected, hence, increasing the employer cost rate.	
<i>Disability Incidence</i>	0.00%
The net change in liability due to disability retirements was nearly equal to that expected.	
<i>Withdrawal</i>	0.07%
The decrease in liability due to withdrawals prior to retirement was less than expected, hence, increasing the employer cost rate.	
<i>Retirement</i>	0.09%
The net change in liability due to non-disabled retirements was lower than expected, hence, increasing the employer cost rate.	
<i>Investments</i>	(0.24)%
On an actuarial value basis, the rate of return on assets exceeded the assumed rate of return, hence, decreasing the employer cost rate.	
<i>Salary Scale</i>	0.01%
Salaries increased more than expected, hence, increasing the employer cost rate.	
<i>Contributions</i>	(0.12)%
Actual contributions received by the System exceeded the actuarially determined amount, thus, reducing the required contributions in future years.	

TABLE 3***Allocation of Combined (PERS and HPRS) Actuarial Value of Assets***

	July 1, 2001		July 1, 2000	
	<u>Market Value</u>	<u>Actuarial Value</u>	<u>Market Value</u>	<u>Actuarial Value</u>
PERS Main System	\$1,114,635,498	\$1,096,115,648	\$1,174,383,171	\$1,009,744,796
PERS Judges	18,249,497	17,946,279	18,726,629	16,101,317
PERS National Guard	<u>1,293,968</u>	<u>1,272,469</u>	<u>1,344,150</u>	<u>1,155,712</u>
PERS Combined	\$1,134,178,963	\$1,115,334,396	\$1,194,453,950	\$1,027,001,825
HPRS	<u>39,442,394</u>	<u>38,787,052</u>	<u>41,726,105</u>	<u>35,876,466</u>
Total	\$1,173,621,357	\$1,154,121,448	\$1,236,180,055	\$1,062,878,291

Note: Allocation of the actuarial value of assets is in proportion to the market value of assets.

Chart 1
Value of Assets for PERS

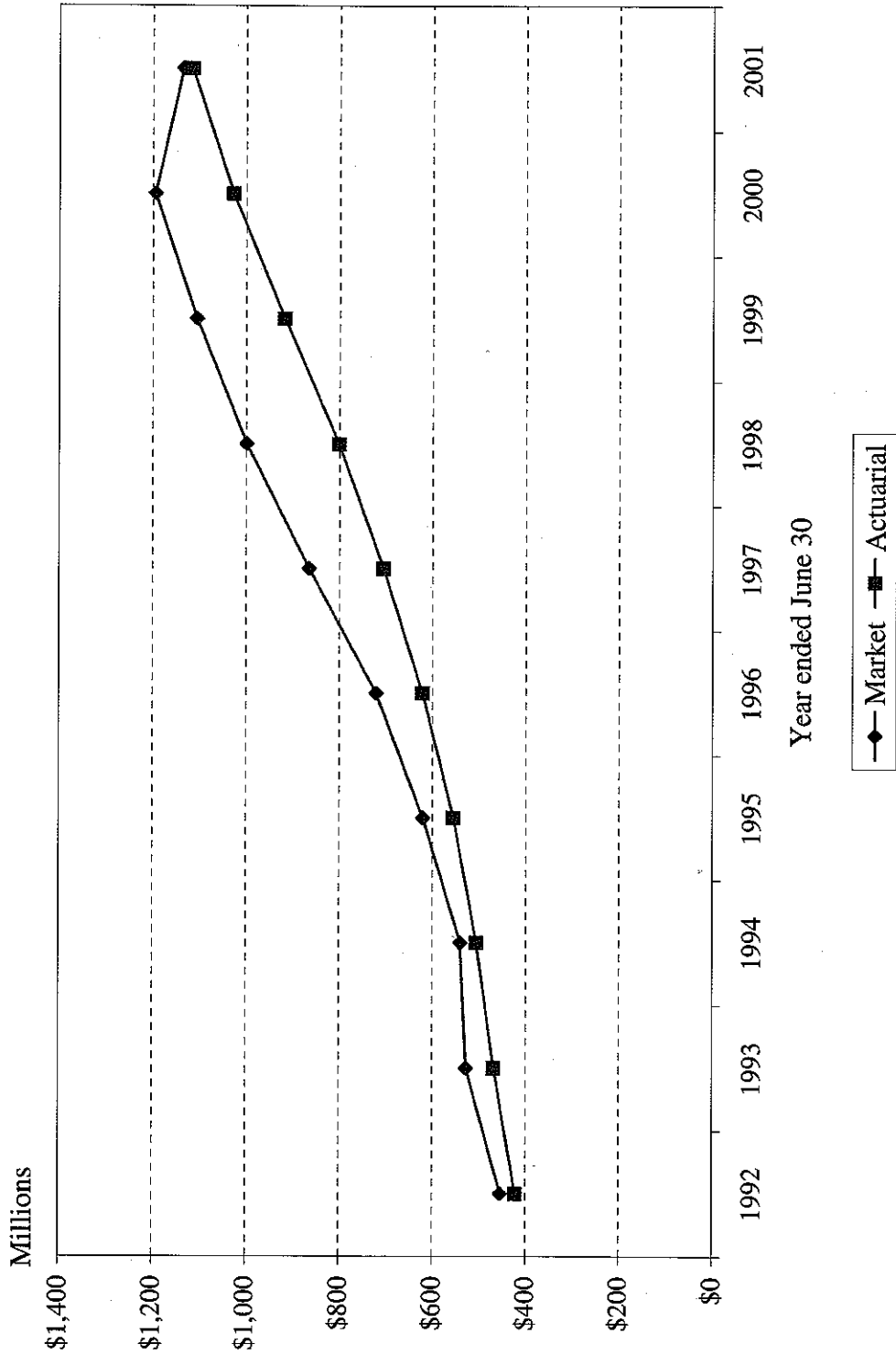


TABLE 4

*Summary Statement of Income and Disbursements for PERS
for the Years Ended June 30, 2001 and 2000
(Actuarial Value Basis)*

	<u>June 30, 2001</u>	<u>June 30, 2000</u>
Contribution Income:		
Employer Contributions	\$ 17,101,628	\$ 16,521,248
Member Contributions	16,273,260	15,693,237
Service Credit Repurchases	<u>1,080,008</u>	<u>925,534</u>
Total Contribution Income	\$ 34,454,896	\$ 33,140,019
Less: Administrative Expenses	<u>(894,868)</u>	<u>(800,529)</u>
Net Contribution Income	<u>\$ 33,560,028</u>	<u>\$ 32,339,490</u>
Investment Income:		
Interest and Dividends	\$ 49,343,023	\$ 44,185,353
Miscellaneous Income	7,570	10,531
Less: Investment Expenses	<u>(9,654,269)</u>	<u>(9,056,600)</u>
Net Interest and Dividends	\$ 39,696,324	\$ 35,139,284
Write-up of Assets	<u>55,803,501</u>	<u>89,141,795</u>
Net Investment Income	<u>\$ 95,499,825</u>	<u>\$ 124,281,079</u>
Total Income Available for Benefit Payments and Reserves	<u>\$ 129,059,853</u>	<u>\$ 156,620,569</u>
Benefit Payments:		
Pension Benefits	\$ (36,676,998)	\$ (34,026,828)
Transfers to Other Plans	(314,930)	(8,693,091)
Refunds	<u>(3,735,354)</u>	<u>(3,852,102)</u>
Total Benefit Payments	<u>\$ (40,727,282)</u>	<u>\$ (46,572,021)</u>
Addition to Reserve for Future Benefit Payments	\$ 88,332,571	\$ 110,048,548
Actuarial Value of Assets, Start of Year	<u>1,027,001,825</u>	<u>916,953,277</u>
Actuarial Value of Assets, End of Year	<u>\$1,115,334,396</u>	<u>\$ 1,027,001,825</u>

TABLE 5

Progress of the PERS Fund through June 30, 2001
(Actuarial Value Basis)

Year Ended June 30	Employer Contributions	Member Contributions*	Administrative Expenses	Net Investment Income	Benefit Payments	Fund at End Of Year
1991	-	-	-	-	-	\$387,647,960
1992	\$11,670,026	\$12,762,153	\$566,880	\$27,434,199	\$17,303,894	421,643,564
1993	12,450,932	12,684,825	622,049	39,884,292	18,056,383	467,985,181
1994	12,685,083	13,044,203	519,659	33,148,687	20,566,725	505,776,770
1995	13,257,600	13,164,344	528,430	45,345,492	22,372,635	554,643,141
1996	13,815,784	13,831,828	555,421	64,398,234	24,470,794	621,662,772
1997	14,435,989	14,320,237	565,778	81,409,263	26,791,639	704,470,844
1998	15,078,427	15,061,818	605,241	98,273,502	30,988,902	801,290,448
1999	15,873,917	16,152,785	718,396	117,425,238	33,070,715	916,953,277
2000	16,521,248	16,618,771	800,529	124,281,079	46,572,021	1,027,001,825
2001	17,101,628	17,353,268	894,868	95,499,825	40,727,282	1,115,334,396
Total for Last Ten Years	\$142,890,634	\$144,994,232	\$6,377,251	\$ 727,099,811	\$280,920,990	\$1,115,334,396

* Includes repurchases of service credit.

