NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

Actuarial Valuation Report as of July 1, 2011

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SEGAL

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December 13, 2011

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, 2011.

The census information on which our calculations are based and the financial information were provided by the Retirement Office staff. That assistance is gratefully acknowledged. The actuarial calculations were completed under the supervision of Mark Hamwee, FSA, MAAA, Enrolled Actuary.

This actuarial valuation has been completed in accordance with generally accepted actuarial principles and practices. To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate. Further, in our opinion, the assumptions as approved by the Board are reasonably related to the experience of and the expectations for the Plan.

We are members of the American Academy of Actuaries, and we meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion herein.

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

Sincerely,

Brad Ramirez, FSA, MAAA, FCA, EA
Consulting Actuary

Mark Hamwee, FSA, MAAA, EA
Vice President & Associate Actuary

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Introduction

This report summarizes the results of our actuarial valuation as of July 1, 2011. The employer contribution requirements presented on page 20 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, 2011;

3. The assets of the System as of June 30, 2011; 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 over 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.

Highlights

- For the PERS Fund overall, the present rate of contributions is not sufficient to meet the actuarially determined requirement for 2011-2012, based upon the actuarial assumptions and financing objectives approved by the Board, even after taking into account scheduled increases in the statutory rate through 2013. If unchanged, this difference will further increase the actuarial contribution requirement in future valuations.

- The PERS Board should continue to review these results and projected future performance to determine appropriate measures to mitigate the difference between the actuarial and statutory (or approved) contribution rates.

- The employer actuarial contribution requirements for 2011-2012 are as follows:

	Amount	Percentage of Payroll	Statutory/ Approved Rate
Main System	$89,224,258	11.36%	4.12%-5.12%*
Judges	988,775	15.96%	14.52%-15.52%*
National Guard	93,661	7.08%	6.50%
Law Enforcement with prior Main service	967,368	10.96%	8.31%
Law Enforcement without prior Main service	184,015	7.56%	6.43%

* The statutory rate is scheduled to increase in January 2012.

- A comparison of this year's actuarial contribution rates to last year's rates as a percent of payroll are as follows:

	2011-2012	2010-2011
Main System	11.36%	10.76%
Judges	15.96	14.10
National Guard	7.08	7.00
Law Enforcement with prior Main service	10.96	10.80
Law Enforcement without prior Main service	7.56	7.53

- The employer actuarial contribution requirement for the Main System for 2011-2012 is $89,224,258, or 11.36% of payroll. The statutory rate was 4.12% of payroll as of the valuation date, but is scheduled to increase to 5.12% of payroll after January 1, 2012 and to 6.12% of payroll after January 1, 2013. Scheduled increases in the member contribution rate of 1% of payroll on each of those dates will also act to decrease the employer actuarial contribution requirement. Even if all scheduled statutory contribution rate increase were in effect on the valuation date, the employer contribution requirement would be 9.86% of payroll, or 3.74% more than the ultimate statutory rate of 6.12% of payroll. Last year, prior to the enactment of any statutory contribution rate increases, the actuarially determined rate of 10.76% was greater than the statutory rate of payroll by 6.64% of payroll.

- The return on the market value of assets for 2010-2011 for the PERS Fund was 21.09%, and was 13.25% for the preceding year.

- The return on the actuarial value of assets for 2010-2011 for the PERS Fund was 3.31% compared to the investment return assumption of 8.00%. As a result, the PERS Fund experienced an investment loss on an actuarial value basis of approximately $75.5 million.

- The ratio of the actuarial value of assets to the market value of assets for the PERS Fund is 93.9%. Last year, this ratio was 110.0%.

- A comparison of this year's funded ratio for PERS to the prior year is as follows:

	July 1, 2011	July 1, 2010
Actuarial Value of Assets	$1,650,463,711	$1,621,723,099
Actuarial Accrued Liability	$2,339,833,155	2,208,386,120
Funded Ratio	70.5%	73.4%

- The unrecognized appreciation represents about 6.1% of the PERS Fund market value of assets. A property of the asset smoothing method used by PERS is that the actuarial value of assets will tend to lag behind the market value of assets. This unrecognized appreciation will be recognized over the next five years. The potential impact may be illustrated as follows:

  - If the unrecognized appreciation were recognized immediately in the actuarial value assets, the funded percentage would increase from 70.5% to 75.1%.

  - If the unrecognized appreciation were recognized immediately in the actuarial value of assets, the actuarial contribution requirement would decrease as follows:

	2011-2012 Actuarial Contribution Rate	2011-2012 Rate Reflecting Unrecognized Appreciation
Main System	11.36%	10.43%
Judges	15.96	13.63
National Guard	7.08	6.33
Law Enforcement with prior Main service	10.96	10.25
Law Enforcement without prior Main service	7.56	7.47

- The actuarial valuation report as of July 1, 2011 is based on financial data as of that date. Changes in the value of assets subsequent to that date, to the extent that they exist, are not reflected.

- Table 7 details actuarial gains and losses in the Main System for many of the measured demographic assumptions. The gain/(loss) by source is measured each year, and a detailed analysis of the System's demographic assumptions is reviewed every fourth or fifth year by the completion of an experience study. The most recent experience study was completed in 2010.

Member Characteristics

Active Members

The age, service, compensation and account balance information based on data provided by the Retirement Office for active members as of July 1, 2010 and July 1, 2011 is summarized below:

	Year Beginning July 1		Change From
Category	**2011**	**2010**	**Prior Year**
Main:			
Number	20,359	20,372	-0.1%
Average age	47.3	47.2	N/A
Average service credit	10.6	10.5	1.0%
Total compensation	$785,388,304	$751,067,149	4.6%
Average compensation	$38,577	$36,868	4.6%
Contribution account balance	$578,394,215	$590,190,993	-2.0%
Judges:			
Number	49	47	4.3%
Average age	57.1	58.1	N/A
Average service credit	16.5	17.0	-2.9%
Total compensation	$6,197,204	$5,685,227	9.0%
Average compensation	$126,474	$120,962	4.6%
Contribution account balance	$4,317,555	$4,312,283	0.1%
National Guard:			
Number	30	30	0.0%
Average age	36.3	35.1	N/A
Average service credit	5.7	4.8	18.8%
Total compensation	$1,323,562	$1,259,707	5.1%
Average compensation	$44,119	$41,990	5.1%
Contribution account balance	$406,694	$345,955	17.6%
Law Enforcement with prior Main service:			
Number	196	187	4.8%
Average age	40.0	40.7	N/A
Average service credit	8.3	8.8	-5.7%
Total compensation	$8,825,750	$10,559,725	-16.4%
Average compensation	$45,029	$56,469	-20.3%
Contribution account balance	$4,947,017	$5,566,535	-11.1%
Law Enforcement without prior Main service:			
Number	61	32	90.6%
Average age	37.7	36.4	N/A
Average service credit	2.5	2.9	-13.8%
Total compensation	$2,434,592	$1,138,300	113.9%
Average compensation	$39,911	$35,572	12.2%
Contribution account balance	$248,554	$118,521	109.7%
All active members:			
Number	20,695	20,668	0.1%
Average age	47.2	47.2	N/A
Average service credit	10.6	10.4	1.9%
Total compensation	$804,169,412	$769,710,108	4.5%
Average compensation	$38,858	$37,242	4.3%
Contribution account balance	$588,314,035	$600,534,287	-2.0%

Distributions of the active members by sex, age, and service are presented in Tables 9-A, 9-B and 9-C of the Appendix. Tables 10-A, 10-B and 10-C present a distribution of these same members by sex, age, and salary. The table below 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.

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

Active Members Eligible for:	Main System	Judges	National Guard	Law Enforcement with prior Main service	Law Enforcement without prior Main service	Total
Retirement:						
Normal	800	6	1	31	1	839
Rule of 85	1,278	5	2	1	0	1,286
Early Retirement	3,740	18	0	15	3	3,776
Total Retirement	5,818	29	3	47	4	5,901
Deferred Retirement	9,446	14	19	87	11	9,577
Total vested	15,264	43	22	134	15	15,478
Nonvested	5,095	6	8	62	46	5,217
Total	20,359	49	30	196	61	20,695

Transfers

Some active members earned a portion of their service in a different system than they are currently in. Liabilities for these members are carried in each system based on their service in that system. The following table summarizes these members:

	Current System						
Original System	Main System	Judges	National Guard	Law Enforcement with prior Main service	Law Enforcement without prior Main service	Highway Patrol	Total
Main System	-	22	1	51	15	22	111
Judges	2	-	-	-	-	-	2
National Guard	2	-	-	-	-	-	2
Law Enforcement with prior Main service	13	-	-	-	-	1	14
Law Enforcement without prior Main service	5	-	-	-	-	-	5
Highway Patrol	9	-	-	1	-	-	10
Total	31	22	1	52	15	23	144

Inactive Members

There were 3,558 inactive members (including 1 from Judges, 3 from National Guard, 18 from Law Enforcement with prior Main service, and 4 from Law Enforcement without prior Main Service) as of July 1, 2011 with vested rights to deferred retirement benefits. The average deferred monthly benefit for this group was $385. There were also 37 members from the Main System and 3 members from National Guard on leave of absence. For these groups, a liability is carried for their deferred retirement benefits.

There were 3,098 inactive members that are due refunds (including 18 from National Guard, 17 from Law Enforcement with prior Main service, and 5 from Law Enforcement without prior Main Service).

Benefit Experience

New Awards

During the fiscal year ended in June 2011, 552 pensions became effective. The average monthly benefit for these pensioners was $1,396 and their average age at retirement was 63.9. Last year, the average benefit among new pensioners was $1,232. The new pensioners are presented in Tables 11-A, 11-B, 11-C, 12-A, 12-B and 12-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:

	July 1, 2011	July 1, 2010
Normal	201	143
Rule of 85	204	165
Early	130	106
Disability	17	7
Total	552	421

Pensioners

Since benefits became payable under the current retirement program, a total of 9,985 retirement pensions have been awarded, of which 7,055 remained on the June 2011 rolls (including 25 retired Judges and 40 retired members of the National Guard/Law Enforcement). In addition, 12 pensions were in suspended status as of June 30, 2011. Distributions of the pensioners are presented in Tables 13-A, 13-B, 13-C, 14-A, 14-B and 14-C in Appendix B by sex, type of pension, monthly benefit amount and current age.