Chart 2
Income and Disbursements for PERS

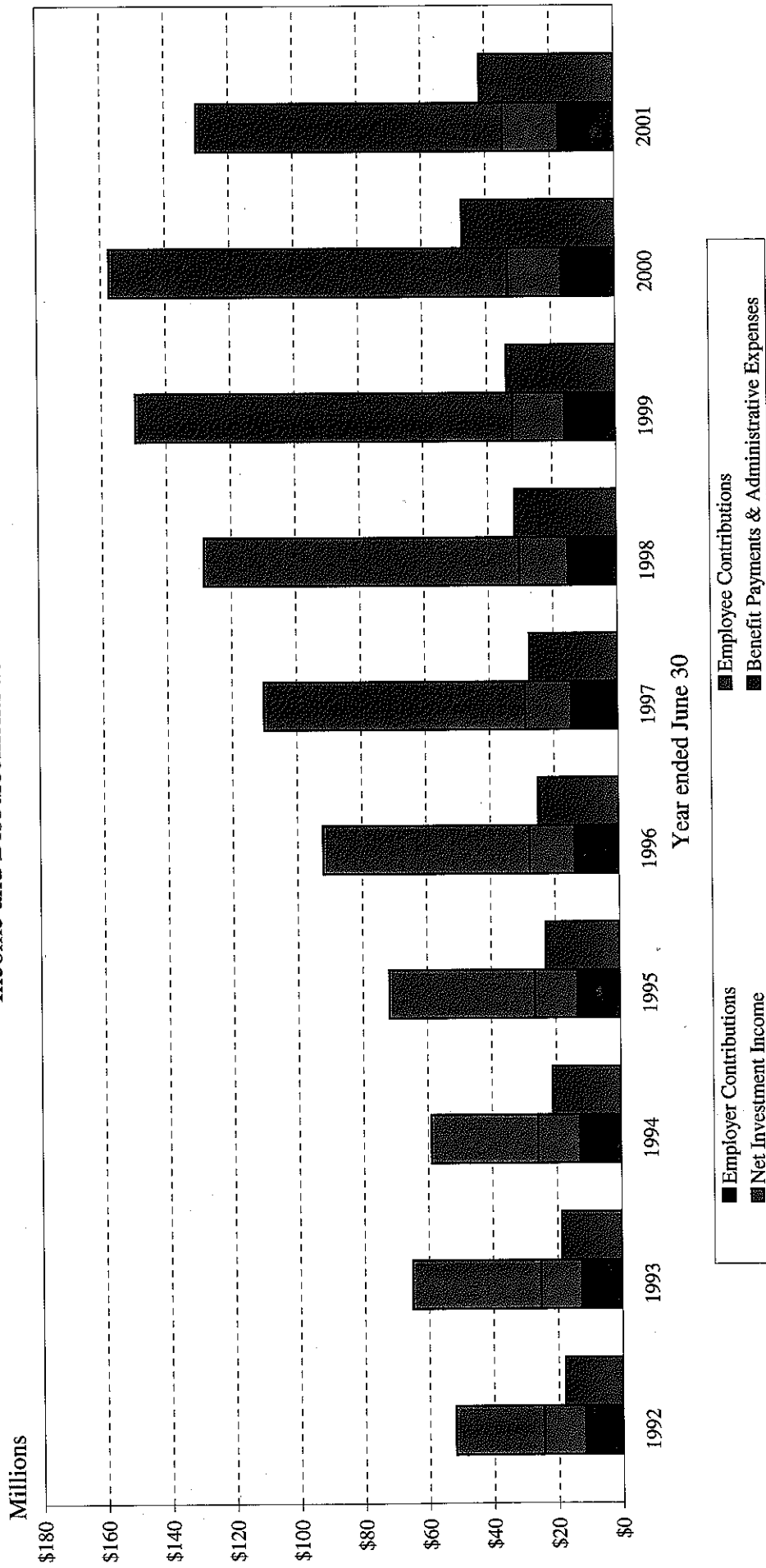
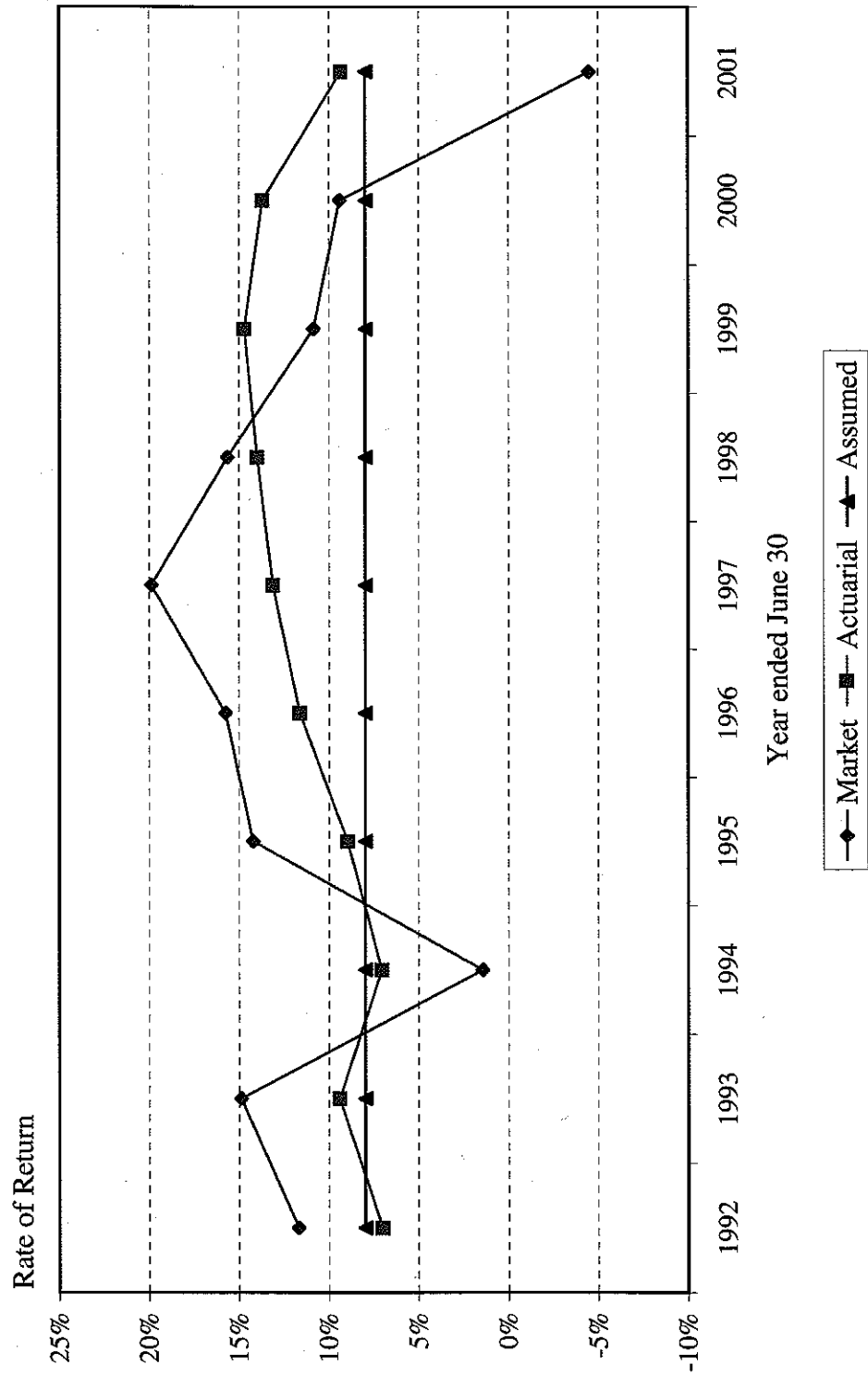


Chart 3
 Investment Returns
 (PERS and HPRS Combined)



VI. RESULTS OF ACTUARIAL VALUATION

The contribution requirement consists of the normal cost, administrative expense allowance, plus the cost of amortizing the unfunded liability over a scheduled period of years. The Board has adopted an open amortization schedule of 20 years. The calculated employer contribution requirements on this basis for fiscal year 2001-2002 are shown below as a dollar amount and as a percentage of the total compensation of contributing employees.

Main System

The components of the actuarial contribution requirements are shown below:

	<u>Amount for 2001-2002</u>	<u>Percentage of Payroll</u>
Total normal cost	\$ 40,027,676	9.33%
Less: Member contributions	<u>(17,158,862)</u>	<u>(4.00)</u>
Net employer normal cost	\$ 22,868,814	5.33%
Administrative expense allowance	710,000	0.17
Amortization payment (credit)	<u>(7,137,021)</u>	<u>(1.67)</u>
Total employer contribution requirement	\$ 16,441,793	3.83%

Covered payroll is \$428,971,553.

The statutory contribution rate is 4.12% of payroll. Hence, statutory contributions exceed the actuarial contribution requirement shown above by 0.29% of payroll.

The total employer actuarial contribution requirement was 2.32% of payroll last year. Since then, actual experience of the System during 2000-2001 has changed the actuarial contribution requirement. Table 6 presents a detailed explanation of these factors that changed the contribution requirement from July 1, 2000 to July 1, 2001.