For the pensions in force on July 1, 2011, the average monthly benefit was $959, an increase of $42 from $917 a year earlier. The average age of these pensioners on the valuation date was 72.2 years.

Beneficiaries

As of July 1, 2011, monthly benefit payments were being made to 766 beneficiaries, including 9 beneficiaries of Judges and 1 beneficiary of National Guard. The monthly payments to beneficiaries in payment status total $471,115.

Prior Service Pensioners

As of July 1, 2011, there were 14 pensioners receiving monthly benefits of $529 under the Special Prior Service Pension provisions of the System. The current average age of Prior Service pensioners was 97.8 years, and the average monthly benefit was $38. Because of the relatively high average age and low benefits, the liability for the Special Prior Service Pensioners represented less than 0.01% of the total actuarial accrued liability for the System. Tables 15 and 16 in Appendix B provide a breakdown of these pensioners by sex, type of pension, monthly benefit amount, and current age.

Assets

Market Value of Assets

As shown in the draft financial statements as of June 30, 2011, the combined market value of net assets of the North Dakota Public Employees Retirement System (PERS) and Highway Patrolmen's Retirement System (HPRS) was $1,810,762,019, an increase of $292 million compared to $1,519,023,138 a year earlier. This year's combined market value represents an increase of 19.21% 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:

	July 1, 2011	July 1, 2010
Main System	$1,708,264,257	$1,433,343,720
Judges	32,368,881	26,895,688
National Guard	2,315,331	1,900,428
Law Enforcement with prior Main service	14,590,482	11,737,147
Law Enforcement without prior Main service	517,647	307,999
Total	$1,758,056,598	$1,474,184,982

The rate of return on the market value basis for the PERS Fund was 21.09% for the year ended June 30, 2011.

Actuarial Value of Assets

The actuarial value of assets is 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. A characteristic of this asset valuation method is that, over time, it is more likely than not to produce an actuarial value of assets that is less than the market value of assets.

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 $1,699,943,566 as of June 30, 2011. The determination of the combined actuarial asset value is shown in Table 1. This table shows that there is approximately $111 million of appreciation that will be recognized in future years.

Table 2 summarizes the combined investment results over the previous ten-year period. Over this period, the earnings of $712,541,900 on an actuarial value basis represented an average annual return of 5.15%. For the 2010-2011 year, the actuarial rate of return on the combined assets was 3.31%.

The total actuarial value of assets is allocated to PERS (Main System, Judges, National Guard and Law Enforcement) 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.

	July 1, 2011	July 1, 2010
Main System	$1,603,718,656	$1,576,794,397
Judges	30,387,909	29,587,439
National Guard	2,173,633	2,090,625
Law Enforcement with prior Main service	13,697,546	12,911,814
Law Enforcement without prior Main service	485,967	338,824
Total	$1,650,463,711	$1,621,723,099

Chart 1 on page 14 shows the historical asset values for the PERS Fund on both an actuarial and market value basis. This graph shows that the market value of assets is currently larger than the actuarial value.

Income and disbursements for 2011 and 2010 on an actuarial value basis are summarized in Table 4, and a summary statement of assets is shown in Table 5 for the PERS Fund. The progress of the PERS Fund for the last ten years is provided in Table 6. 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.

A picture of the financial development of the PERS Fund over the last ten years is provided in Chart 2 on page 18. It shows that benefit payments and expenses continue to exceed contributions. However, over the past ten years, the investment income has offset this deficit and served to increase the assets of the System.

Investment results on an actuarial value 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 PERS and HPRS fund are as follows:

Year Ending June 30	Market Value	Actuarial Value
2002	(6.94)%	3.91%
2003	5.19	2.18
2004	16.65	3.16
2005	14.17	4.36
2006	12.04	7.79
2007	19.63	15.84
2008	(5.21)	8.51
2009	(24.05)	1.72
2010	13.25	1.48
2011	21.09	3.31

The above values demonstrate the fact that the volatility of market value returns is reduced by using an actuarial value of assets. Chart 3 on page 19 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.

Rates of investment return 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 Actuarial Value of Assets (for PERS and HPRS) as of June 30, 2011 and 2010

		June 30, 2011		June 30, 2010	
Year Ending	Total Appreciation (Depreciation)	Percent Deferred	Amount Deferred	Percent Deferred	Amount Deferred
June 30, 2007	$285,031,438	0%	$0	20%	$57,006,288
June 30, 2008	(133,303,450)	20%	(26,660,690)	40%	(53,321,380)
June 30, 2009	(463,523,678)	40%	(185,409,471)	60%	(278,114,207)
June 30, 2010	153,004,660	60%	91,802,796	80%	122,403,728
June 30, 2011	288,857,273	80%	231,085,818	N/A	0
Total Deferred as of Valuation Date			$110,818,453		($152,025,571)
(a) Total Appreciation (Depreciation) for last five Plan Years			130,066,243		(6,687,465)
(b) Write-Up/(Down) Amount for the year - equals 20% of (a)			26,013,248		(1,337,493)