The net employer normal cost plus the administrative expense allowance of 5.50% of payroll is greater than the statutory contribution rate of 4.12%. However, due to the amortization credit, statutory contributions exceed the actuarial contribution requirement. If the past gains are drawn down, then the employer contribution requirement may exceed the statutory rate.

TABLE 6

Main System *Explanation of Change in Employer Cost Rate (continued)*

	Percent of Payroll
<i>Administrative Expenses</i>	0.04%
Actual expenses were more than expected, hence, increasing the employer cost rate.	
<i>New Members and Reinstated Members</i>	0.04%
Some new active members had past service credits reinstated, thereby increasing costs due to the unanticipated liabilities.	
<i>Change in Size and Composition of Active Membership and Miscellaneous Experience</i>	0.13%
The demographic characteristics of the active membership changed during the year.	
<i>Plan Provision Changes</i>	1.36%
The benefit multiplier was increased from 1.89% to 2.00%, retirees and beneficiaries received an ad-hoc cost-of-living adjustment of 6.00%, and the early retirement factor was enhanced to be based on the earlier of age 65 or the "Rule of 85" age.	
<i>Assumption Changes</i>	0.00%
There were no assumption changes.	
<i>Funding Schedule</i>	0.08%
The effect of maintaining a 20-year funding schedule results in a small increase in cost each year.	
Employer Cost Rate as of July 1, 2001	3.83%

VII. FUNDING STATUS

The calculation of benefit security ratios provides one measure of the progress of funding a retirement plan. The benefit security ratio is the percentage of plan liabilities covered by plan assets. The greater the ratio, the better funded the retirement plan is. This ratio can be calculated using different measures of the retirement plan's liabilities.

Funding Basis - Actuarial Accrued Liability

This measure of liabilities is used in calculating pension costs. It uses the Entry Age Normal Actuarial Cost Method that spreads costs as a level percentage of payroll over a member's working career.

For determining plan costs, a smoothed value of assets (called the actuarial value) is used. Hence, the actuarial value of assets was used to calculate the benefit security ratios.

Disclosure Basis

The accounting standard for disclosure of liabilities and funding status of the System is based on GASB Statement No. 25 (Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans). GASB Statement No. 25 allows the System to disclose its liabilities and funding status on the same bases used for funding the System. The actuarial value of assets is used for comparing assets and liabilities.

Historical Results

The benefit security ratios (under the GASB Statement No. 25 standard) for the last ten years are developed in Table 7. These ratios are graphed in Chart 4. They show that, on a funding basis, the benefit security ratio was generally greater than 100% during the period.

Funding ratios change over time due to several factors. These factors include the level of contributions, actual experience (including investment returns), plan amendments, and changes in assumptions. In particular, we observe that in 1993, 1994, 1995, 1999, and 2001 benefit improvements were effective, decreasing the funding ratio from what it would have been otherwise. Also, the actuarial assumptions were changed in 1992, 1995 and 2000, changing the funding ratio from what it would have been otherwise.

TABLE 7***Benefit Security Ratio***

As of July 1	Actuarial Accrued Liability	Actuarial Value of Assets	Benefit Security Ratio
1992	\$ 417,782,400	\$ 421,643,500	100.9%
1993	469,584,300	467,985,200	99.7
1994	511,155,700	505,776,800	98.9
1995	539,798,100	554,643,100	102.8
1996	597,870,000	621,662,800	104.0
1997	646,902,000	704,470,800	108.9
1998	720,093,400	801,290,400	111.3
1999	842,717,700	916,953,300	108.8
2000	891,889,000	1,027,001,800	115.1
2001	1,008,722,500	1,115,334,400	110.6

TABLE 6

Main System *Explanation of Change in Employer Cost Rate (continued)*

	Percent of Payroll
<i>Administrative Expenses</i>	0.04%
Actual expenses were more than expected, hence, increasing the employer cost rate.	
<i>New Members and Reinstated Members</i>	0.04%
Some new active members had past service credits reinstated, thereby increasing costs due to the unanticipated liabilities.	
<i>Change in Size and Composition of Active Membership and Miscellaneous Experience</i>	0.13%
The demographic characteristics of the active membership changed during the year.	
<i>Plan Provision Changes</i>	1.36%
The benefit multiplier was increased from 1.89% to 2.00%, retirees and beneficiaries received an ad-hoc cost-of-living adjustment of 6.00%, and the early retirement factor was enhanced to be based on the earlier of age 65 or the "Rule of 85" age.	
<i>Assumption Changes</i>	0.00%
There were no assumption changes.	
<i>Funding Schedule</i>	0.08%
The effect of maintaining a 20-year funding schedule results in a small increase in cost each year.	
Employer Cost Rate as of July 1, 2001	3.83%

VII. FUNDING STATUS

The calculation of benefit security ratios provides one measure of the progress of funding a retirement plan. The benefit security ratio is the percentage of plan liabilities covered by plan assets. The greater the ratio, the better funded the retirement plan is. This ratio can be calculated using different measures of the retirement plan's liabilities.

Funding Basis - Actuarial Accrued Liability

This measure of liabilities is used in calculating pension costs. It uses the Entry Age Normal Actuarial Cost Method that spreads costs as a level percentage of payroll over a member's working career.

For determining plan costs, a smoothed value of assets (called the actuarial value) is used. Hence, the actuarial value of assets was used to calculate the benefit security ratios.

Disclosure Basis

The accounting standard for disclosure of liabilities and funding status of the System is based on GASB Statement No. 25 (Financial Reporting for Defined Benefit Pension Plans and Note Disclosures for Defined Contribution Plans). GASB Statement No. 25 allows the System to disclose its liabilities and funding status on the same bases used for funding the System. The actuarial value of assets is used for comparing assets and liabilities.

Historical Results

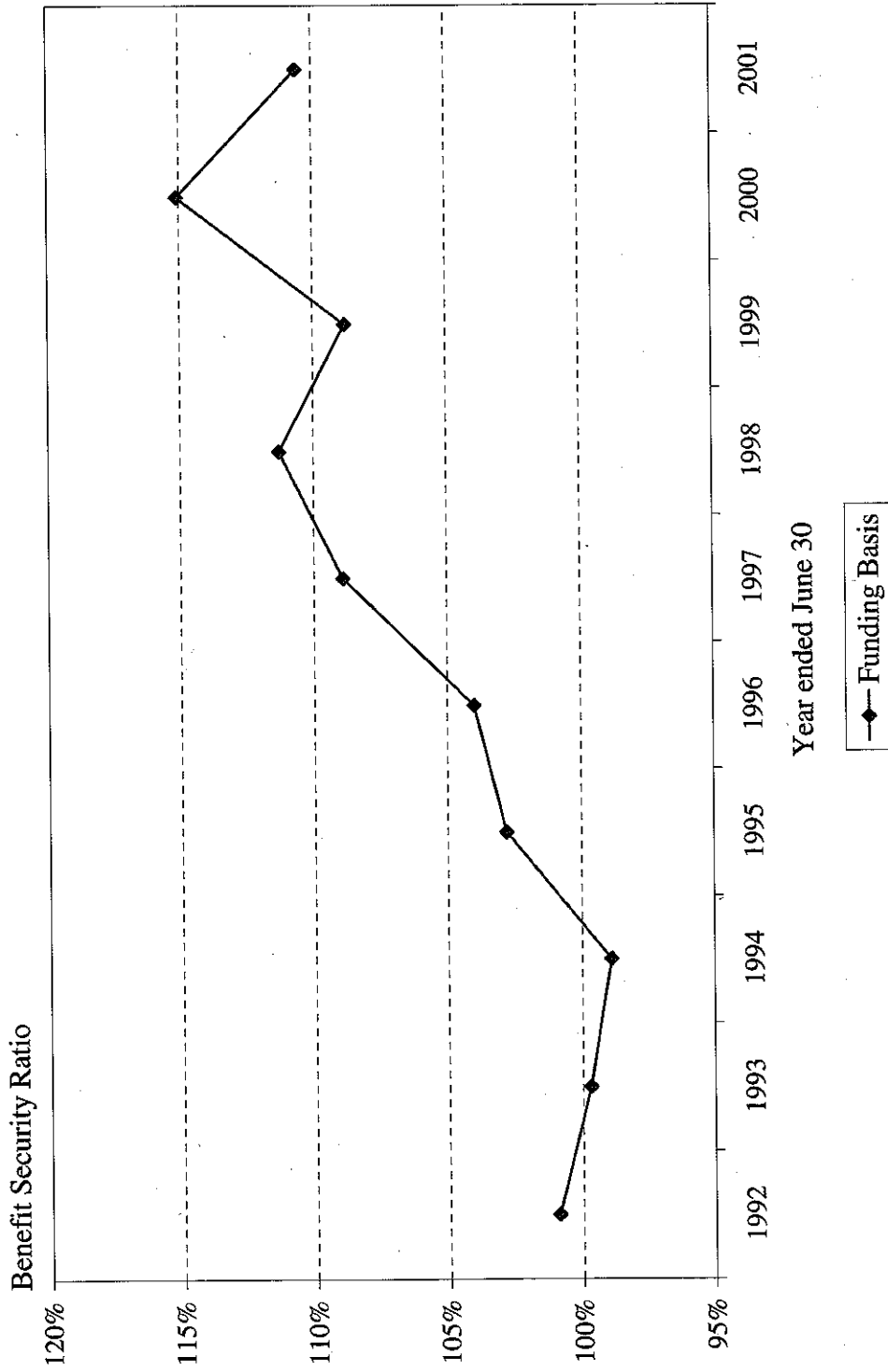
The benefit security ratios (under the GASB Statement No. 25 standard) for the last ten years are developed in Table 7. These ratios are graphed in Chart 4. They show that, on a funding basis, the benefit security ratio was generally greater than 100% during the period.

Funding ratios change over time due to several factors. These factors include the level of contributions, actual experience (including investment returns), plan amendments, and changes in assumptions. In particular, we observe that in 1993, 1994, 1995, 1999, and 2001 benefit improvements were effective, decreasing the funding ratio from what it would have been otherwise. Also, the actuarial assumptions were changed in 1992, 1995 and 2000, changing the funding ratio from what it would have been otherwise.

TABLE 7***Benefit Security Ratio***

As of July 1	Actuarial Accrued Liability	Actuarial Value of Assets	Benefit Security Ratio
1992	\$ 417,782,400	\$ 421,643,500	100.9%
1993	469,584,300	467,985,200	99.7
1994	511,155,700	505,776,800	98.9
1995	539,798,100	554,643,100	102.8
1996	597,870,000	621,662,800	104.0
1997	646,902,000	704,470,800	108.9
1998	720,093,400	801,290,400	111.3
1999	842,717,700	916,953,300	108.8
2000	891,889,000	1,027,001,800	115.1
2001	1,008,722,500	1,115,334,400	110.6

Chart 4
Benefit Security Ratio



VIII. ACTUARIAL ASSUMPTIONS AND COST METHOD

The actuarial assumptions used in the actuarial valuation as of July 1, 2001 are the same as those used in the previous valuation. The cost method used in this year's valuation is the same as that used in the previous valuation. A summary of the actuarial assumptions and cost method follows. Details can be found in Exhibit II of Appendix A.

Investment Return

The actuarial calculations are based on the assumption that the investment return on the actuarial value of assets of the System will be 8.00% per year, net of investment expenses.

Salary Increases

Because the retirement benefits provided by the plan are based on a member's final average salary, increases in salaries affect the employer's contribution requirements. A salary scale is used in an actuarial valuation to project each member's future salary increases.

For the Main System and National Guard, the assumed salary increase is 7.00% during each of the first five years of service. After five years of service, salary increases are age-related. Sample age-related annual salary rate increases are as follows:

<u>Age</u>	<u>Increase</u>
25	5.90%
30	5.60
35	5.30
40	5.10
45	4.90
50	4.80
55	4.70
60	4.70

For Judges, the assumed salary increase is 5.50% per year.

Actuarial assumptions should be reasonable over the long term and should not be unduly influenced by transitory deviations. Actual salary increases that are greater than assumed produce actuarial losses that, if not offset by actuarial gains from other sources (such as investment gains), result in increasing future employer costs. On the other hand, salary increases that are less than projected produce actuarial gains, which can result in lowering future employer costs.

Payroll Growth

For the Main System and the National Guard, the assumed payroll growth rate is 4.50% per annum. For Judges, the assumed payroll growth rate is 4.00% per annum.

Mortality Rates

The reserve required to pay a member's retirement benefits depends on life expectancies. The valuation uses the 1983 Group Annuity Mortality Table for healthy members and the Pension Benefit Guaranty Corporation Disabled Life Mortality Table for Individuals Receiving Social Security Disability Benefits for disabled members. The table below shows sample mortality rates and life expectancies underlying the healthy mortality table for males.

<u>Retired Members (Males)</u>		
<u>Age</u>	<u>Deaths per 1,000 Lives</u>	<u>Expected Number of Years of Life Remaining</u>
55	6.1	24.8
60	9.2	20.6
65	15.6	16.7
70	27.5	13.2
75	44.6	10.2
80	74.1	7.6
85	114.8	5.7

Disability

A percentage of members are assumed to become disabled while in active service. The incidence rates used are based on a study of disability incidence under the Social Security program. To reflect actual experience under the retirement system, 42% of the Social Security disability incidence rates are used for males and 30% are used for females.

Withdrawal Rates Before Retirement

The withdrawal rates used in this actuarial valuation reflect the expected percentage of members who will leave service at each age before retirement for reasons other than death or disability.

For the Main System and National Guard, special withdrawal rates are applied during the first five years of service to recognize higher turnover for short service members.

During the first five years of service, the rates vary with age and service as follows:

<u>Age</u>	<u>Years of Service</u>				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
20 - 29	23%	20%	17%	16%	15%
30 - 39	17	15	13	12	11
40 & Over	15	12	10	8	6

After five years of service, annual rates vary with age and gender as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20 - 24	12%	12%
25 - 29	8	10
30 - 34	5	8
35 - 39	4	6
40 - 44	3	5
45 - 49	3	4
50 & Over	2	3

For Judges, withdrawal rates at each age are one-half of the rates for members of the Main System and National Guard with at least five years of service.

Withdrawal rates end upon the earlier of early retirement and Rule of 85 (Main System and Judges) eligibility.

Retirement

The retirement rates reflect the expected percentage of members who will retire at each age. For Main System members, the rates vary with age, as follows:

<u>Age</u>	<u>Rate</u>
55	4%
56	6
57	6
58	6
59	6
60	8
61	15
62	35
63	25
64	25
65	40
66	20
67	20
68	20
69	20
70	100

The retirement rates for Judges begin at age 62. Thirty-five percent of Judges are assumed to retire at each age from 62 to 64, 50% are assumed to retire at each age from 65 to 69, and 100% of the remaining Judges are assumed to retire at age 70.

Retirement for members of the National Guard is assumed to occur at age 60.

Retirement for inactive vested members of the Main System and Judges is assumed to occur at the earlier of age 65 and Rule of 85. Retirement for inactive vested members of the National Guard is assumed to occur at age 55.

Fifty percent of inactive vested Main System and Judges and 100% of inactive vested National Guard are assumed to elect a refund of employee contributions in lieu of a pension benefit.

Annual Administrative Expenses

Annual administrative expenses for all three Systems combined are assumed to be \$720,000.

Marital Status for Non-Retired Members

At death, 75% of male members and 60% of female members are assumed to have spouses. Males are assumed to be five years older than their female spouses.

Valuation of Assets

Investments are valued at an adjusted market value. Interest and dividends are recognized immediately. The net market appreciation (depreciation) is spread over five years in equal dollar amounts, beginning with the year of occurrence. The actuarial value of assets is the market value less deferred appreciation (depreciation).

Actuarial Cost Method

The System is funded using the Entry Age Normal Actuarial Cost Method. This method produces costs that remain relatively level as a percentage of covered payroll.

Under the Entry Age Normal Method, the total contribution requirement has three components - an annual normal cost, an allowance for administrative expenses and a payment with respect to the unfunded actuarial accrued liability. The annual normal cost is calculated for each member as the level percentage of pay required over the member's period of covered employment to pay the total expected benefits. The normal cost is determined as if the current benefit accrual rate had always been in effect. If the actuarial assumptions are met, the total normal cost rate will remain level as a percentage of payroll.

The normal cost payments are sufficient to finance the benefit program only if there are no changes in plan design and all actuarial assumptions are realized. To the extent that actual experience is less favorable than assumed, additional liabilities not funded through normal cost payments arise. Also, benefit liberalizations that improve earned benefits or benefit eligibility produce additional liabilities. The Board has adopted a schedule of amortizing this unfunded/(surplus) actuarial accrued liability over an open period of 20 years. The annual payments are determined as a level percent of payroll, with payroll expected to increase 4.5% per year for the Main System and National Guard, and for Judges payroll is expected to increase 4.0% per year. This method provides payment in constant, or real, dollars.

APPENDIX A

October 11, 2001

**NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM
ACTUARIAL VALUATION CERTIFICATE**

This is to certify that we have prepared an Actuarial Valuation of the System as of July 1, 2001 in accordance with generally accepted actuarial principles and practices.

The certificate contains the following attached exhibits:

- I. Actuarial Valuation Results
- II. Actuarial Assumptions and Cost Method
- III. Changes in Actuarial Assumptions and Cost Methods
- IV. Plan Amendments
- V. Summary of Plan Provisions

The valuation was based on information supplied by the Retirement Office with respect to member and financial data. We have not verified, and customarily would not verify, such information but we have no reason to doubt its substantial accuracy.

In my opinion, the individual assumptions used are reasonably related to the experience of the System and to reasonable expectations.