	June 30, 2011	June 30, 2010
Market Value of Assets	$1,810,762,019	$1,519,023,138
Less: Deferred Appreciation (Depreciation)	110,818,453	(152,025,571)
Actuarial value of assets	$1,699,943,566	$1,671,048,709
Actuarial Value as a Percent of Market Value	93.9%	110.0%

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
2002	$35,077,400	3.06%	$9,694,500	0.85%	$44,771,900	3.91%
2003	33,595,900	2.84	(7,793,200)	(0.66)	25,802,700	2.18
2004	30,464,800	2.54	7,398,200	0.62	37,863,000	3.16
2005	29,115,600	2.38	24,276,800	1.98	53,392,400	4.36
2006	24,410,600	1.93	73,910,900	5.86	98,321,500	7.79
2007	34,727,000	2.58	178,771,700	13.26	213,498,700	15.84
2008	32,819,700	2.13	98,332,000	6.38	131,151,700	8.51
2009	29,260,400	1.77	(964,400)	(0.05)	28,296,000	1.72
2010	25,938,200	1.57	(1,337,500)	(0.09)	24,600,700	1.48
2011	28,830,100	1.74	26,013,200	1.57	54,843,300	3.31
Total for Last Ten Years	$304,239,700		$408,302,200		$712,541,900	
Average Yield for last Ten Years					5.15%	

* Net of investment expenses.
** Includes write-up (down).

TABLE 3

Allocation of Combined (PERS and HPRS) Actuarial Value of Assets

	July 1, 2011		July 1, 2010	
	Market Value	Actuarial Value	Market Value	Actuarial Value
PERS Main System	$1,708,264,257	$1,603,718,656	$1,433,343,720	$1,576,794,397
PERS Judges	32,368,881	30,387,909	26,895,688	29,587,439
PERS National Guard	2,315,331	2,173,633	1,900,428	2,090,625
PERS Law Enforcement with prior Main service	14,590,482	13,697,546	11,737,147	12,911,814
PERS Law Enforcement without prior Main service	517,647	485,967	307,999	338,824
PERS Combined	$1,758,056,598	$1,650,463,711	$1,474,184,982	$1,621,723,099
Highway Patrol	52,705,421	49,479,855	44,838,156	49,325,610
Total	$1,810,762,019	$1,699,943,566	$1,519,023,138	$1,671,048,709

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

Chart 1
Value of Assets for PERS

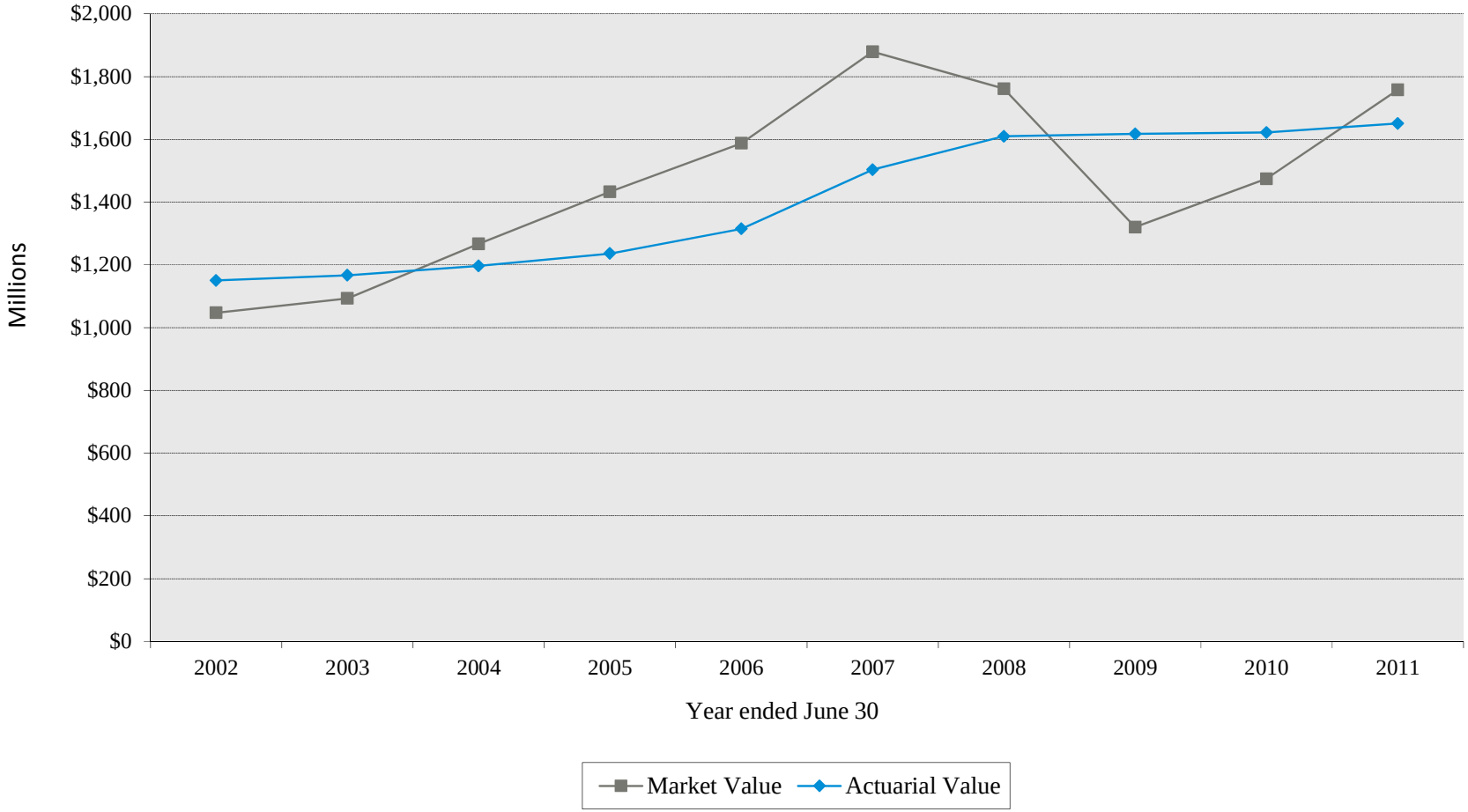


TABLE 4

Summary Statement of Income and Disbursements for PERS
for the Years Ended June 30, 2011 and 2010
(Actuarial Value Basis)

	Year Ended June 30, 2011	Year Ended June 30, 2010
Contribution Income:		
Employer Contributions	$32,278,056	$30,253,093
Member Contributions	30,479,702	28,579,338
Service Credit Repurchases	3,797,333	4,005,571
Total Contribution Income	$66,555,091	$62,838,002
Less: Administrative Expenses	(1,797,287)	(1,214,733)
Net Contribution Income	$64,757,804	$61,623,269
Investment Income:		
Interest and Dividends	$34,500,138	$31,306,367
Miscellaneous Income	2,129	3,406
Less: Investment Expenses	(6,701,848)	(6,146,415)
Net Interest and Dividends	$27,800,419	$25,163,358
Write-up of Assets	25,423,177	(1,173,587)
Net Investment Income	$53,223,596	$23,989,771
Total Income Available for Benefit Payments and Reserves	$117,981,400	$85,613,040
Benefit Payments:		
Pension Benefits	$(84,307,030)	$(76,884,950)
Transfers to Other Plans	(264,686)	(210,638)
Refunds	(4,669,072)	(3,942,154)
Total Benefit Payments	$(89,240,788)	$(81,037,742)
Addition to Reserve for Future Benefit Payments	$28,740,612	$4,575,298
Actuarial Value of Assets, Start of Year	1,621,723,099	1,617,147,801
Actuarial Value of Assets, End of Year	$1,650,463,711	$1,621,723,099

TABLE 5

Summary Statement of Assets for PERS
(based on unaudited financial statements)
for the Years Ended June 30, 2011 and 2010

	Year Ended June 30, 2011		Year Ended June 30, 2010	
Cash		$2,808,985		$2,026,148
Receivables				
Contribution receivable	$4,688,613		$4,483,815	
Interest receivable	2,666,991		2,422,345	
Due from fiduciary funds	276,844		108,859	
Due from proprietary funds	225		0	
Due from other state agencies	3,352		13,457	
Total receivables		7,636,025		7,028,476
Investments				
Domestic equities	$703,847,078		$534,160,908	
International equities	262,381,505		195,344,142	
International fixed income	85,111,321		83,852,649	
Domestic fixed income	510,392,764		499,029,310	
Real estate	98,906,281		71,436,241	
Alternative investments	61,304,374		61,490,084	
Invested cash	25,206,160		19,240,625	
Total investments		1,747,149,483		1,464,553,959
Securities lending collateral		0		9,150,222
Software (not in production)		76,022		3,243,551
Software (net of amortization)		3,406,843		0
Equipment		0		921
Total assets		1,761,077,358		1,486,003,277
Liabilities				
Salaries payable	($81,293)		($68,298)	
Accounts payable	(2,719,239)		(2,479,238)	
Due to fiduciary funds	(116,601)		0	
Due to proprietary funds	(1,634)		(20)	
Due to other state agencies	(19,451)		(19,961)	
Benefits payable	0		(23,534)	
Securities lending collateral	0		(9,150,222)	
Accrued compensated absences	(82,542)		(77,022)	
Total liabilities		(3,020,760)		(11,818,295)
Net assets at market value		$1,758,056,598		$1,474,184,982
Net assets at actuarial value		$1,650,463,711		$1,621,723,099

TABLE 6

Progress of the PERS Fund through June 30, 2011
(Actuarial Value Basis)