Leslie L. Thompson, A.S.A., M.A.A.A., E.A.
Vice President and Consulting Actuary

LLT:cvm

EXHIBIT I-A

ACTUARIAL VALUATION RESULTS

MAIN SYSTEM

1.	Actuarial accrued liability on July 1, 2001:	
a.	Active members.....	\$ 630,004,376
b.	Special prior service pensions	298,528
c.	Retired members and beneficiaries	336,160,787
d.	Inactive non-retired members.....	<u>27,388,118</u>
e.	Total.....	\$ 993,851,809
2.	Assets at actuarial value (\$1,114,635,498 at market value).....	1,096,115,648
3.	Unfunded/(Surplus) actuarial accrued liability equals (1) minus (2).....	(102,263,839)
4.	Member and employer normal cost for ensuing year*	40,027,676
5.	Estimated annual salaries of covered members.....	428,971,553
6.	Member normal cost - equals 4% of (5).....	17,158,862
7.	Employer normal cost for ensuing year - equals (4) minus (6)*	22,868,814
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*	(7,137,021)
9.	Administrative expenses	710,000
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)*.....	16,441,793
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)*.....	3.83%

* Adjusted for interest to recognize payments through the year.

EXHIBIT I-B

ACTUARIAL VALUATION RESULTS

JUDGES

1.	Actuarial accrued liability on July 1, 2001:	
a.	Active members.....	\$ 9,650,871
b.	Retired members and beneficiaries	4,093,017
c.	Inactive non-retired members.....	<u>109,271</u>
d.	Total.....	\$13,853,159
2.	Assets at actuarial value (\$18,249,497 at market value).....	17,946,279
3.	Unfunded/(Surplus) actuarial accrued liability equals (1) minus (2).....	(4,093,120)
4.	Member and employer normal cost for ensuing year*	841,430
5.	Estimated annual salaries of covered members	3,914,240
6.	Member normal cost - equals 5% of (5)	195,712
7.	Employer normal cost for ensuing year - equals (4) minus (6)*	645,718
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*	(297,310)
9.	Administrative expenses	5,000
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)*	353,408
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)*	9.03%

* Adjusted for interest to recognize payments through the year.

EXHIBIT I-C

ACTUARIAL VALUATION RESULTS

NATIONAL GUARD

1.	Actuarial accrued liability on July 1, 2001:	
	a. Active members.....	\$ 701,959
	b. Retired members and beneficiaries	291,519
	c. Inactive non-retired members.....	<u>24,020</u>
	d. Total.....	\$ 1,017,498
2.	Assets at actuarial value (\$1,293,968 at market value).....	1,272,469
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)	(254,971)
4.	Member and employer normal cost for ensuing year*	48,394
5.	Estimated annual salaries of covered members	487,614
6.	Member normal cost - equals 4% of (5)	19,505
7.	Employer normal cost for ensuing year - equals (4) minus (6)*	28,889
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*	(17,794)
9.	Administrative expenses	5,000
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)*	16,095
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)*	3.30%

* Adjusted for interest to recognize payments through the year.

EXHIBIT I-D

ACTUARIAL VALUATION RESULTS

MAIN SYSTEM, JUDGES, AND NATIONAL GUARD COMBINED

1.	Actuarial accrued liability on July 1, 2001:		
	a. Active members.....	\$640,357,206	
	b. Special prior service pensions	298,528	
	c. Retired members and beneficiaries	340,545,323	
	d. Inactive non-retired members.....	<u>27,521,409</u>	
	e. Total.....		\$1,008,722,466
2.	Assets at actuarial value (\$1,134,178,962 at market value).....		1,115,334,396
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)		(106,611,930)
4.	Member and employer normal cost for ensuing year *		40,917,500
5.	Estimated annual salaries of covered members		433,373,407
6.	Member normal cost		17,374,079
7.	Employer normal cost for ensuing year - equals (4) minus (6)*		23,543,421
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*		(7,452,125)
9.	Administrative expenses		720,000
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)*		16,811,296
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)*		3.88%

* Adjusted for interest to recognize payments through the year.

EXHIBIT II

ACTUARIAL ASSUMPTIONS AND COST METHOD

1. Mortality Tables:

Healthy: 1983 Group Annuity Mortality Table.

Disabled: Pension Benefit Guaranty Corporation Disabled Life Mortality Table for Individuals Receiving Social Security Disability Benefits.

2. Disability Incidence Rates:

Before Age 65: Males 42% of Social Security disability incidence rates.
Females 30% of Social Security disability incidence rates.

Age 65 and Later: Males 0.25% per year.
Females 0.35% per year.

Sample rates are as follows:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20	0.03%	0.02%
30	0.05	0.03
40	0.09	0.07
50	0.25	0.18

3. Annual Withdrawal Rates:

Main System and National Guard:

First five years of service:

<u>Age</u>	<u>Years of Service</u>				
	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
20 - 29	23%	20%	17%	16%	15
30 - 39	17	15	13	12	11
40 & Over	15	12	10	8	6

EXHIBIT II (continued)

After five years service:

<u>Age</u>	<u>Male</u>	<u>Female</u>
20 - 24	12%	12%
25 - 29	8	10
30 - 34	5	8
35 - 39	4	6
40 - 44	3	5
45 - 49	3	4
50 & Over	2	3

Judges:

One-half of the Main System ultimate rates.

Withdrawal Rates End Upon Eligibility for Early Retirement. Early Retirement Eligibility is as follows:

Main System:

Earlier of (i) age 55 and 3 years of service, and (ii) eligibility of Rule of 85.

Judges:

Earlier of (i) age 55 and 5 years of service, and (ii) eligibility of Rule of 85.

National Guard:

Age 50 and 3 years of service.

EXHIBIT II (continued)

4. Retirement Rates for Active Members:

Main System:

<u>Age</u>	<u>Rate</u>
55	4%
56	6
57	6
58	6
59	6
60	8
61	15
62	35
63	25
64	25
65	40
66	20
67	20
68	20
69	20
70	100

Judges:

<u>Age</u>	<u>Rate</u>
62	35%
63	35
64	35
65	50
66	50
67	50
68	50
69	50
70	100

National Guard:

<u>Age</u>	<u>Rate</u>
60	100%

EXHIBIT II (continued)

5. Retirement Age for Inactive Vested Members:

Main System and Judges:

The earlier of:

- Age 65.
- Unreduced retirement date for each individual.

National Guard:

Age 55.

6. Interest rate:

8.00% per annum, net of investment expenses.

7. Annual administrative expenses:

Main System: \$ 710,000.

Judges: \$ 5,000.

National Guard: \$ 5,000.

8. Salary scale:

Main System and National Guard:

Less than five years of service: 7.00% per annum.

Five or more years of service:

<u>Age</u>	<u>Percentage Increase</u>	<u>Age</u>	<u>Percentage Increase</u>
25	5.90%	45	4.90%
30	5.60	50	4.80
35	5.30	55	4.70
40	5.10	60	4.70

Judges:

5.50% per annum.

EXHIBIT II (continued)

9. Payroll Growth:

Main System and National Guard: 4.50% per annum.
Judges: 4.00% per annum.

10. Marital Status:

At death, 75% of active male members and 60% of active female members are assumed to have spouses. Males are assumed to be five years older than their female spouses.

11. Part-Time Employees:

One full year of service is credited for each future year of service.

12. Split Service:

Liabilities are held in both plans based on service in each plan and are based on the actuarial assumptions of the plan in which they are currently active.

13. Actuarial Cost Method:

Entry Age Normal Actuarial Cost Method. The unfunded actuarial accrued liability is amortized in installments increasing by the inflation assumption each year over an open 20-year period.

14. Actuarial Value of Assets:

Adjusted market value that immediately recognizes interest and dividends. The procedure recognizes 20% of each year's total appreciation (depreciation) beginning with the year of occurrence. After five years, the appreciation (depreciation) is fully recognized.

15. Disability Social Security (for Judges' disability benefit offset):

Eligibility: 50%

Consumer Price Index Increases: 4.5% per annum

Wage Base Increases: 5.0% per annum

16. Workers' Compensation (for Judges' disability benefit offset):

None assumed.

EXHIBIT II (continued)

17. Account Balance Due to Vested Employer Contribution (PEP):

Participation

Under Chapter 54-52.2: *If not elected:* 50% of active members of the Main System
and National Guard.

If elected: 100% of active members of the Main System
and National Guard.

Contribution: Maximum allowed based on service at the beginning of the Plan year.

EXHIBIT III

CHANGES IN ACTUARIAL ASSUMPTIONS AND COST METHODS

- There were no changes in actuarial assumptions or in the actuarial cost method since the preceding actuarial valuation.

EXHIBIT IV
PLAN AMENDMENTS

Since the preceding actuarial valuation, the following changes in plan provisions have been adopted:

Main System:

- Benefit Multiplier – the benefit multiplier increased from 1.89% to 2.00% of final average salary for all years of service for current actives and deferred vested retirees.
- Post-retirement Adjustments – the benefits for those members in pay status as of July 31, 2001 increased by 6.00% effective August 1, 2001.
- Early Service Retirement Benefit – a benefit that begins before age 65 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before the earlier of age 65 or the age at which the Rule of 85 would be met. Previously, the reduction was from age 65.

Judges:

- Normal Form of Benefit – the normal form of benefit was changed from a life annuity to a 50% joint and survivor annuity.
- Post-retirement Adjustments – the benefits for those members in pay status as of December 31, 2001 increase by 2.00%, effective January 1, 2002. Also, the benefits for those members in pay status as of December 31, 2002 increase by 2.00%, effective January 1, 2003.