Year Ended June 30	Employer Contributions	Member Contributions*	Administrative Expenses	Net Investment Income	Transfers From/(To) Other Plans	Benefit Payments	Fund at End Of Year
2001							$1,115,334,396
2002	$18,244,655	$18,439,125	$(983,258)	$43,304,595	$(337,553)	$(44,001,131)	1,150,000,829
2003	19,212,733	19,758,764	(1,068,803)	25,009,784	(129,235)	(46,331,954)	1,166,452,118
2004	19,732,842	22,152,045	(995,879)	36,594,962	3,771,763	(51,174,769)	1,196,533,082
2005	20,704,241	24,097,496	(1,072,277)	51,592,706	(21,131)	(55,719,982)	1,236,114,135
2006	21,969,517	24,508,623	(1,037,535)	95,085,991	(41,271)	(62,056,555)	1,314,542,905
2007	23,140,767	25,562,617	(1,109,260)	206,643,922	(39,829)	(65,601,228)	1,503,139,894
2008	25,253,902	27,351,026	(1,118,233)	126,989,439	3,132,512	(74,938,198)	1,609,810,342
2009	27,705,267	29,970,355	(1,260,812)	27,509,459	(496,073)	(76,090,737)	1,617,147,801
2010	30,253,093	32,584,909	(1,214,733)	23,989,771	(210,638)	(80,827,104)	1,621,723,099
2011	32,278,056	34,277,035	(1,797,287)	53,223,596	(264,686)	(88,976,102)	1,650,463,711
Total for Last Ten Years	$238,495,073	$258,701,995	($11,658,077)	$689,944,225	$5,363,859	($645,717,760)	

***** Includes repurchases of service credit.

Chart 2
Income and Disbursements for PERS

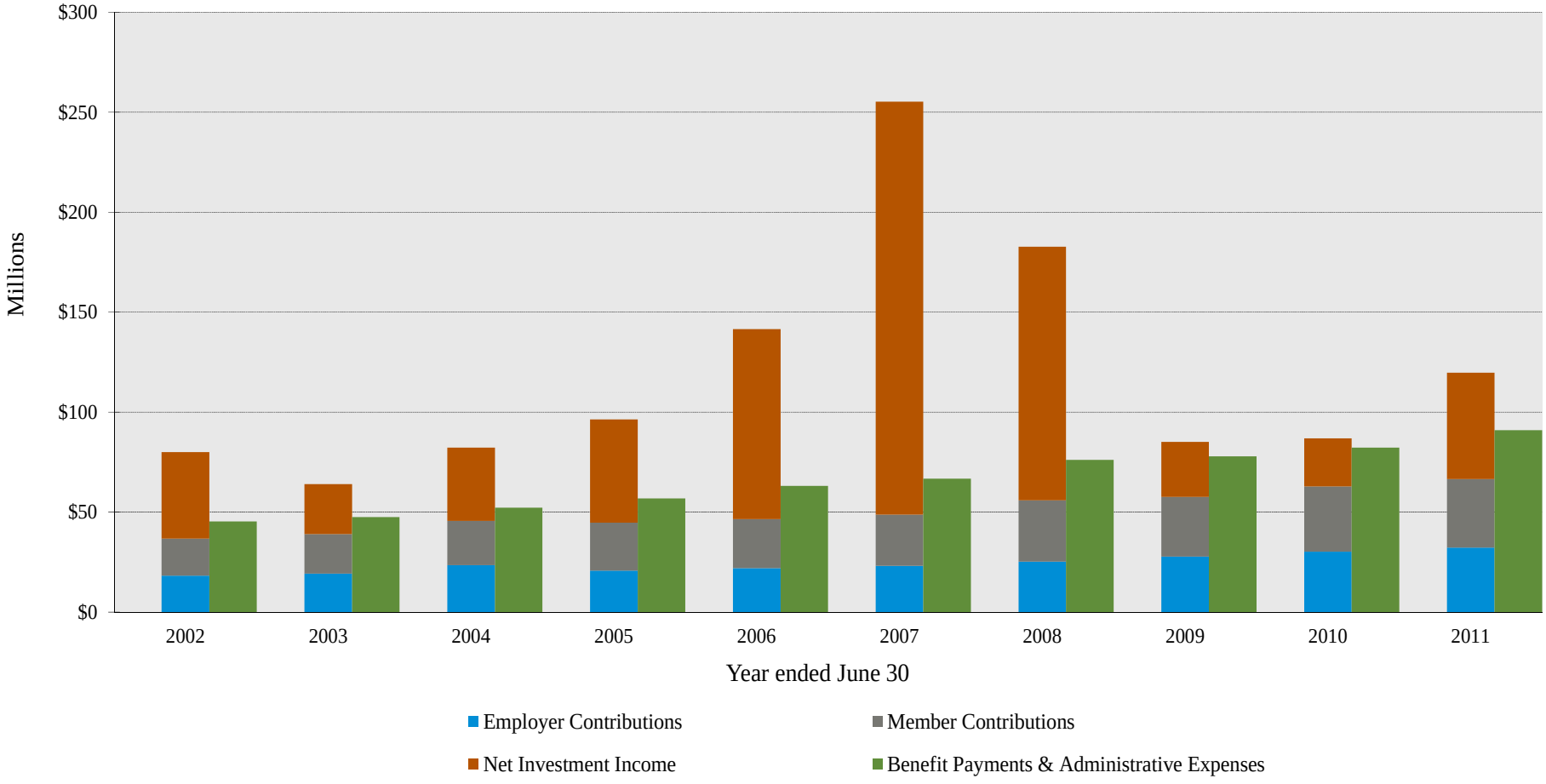
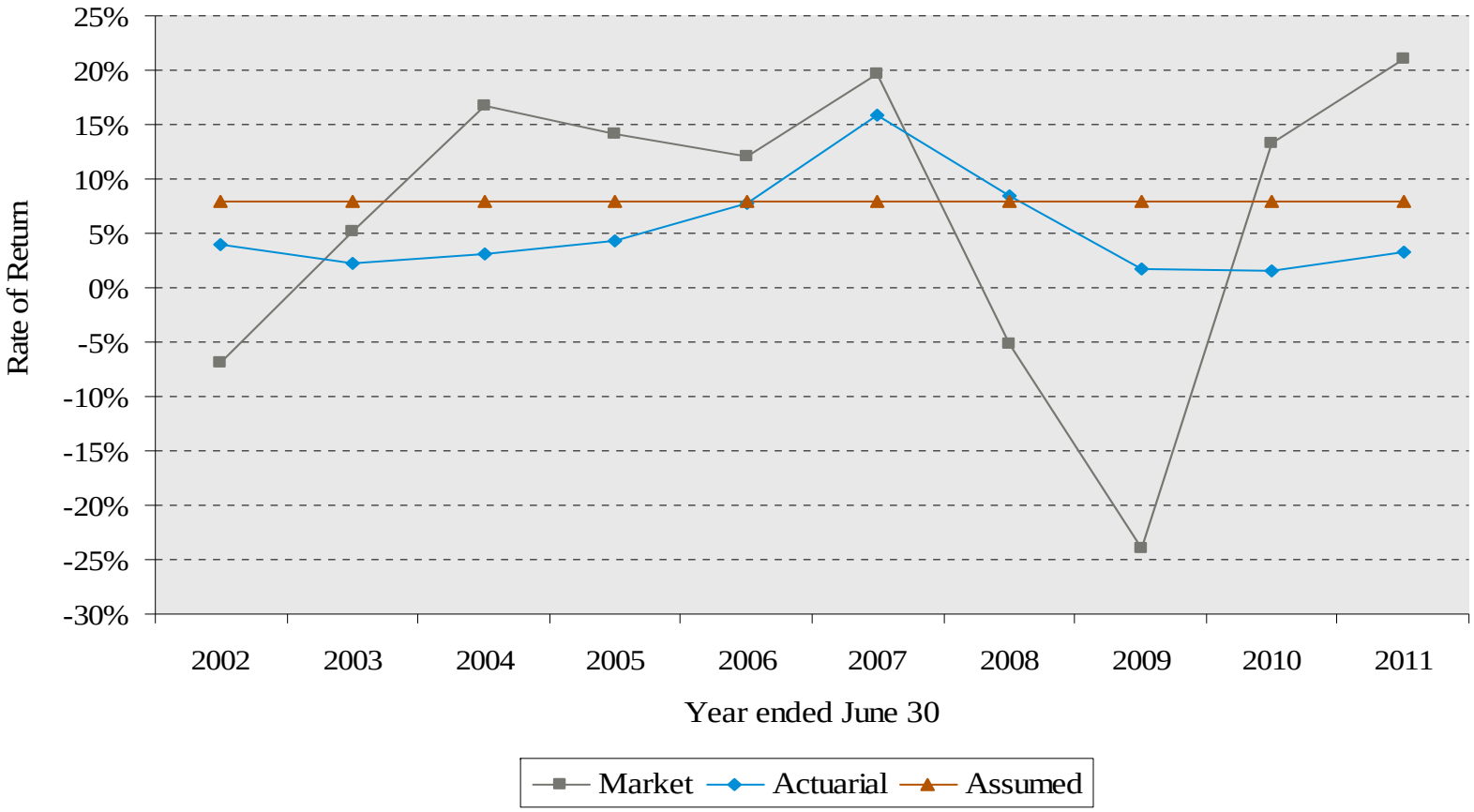


Chart 3
Investment Returns
(PERS and HPRS Combined)



Results of Actuarial Valuation

The contribution requirement consists of the normal cost, administrative expense allowance, plus the cost of amortizing the unfunded actuarial accrued liability over a scheduled period of years. The Board has adopted an open amortization schedule of 20 years with increasing payments. The calculated employer contribution requirements on this basis for fiscal year 2010-2011 are shown below as a dollar amount and as a percentage of the covered payroll of contributing employees.

Main System

The components of the actuarial contribution requirements are shown below:

	Amount for 2011 – 2012	Percentage of Payroll
Total normal cost	$75,975,824	9.67%
Less: Member contributions	(35,342,474)	(4.50)
Net employer normal cost	$40,633,350	5.17%
Administrative expense allowance	1,100,000	0.14
Amortization payment (credit)	47,490,908	6.05
Total employer contribution requirement	$89,224,258	11.36%

Covered payroll is $785,388,304.

The total statutory contribution rate is 8.12% of payroll (4.00% for the member and 4.12% for the employer) as of July 1, 2011, but increases of 2.00% of payroll are scheduled January 1, 2012 and January 1, 2013, with the member and employer each being responsible for one-half of the increase. Compared to the ultimate statutory employer rate of 6.12%, and taking into account the ultimate statutory member rate of 6.00%, the plan has a deficit of 3.74% of payroll. This results in an infinite effective amortization period, since the contribution net of normal cost and administrative expenses is never projected to exceed interest on the Unfunded Actuarial Accrued Liability.

Even if deferred asset appreciation were taken into account on the valuation date, the effective amortization period would still be infinite.