National Guard:

- Benefit Multiplier – the benefit multiplier increased from 1.89% to 2.00% of final average salary for all years of service for current actives and deferred vested retirees.
- Post-retirement Adjustments – the benefits for those members in pay status as of July 31, 2001 increased by 6.00% effective August 1, 2001.

EXHIBIT V

SUMMARY OF PLAN PROVISIONS

This exhibit summarizes the major benefit provisions of the North Dakota Public Employees Retirement System as included in the valuation. It is not intended to be, nor should it be, interpreted as a complete statement of all plan provisions.

1. Normal Service Retirement:

Eligibility:

Main System and Judges:

Attainment of age 65 or age plus service equal to at least 85 (Rule of 85).

National Guard:

Attainment of age 55 and 3 consecutive years of service.

Benefit:

Main System:

2.00% of final average salary multiplied by service.

Judges:

3.50% of final average salary for the first 10 years of service, 2.80% for the next 10 years of service, and 1.25% for service in excess of 20 years.

National Guard:

2.00% of final average salary multiplied by service.

2. Early Service Retirement:

Eligibility:

Main System:

Attainment of age 55 with 3 years of service.

Judges:

Attainment of age 55 with 5 years of service.

EXHIBIT V (continued)

National Guard:

Attainment of age 50 with 3 years of service.

Benefit:

Main System:

The Normal Service Retirement Benefit as determined above. A benefit that begins before age 65 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before the earlier of age 65 or the age at which the Rule of 85 is met.

Judges:

The Normal Service Retirement Benefit as determined above. A benefit that begins before age 65 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before age 65.

National Guard:

The Normal Service Retirement Benefit as determined above. A benefit that begins before age 55 is reduced by one-half of one percent for each month before age 55.

3. Disability Benefit:

Eligibility:

Six months of service and inability to engage in any substantial gainful activity.

Benefit:

Main System and National Guard:

25% of the member's final average salary at disability, with a minimum of \$100 per month.

Judges:

70% of the member's final average salary at disability minus Social Security and Workers' Compensation benefits paid.

EXHIBIT V (continued)

4. Deferred Vested Retirement:

Eligibility:

Main System and National Guard:

Three years of service.

Judges:

Five years of service.

Benefit:

Main System and Judges:

The Normal Service Retirement Benefit payable at age 65 or the Rule of 85, if earlier. Reduced early retirement benefits can be elected upon attainment of age 55.

National Guard:

The Normal Service Retirement Benefit payable at age 55. Reduced early retirement benefits can be elected upon attainment of age 50.

5. Pre-Retirement Death Benefits:

Survivor annuity benefits (paid to surviving spouse):

Main System and National Guard:

Eligibility:

Three years of service and before normal retirement.

Benefit:

One of the following options:

- Lump sum payment of accumulated contributions.
- The member's accrued benefit payable for 60 months.
- 50% of the member's accrued benefit (not reduced on account of age) payable for the spouse's lifetime.

Eligibility:

Eligible for normal retirement.

EXHIBIT V (continued)

Benefit:

Continuation portion of 100% Joint and Survivor Annuity.

Judges:

Eligibility:

Five years of service.

Benefit:

One of the following options:

- Lump sum payment of accumulated contributions.
- 100% of the member's accrued benefit (not reduced on account of age) payable for the spouse's lifetime.

Other death benefits:

Main System, National Guard and Judges:

Eligibility:

Not vested or no surviving spouse.

Benefit:

Refund of member's accumulated contributions.

6. Refund of Contributions:

Paid to terminated non-vested members and terminated vested members in lieu of a monthly retirement benefit.

7. Accumulated Member Contributions:

Member contributions accumulate with interest at the following rates:

<u>Time Period</u>	<u>Per Annum Interest Rate</u>
Through June 30, 1981	5.0%
July 1, 1981 to June 30, 1986	6.0%
After June 30, 1986	0.5% less than the actuarial interest rate assumption

EXHIBIT V (continued)

8. Standard and Optional Forms of Payment:

Standard form of payment:

Monthly benefit for life with a refund of the remaining balance (if any) of accumulated member contributions.

Optional forms of payment:

50% joint and survivor annuity, 100% joint and survivor annuity (with pop-up feature), five year certain and life annuity, ten year certain and life annuity, or a level Social Security income annuity.

9. Final Average Salary:

Average of the highest salary received by the member for any 36 months employed during the last 120 months of employment.

10. Contributions:

Contribution rates specified in the Century Code (except employer rate for National Guard); differ between permanent full-time employees and part-time temporary employees. Rates are as follows:

	<u>Full-Time Employees</u>	<u>Employer</u>
Main System	4.00%	4.12%
Judges	5.00%	14.52%
National Guard	4.00%	8.33%

Part-time employees in the Main System contribute 8.12%, with no employer contributions.

Effective January 1, 2000:

A member's account balance includes vested employer contributions equal to the member's contributions to the deferred compensation Plan under chapter 54-52.2. The vested employer contribution may not exceed:

1. For months one through twelve of service credit, twenty-five dollars or one percent of the member's monthly salary, whichever is greater.
2. For months thirteen through twenty-four of service credit, twenty-five dollars or two percent of the member's monthly salary, whichever is greater.
3. For months twenty-five through thirty-six of service credit, twenty-five dollars or three percent of the member's monthly salary, whichever is greater.

EXHIBIT V (continued)

4. For service exceeding thirty-six months, twenty-five dollars or four percent of the member's monthly salary, whichever is greater.
5. The vested employer contribution may not exceed four percent of the member's monthly salary.

Vested employer contributions are credited monthly to the member's account balance.

11. Rollovers:

The fund may accept rollovers from other qualified plans under rules adopted by the Board for the purchase of additional service credit.

APPENDIX B: CENSUS TABLES

		<u>Table Designation</u>
I.	Active Members	
(A)	Number of active members grouped by age and years of employment:	
	Males	8-A
	Females	8-B
	All	8-C
(B)	Number of active members grouped by age and salary amounts:	
	Males	9-A
	Females	9-B
	All	9-C
II.	Current Plan Pensions	
(A)	Distribution of pensions awarded during the year by amount of benefit and type of pension:	
	Males	10-A
	Females	10-B
	All	10-C
(B)	Distribution of pensions awarded during the year by age and type of pension:	
	Males	11-A
	Females	11-B
	All	11-C
(C)	Distribution of pensions in force by amount of benefit and type of pension:	
	Males	12-A
	Females	12-B
	All	12-C
(D)	Distribution of pensions in force by age and type of pension:	
	Males	13-A
	Females	13-B
	All	13-C
III.	Special Prior Service Pensions	
(A)	Distribution of pensions in force by amount of benefit:	
	Males	14-A
	Females	14-B
	All	14-C
(B)	Distribution of pensions in force by age:	
	Males	15-A
	Females	15-B
	All	15-C

TABLE 8-A

*Census of Members in Active Service on July 1, 2001
by Age and Years of Employment in PERS*

(Males - Main System, Judges and National Guard)

Age	Total	Years of Employment									
		Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over		
Total	6,629	2,340	1,191	1,072	827	664	309	169	57		
Under 20	2	2	-	-	-	-	-	-	-	-	-
20-24	157	157	-	-	-	-	-	-	-	-	-
25-29	422	373	49	-	-	-	-	-	-	-	-
30-34	574	339	178	57	-	-	-	-	-	-	-
35-39	705	268	213	167	57	-	-	-	-	-	-
40-44	972	301	176	214	170	109	2	-	-	-	-
45-49	1,189	330	185	200	186	207	76	5	-	-	-
50-54	1,168	244	161	189	179	195	135	65	-	-	-
55-59	783	173	118	131	114	88	67	69	23		
60-64	462	104	66	77	87	53	22	27	26		
65-69	128	26	31	25	23	10	3	3	7		
70 & Over	67	23	14	12	11	2	4	-	1		

TABLE 8-B

*Census of Members in Active Service on July 1, 2001
by Age and Years of Employment in PERS*

(Females - Main System, Judges and National Guard)

Age	Total	Years of Employment									
		Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over		
Total	10,127	4,124	1,994	1,599	1,163	800	307	106	34	-	-
Under 20	6	6	-	-	-	-	-	-	-	-	-
20-24	240	239	1	-	-	-	-	-	-	-	-
25-29	613	551	61	1	-	-	-	-	-	-	-
30-34	811	518	218	73	2	-	-	-	-	-	-
35-39	1,218	612	254	215	129	8	-	-	-	-	-
40-44	1,869	765	408	273	242	169	12	-	-	-	-
45-49	1,991	656	442	333	212	212	130	6	-	-	-
50-54	1,623	431	324	326	250	157	74	61	-	-	-
55-59	1,040	199	167	231	197	143	61	24	18	-	-
60-64	518	110	75	108	92	90	22	11	10	-	-
65-69	141	24	35	25	26	15	7	3	6	-	-
70 & Over	57	13	9	14	13	6	1	1	-	-	-

TABLE 8-C

*Census of Members in Active Service on July 1, 2001
by Age and Years of Employment in PERS*

(All Members - Main System, Judges and National Guard)

Age	Total	Years of Employment										
		Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over			
Total	16,756	6,464	3,185	2,671	1,990	1,464	616	275	91			
Under 20	8	8	-	-	-	-	-	-	-	-	-	-
20-24	397	396	1	-	-	-	-	-	-	-	-	-
25-29	1,035	924	110	1	-	-	-	-	-	-	-	-
30-34	1,385	857	396	130	2	-	-	-	-	-	-	-
35-39	1,923	880	467	382	186	8	-	-	-	-	-	-
40-44	2,841	1,066	584	487	412	278	14	-	-	-	-	-
45-49	3,180	986	627	533	398	419	206	11	-	-	-	-
50-54	2,791	675	485	515	429	352	209	126	-	-	-	-
55-59	1,823	372	285	362	311	231	128	93	41	-	-	-
60-64	980	214	141	185	179	143	44	38	36	-	-	-
65-69	269	50	66	50	49	25	10	6	13	-	-	-
70 & Over	124	36	23	26	24	8	5	1	1	-	-	-

TABLE 9-A

*Census of Members in Active Service on July 1, 2001
by Age and Actual Salary*

(Males - Main System, Judges and National Guard)

Age	Actual Salary												
	Less than \$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- \$29,999	\$30,000- \$34,999	\$35,000- \$39,999	\$40,000- \$44,999	\$45,000- \$49,999	\$50,000 & Over	Total		
Total	198	236	731	1,253	1,433	991	613	383	267	524			
Under 20	-	1	1	-	-	-	-	-	-	-	2		
20-24	11	21	33	51	32	6	2	-	1	-	157		
25-29	12	14	59	118	115	57	26	14	6	1	422		
30-34	18	13	82	112	158	71	50	32	22	16	574		
35-39	10	14	69	147	174	107	82	38	19	45	705		
40-44	16	21	102	190	208	151	99	71	41	73	972		
45-49	21	39	107	207	256	199	116	79	55	110	1,189		
50-54	22	29	112	197	239	197	105	80	60	127	1,168		
55-59	22	32	76	132	152	120	84	45	38	82	783		
60-64	22	21	57	77	79	70	37	19	23	57	462		
65-69	18	18	18	16	16	12	10	5	2	13	128		
70 & Over	26	13	15	6	4	1	2	-	-	-	67		

TABLE 9-B

*Census of Members in Active Service on July 1, 2001
by Age and Actual Salary*

(Females - Main System, Judges and National Guard)

Age	Actual Salary												
	Less than \$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- \$29,999	\$30,000- \$34,999	\$35,000- \$39,999	\$40,000- \$44,999	\$45,000- \$49,999	\$50,000 & Over	Total		
Total	10,127	573	1,625	2,138	2,309	1,532	935	433	276	142	164		
Under 20	6	3	2	1	-	-	-	-	-	-	-	-	-
20-24	240	31	49	86	47	19	6	-	1	-	1	-	1
25-29	613	27	84	160	150	102	52	20	15	2	1	-	1
30-34	811	57	105	171	197	118	90	38	20	10	5	-	5
35-39	1,218	64	220	233	264	192	129	51	33	18	14	-	14
40-44	1,869	121	326	375	393	264	171	90	55	32	42	-	42
45-49	1,991	83	329	382	430	340	205	97	62	25	38	-	38
50-54	1,623	64	222	354	400	249	140	77	49	30	38	-	38
55-59	1,040	47	141	214	272	167	91	45	27	18	18	-	18
60-64	518	44	99	117	124	62	37	10	13	6	6	-	6
65-69	141	21	25	37	24	16	11	4	1	1	1	-	1
70 & Over	57	11	23	8	8	3	3	1	-	-	-	-	-

TABLE 9-C

*Census of Members in Active Service on July 1, 2001
by Age and Actual Salary*

(All Members - Main System, Judges and National Guard)

Age	Total	Actual Salary												
		Less than \$10,000	\$10,000- \$14,999	\$15,000- \$19,999	\$20,000- \$24,999	\$25,000- \$29,999	\$30,000- \$34,999	\$35,000- \$39,999	\$40,000- \$44,999	\$45,000- \$49,999	\$50,000 & Over			
Total	16,756	771	1,861	2,869	3,562	2,965	1,926	1,046	659	409	688			
Under 20	8	3	3	2	-	-	-	-	-	-	-	-	-	-
20-24	397	42	70	119	98	51	12	2	1	1	1			
25-29	1,035	39	98	219	268	217	109	46	29	8	2			
30-34	1,385	75	118	253	309	276	161	88	52	32	21			
35-39	1,923	74	234	302	411	366	236	133	71	37	59			
40-44	2,841	137	347	477	583	472	322	189	126	73	115			
45-49	3,180	104	368	489	637	596	404	213	141	80	148			
50-54	2,791	86	251	466	597	488	337	182	129	90	165			
55-59	1,823	69	173	290	404	319	211	129	72	56	100			
60-64	980	66	120	174	201	141	107	47	32	29	63			
65-69	269	39	43	55	40	32	23	14	6	3	14			
70 & Over	124	37	36	23	14	7	4	3	-	-	-			

TABLE 10-A

*Pensions Awarded During the Year Ended June 30, 2001
by Type of Pension and Monthly Amount*

(Males - Main System, Judges and National Guard)

Monthly Amount	Type of Pension				
	Total	Normal	Early	Disability	Rule of 85
Total	128	44	32	11	41
Under \$200	18	12	5	-	1
200-399	21	12	6	3	-
400-599	17	4	7	5	1
600-799	6	1	3	1	1
800-999	6	2	-	2	2
1,000-1,199	10	2	2	-	6
1,200-1,399	5	1	-	-	4
1,400-1,599	6	-	1	-	5
1,600-1,799	7	1	2	-	4
1,800-1,999	4	1	-	-	3
2,000-2,199	2	-	1	-	1
2,200-2,399	3	1	-	-	2
2,400-2,599	6	2	2	-	2
2,600-2,799	5	1	2	-	2
2,800-2,999	3	-	-	-	3
3,000-3,199	3	1	-	-	2
3,200-3,399	1	-	1	-	-
3,400-3,599	1	-	-	-	1
3,600-3,799	-	-	-	-	-
3,800-3,999	-	-	-	-	-
4,000-4,199	1	-	-	-	1
4,200-4,399	1	1	-	-	-
4,400-4,599	1	1	-	-	-
4,600-4,799	1	1	-	-	-

TABLE 10-B

*Pensions Awarded During the Year Ended June 30, 2001
by Type of Pension and Monthly Amount*

(Females - Main System, Judges and National Guard)

Monthly Amount	Type of Pension				
	Total	Normal	Early	Disability	Rule of 85
Total	191	48	77	12	54
Under \$200	25	9	16	-	-
200-399	43	15	23	4	1
400-599	40	11	19	6	4
600-799	21	6	5	2	8
800-999	19	4	3	-	12
1,000-1,199	18	2	4	-	12
1,200-1,399	10	1	2	-	7
1,400-1,599	3	-	1	-	2
1,600-1,799	5	-	3	-	2
1,800-1,999	4	-	-	-	4
2,000-2,199	-	-	-	-	-
2,200-2,399	-	-	-	-	-
2,400-2,599	2	-	1	-	1
2,600-2,799	1	-	-	-	1
2,800-2,999	-	-	-	-	-
3,000-3,199	-	-	-	-	-
3,200-3,399	-	-	-	-	-
3,400-3,599	-	-	-	-	-
3,600-3,799	-	-	-	-	-
3,800-3,999	-	-	-	-	-
4,000-4,199	-	-	-	-	-
4,200-4,399	-	-	-	-	-
4,400-4,599	-	-	-	-	-
4,600-4,799	-	-	-	-	-

TABLE 10-C

*Pensions Awarded During the Year Ended June 30, 2001
by Type of Pension and Monthly Amount*

(All Members - Main System, Judges and National Guard)

Monthly Amount	Type of Pension				
	Total	Normal	Early	Disability	Rule of 85
Total	319	92	109	23	95
Under \$200	43	21	21	-	1
200-399	64	27	29	7	1
400-599	57	15	26	11	5
600-799	27	7	8	3	9
800-999	25	6	3	2	14
1,000-1,199	28	4	6	-	18
1,200-1,399	15	2	2	-	11
1,400-1,599	9	-	2	-	7
1,600-1,799	12	1	5	-	6
1,800-1,999	8	1	-	-	7
2,000-2,199	2	-	1	-	1
2,200-2,399	3	1	-	-	2
2,400-2,599	8	2	3	-	3
2,600-2,799	6	1	2	-	3
2,800-2,999	3	-	-	-	3
3,000-3,199	3	1	-	-	2
3,200-3,399	1	-	1	-	-
3,400-3,599	1	-	-	-	1
3,600-3,799	-	-	-	-	-
3,800-3,999	-	-	-	-	-
4,000-4,199	1	-	-	-	1
4,200-4,399	1	1	-	-	-
4,400-4,599	1	1	-	-	-
4,600-4,799	1	1	-	-	-

TABLE 11-A

*Pensions Awarded During the Year Ended June 30, 2001
by Type of Pension and Age*

(Males - Main System, Judges and National Guard)

Age	Type of Pension				
	Total	Normal	Early	Disability	Rule of 85
Total	128	45	31	11	41
Under 50	3	-	-	3	-
50-54	7	-	1	4	2
55-59	26	1	8	2	15
60-64	48	-	22	2	24
65-69	32	32	-	-	-
70-74	11	11	-	-	-
75 & Over	1	1	-	-	-

TABLE 11-B

*Pensions Awarded During the Year Ended June 30, 2001
by Type of Pension and Age*

(Females - Main System, Judges and National Guard)

Age	Type of Pension				
	Total	Normal	Early	Disability	Rule of 85
Total	191	50	76	12	53
Under 50	7	-	-	7	-
50-54	7	-	2	2	3
55-59	35	-	25	1	9
60-64	92	-	49	2	41
65-69	38	38	-	-	-
70-74	8	8	-	-	-
75 & Over	4	4	-	-	-

TABLE 11-C

*Pensions Awarded During the Year Ended June 30, 2001
by Type of Pension and Age*

(All Members - Main System, Judges and National Guard)

Age	Type of Pension				
	Total	Normal	Early	Disability	Rule of 85
Total	319	95	107	23	94
Under 50	10	-	-	10	-
50-54	14	-	3	6	5
55-59	61	1	33	3	24
60-64	140	-	71	4	65
65-69	70	70	-	-	-
70-74	19	19	-	-	-
75 & Over	5	5	-	-	-

TABLE 12-A

*Current Plan Pensions in Force on July 1, 2001
by Type of Pension and Monthly Amount*

(Males - Main System, Judges and National Guard)

Monthly Amount	Type of Pension				
	Total	Normal	Early	Disability	Service*
Total	2,090	780	527	143	640
Under \$200	264	159	85	13	7
200-399	406	182	154	59	11
400-599	343	139	150	44	10
600-799	201	89	77	17	18
800-999	152	49	26	7	70
1,000-1,199	143	48	12	1	82
1,200-1,399	131	30	8	-	93
1,400-1,599	87	17	3	1	66
1,600-1,799	80	17	4	-	59
1,800-1,999	63	15	2	-	46
2,000-2,199	56	8	1	1	46
2,200-2,399	43	5	3	-	35
2,400-2,599	33	4	-	-	29
2,600-2,799	31	8	-	-	23
2,800-2,999	12	3	-	-	9
3,000-3,199	12	-	1	-	11
3,200-3,399	13	2	1	-	10
3,400-3,599	3	-	-	-	3
3,600-3,799	3	2	-	-	1
3,800-3,999	2	-	-	-	2
4,000-4,199	2	-	-	-	2
4,200-4,399	6	3	-	-	3
4,400-4,599	2	-	-	-	2
4,600-4,799	2	-	-	-	2

* Includes Rule of 85, Rule of 88, and Rule of 90.

TABLE 12-B

*Current Plan Pensions in Force on July 1, 2001
by Type of Pension and Monthly Amount*

(Females - Main System, Judges and National Guard)

Monthly Amount	Type of Pension				
	Total	Normal	Early	Disability	Service*
Total	2,402	858	1,011	133	400
Under \$200	479	181	279	16	3
200-399	770	296	415	56	3
400-599	453	175	216	44	18
600-799	246	100	72	12	62
800-999	170	39	19	4	108
1,000-1,199	103	26	7	1	69
1,200-1,399	69	19	1	-	49
1,400-1,599	41	11	-	-	30
1,600-1,799	33	8	2	-	23
1,800-1,999	13	-	-	-	13
2,000-2,199	12	1	-	-	11
2,200-2,399	4	1	-	-	3
2,400-2,599	3	-	-	-	3
2,600-2,799	4	-	-	-	4
2,800-2,999	-	-	-	-	-
3,000-3,199	-	-	-	-	-
3,200-3,399	2	1	-	-	1
3,400-3,599	-	-	-	-	-
3,600-3,799	-	-	-	-	-
3,800-3,999	-	-	-	-	-
4,000-4,199	-	-	-	-	-
4,200-4,399	-	-	-	-	-
4,400-4,599	-	-	-	-	-
4,600-4,799	-	-	-	-	-

* Includes Rule of 85, Rule of 88, and Rule of 90.

TABLE 12-C

*Current Plan Pensions in Force on July 1, 2001
by Type of Pension and Monthly Amount*

(All Members - Main System, Judges and National Guard)

Monthly Amount	Type of Pension				
	Total	Normal	Early	Disability	Service*
Total	4,493	1,639	1,538	276	1,040
Under \$200	743	340	364	29	10
200-399	1,176	478	569	115	14
400-599	796	314	366	88	28
600-799	447	189	149	29	80
800-999	322	88	45	11	178
1,000-1,199	246	74	19	2	151
1,200-1,399	200	49	9	-	142
1,400-1,599	128	28	3	1	96
1,600-1,799	113	25	6	-	82
1,800-1,999	76	15	2	-	59
2,000-2,199	68	9	1	1	57
2,200-2,399	47	6	3	-	38
2,400-2,599	36	4	-	-	32
2,600-2,799	35	8	-	-	27
2,800-2,999	12	3	-	-	9
3,000-3,199	12	-	1	-	11
3,200-3,399	15	3	1	-	11
3,400-3,599	3	-	-	-	3
3,600-3,799	3	2	-	-	1
3,800-3,999	3	1	-	-	2
4,000-4,199	2	-	-	-	2
4,200-4,399	6	3	-	-	3
4,400-4,599	2	-	-	-	2
4,600-4,799	2	-	-	-	2

* Includes Rule of 85, Rule of 88, and Rule of 90.

TABLE 13-A

*Current Plan Pensions in Force on July 1, 2001
by Type of Pension and Age*

(Males - Main System, Judges and National Guard)

Age	Type of Pension				
	Total	Normal	Early	Disability	Service*
Total	2,090	780	527	143	640
Under 50	23	-	-	23	-
50-54	29	-	-	23	6
55-59	96	1	12	25	58
60-64	244	-	59	23	162
65-69	495	104	143	26	222
70-74	466	194	137	13	122
75-79	365	205	87	8	65
80-84	241	164	70	2	5
85-89	113	94	19	-	-
90 & Over	18	18	-	-	-

* Includes Rule of 85, Rule of 88, and Rule of 90.

TABLE 13-B

*Current Plan Pensions in Force on July 1, 2001
by Type of Pension and Age*

(Females - Main System, Judges and National Guard)

Age	Type of Pension				
	Total	Normal	Early	Disability	Service*
Total	2,403	859	1,011	133	400
Under 50	28	-	-	28	-
50-54	19	-	1	13	5
55-59	82	-	30	20	32
60-64	333	-	176	34	123
65-69	573	103	299	20	151
70-74	516	200	250	8	58
75-79	418	230	151	7	30
80-84	273	189	80	3	1
85-89	144	120	24	-	-
90 & Over	17	17	-	-	-

* Includes Rule of 85, Rule of 88, and Rule of 90.

TABLE 13-C

*Current Plan Pensions in Force on July 1, 2001
by Type of Pension and Age*

(All Members - Main System, Judges and National Guard)

Age	Total	Type of Pension			
		Normal	Early	Disability	Service*
Total	4,493	1,639	1,538	276	1,040
Under 50	51	-	-	51	-
50-54	48	-	1	36	11
55-59	178	1	42	45	90
60-64	577	-	235	57	285
65-69	1,068	207	442	46	373
70-74	982	394	387	21	180
75-79	783	435	238	15	95
80-84	514	353	150	5	6
85-89	257	214	43	-	-
90 & Over	35	35	-	-	-

* Includes Rule of 85, Rule of 88, and Rule of 90.

TABLE 14-A

*Special Prior Service Pensions in Force on July 1, 2001
by Monthly Amount*

(Males)

<u>Monthly Amount</u>	<u>Total</u>
Total	51
Under \$20	5
20-39	12
40-59	6
60-79	12
80-99	9
100-119	5
120-139	2
140-159	-
160-179	-

TABLE 14-B

*Special Prior Service Pensions in Force on July 1, 2001
by Monthly Amount*

(Females)

Monthly Amount	Total
Total	86
Under \$20	18
20-39	23
40-59	17
60-79	14
80-99	6
100-119	3
120-139	2
140-159	2
160-179	1

TABLE 14-C

*Special Prior Service Pensions in Force on July 1, 2001
by Monthly Amount*

(All Members)

<u>Monthly Amount</u>	<u>Total</u>
Total	137
Under \$20	23
20-39	35
40-59	23
60-79	26
80-99	15
100-119	8
120-139	4
140-159	2
160-179	1

TABLE 15-A

Special Prior Service Pensions in Force on July 1, 2001

by Age

(Males)

Age	Total
Total	51
80-84	3
85-89	11
90-94	30
95-99	7
100 & Over	-

TABLE 15-B

*Special Prior Service Pensions in Force on July 1, 2001
by Age*

(Females)

Age	Total
Total	86
80-84	4
85-89	27
90-94	40
95-99	13
100 & Over	2

TABLE 15-C

*Special Prior Service Pensions in Force on July 1, 2001
by Age*

(All Members)

Age	Total
Total	137
80-84	7
85-89	38
90-94	70
95-99	20
100 & Over	2