The total employer actuarial contribution requirement was 10.76% of payroll last year. Since then, actual experience of the System during 2010-2011 has changed the actuarial contribution requirement. Table 7 presents a detailed explanation of the factors that changed the contribution requirement from July 1, 2010 to July 1, 2011.

Judges

The components of the actuarial contribution requirement are shown below:

	Amount for 2011 – 2012	Percentage of Payroll
Total normal cost	$1,200,791	19.38%
Less: Member contributions	(340,845)	(5.50)
Net employer normal cost	$859,946	13.88%
Administrative expense allowance	7,500	0.12
Amortization payment (credit)	121,329	1.96
Total employer contribution requirement	$988,775	15.96%

Covered payroll is $6,197,204.

The total statutory contribution rate is 19.52% of payroll (5.00% for the member and 14.52% for the employer) as of July 1, 2011, but increases of 2.00% of payroll are scheduled January 1, 2012 and January 1, 2013, with the member and employer each being responsible for one-half of the increase. Compared to the ultimate statutory employer rate of 16.52%, and taking into account the ultimate statutory member rate of 7.00%, the plan has a margin of 2.06% of payroll. This results in an effective amortization period of 9.2 years.

If deferred asset appreciation were taken into account on the valuation date, the Judges segment would be fully funded. The total normal cost plus the administrative expense allowance is 19.50% of payroll. Taking into account the ultimate statutory member rate of 7.00% leaves an ultimate employer cost of 12.50% of payroll. This should be viewed as the long-term plan cost rate. By this measure, the ultimate statutory contribution rate is greater than the ultimate employer plan cost rate of 12.50% of payroll by 4.02% of payroll.

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

	Percentage of Payroll
Employer cost rate as of July 1, 2010	14.10%
Plan change*	(0.48)
Investment loss	1.63
Contribution gain	(0.08)
Other Plan experience during the year	0.86
Effect of maintaining 20-year amortization schedule	(0.07)
Employer cost rate as of July 1, 2011	15.96%

* *The scheduled 2.00% of payroll increase in the member contribution rate will ultimately decrease the employer cost rate by 1.98% of payroll, but only one fourth of the increase is reflected in the projected contributions for the 2011-2012 plan year.*

National Guard

The components of the actuarial contribution requirement are shown below:

	Amount for 2011 – 2012	Percentage of Payroll
Total normal cost	$129,765	9.80%
Less: Member contributions	(52,943)	(4.00)
Net employer normal cost	$76,822	5.80%
Administrative expense allowance	3,000	0.23
Amortization payment (credit)	13,839	1.05
Total employer contribution requirement	$93,661	7.08%

Covered payroll is $1,323,562.

The approved contribution rate is 6.50% of payroll. Hence, approved contributions are less than the actuarial contribution requirement shown above by 0.58% of payroll. This results in an infinite effective amortization period, since the contribution net of normal cost and administrative expenses is never projected to exceed interest on the Unfunded Actuarial Accrued Liability.

If deferred asset appreciation were taken into account on the valuation date, the effective amortization period would be 11.1 years.

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

	Percentage of Payroll
Employer cost rate as of July 1, 2010	7.00%
Investment loss	0.52%
Contribution gain	(0.01)
Other Plan experience during the year	(0.39)
Effect of maintaining 20-year amortization schedule	(0.04)
Employer cost rate as of July 1, 2011	7.08%

Law Enforcement with prior Main service

The components of the actuarial contribution requirement are shown below:

	Amount for 2011 – 2012	Percentage of Payroll
Total normal cost	$867,122	9.82%
Less: Member contributions	(379,710)	(4.30)
Net employer normal cost	$487,412	5.52%
Administrative expense allowance	2,500	0.03
Amortization payment (credit)	477,456	5.41
Total employer contribution requirement	$967,368	10.96%

Covered payroll is $8,825,766.

The total approved employer contribution rate is 8.31% of payroll. The employer rate is approved by the Board of Retirement, and no increases are scheduled. The statutory member contribution rate is 4.00% of payroll as of July 1, 2011, but increases are scheduled January 1, 2012 and January 1, 2013. Both of these increases will be 1.00% of payroll for members employed by the Bureau of Criminal Investigation (BCI) but only 0.50% for all other members in this segment. If the employer rate remains the same for all employers after the new member rate is in effect, this will result in the cost of the plan being unequally shared among employers.

Under the current policy and statute, this segment has an effective amortization period of 38.9 years.

If deferred asset appreciation were taken into account on the valuation date, the effective amortization period would be reduced to 30.2 years.

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

	Percentage of Payroll
Employer cost rate as of July 1, 2010	10.80%
Plan change*	(0.21)
Investment loss	0.49
Contribution loss	0.51
Other Plan experience during the year	(0.42)
Effect of maintaining 20-year amortization schedule	(0.21)
Employer cost rate as of July 1, 2011	10.96%

* *The scheduled 2.00% of payroll increase in the member contribution rate for BCI employees and 1.00% of payroll increase for other members will ultimately decrease the employer cost rate by 1.18% of payroll, but only one fourth of the increase is reflected in the projected contributions for the 2011-2012 plan year.*

Law Enforcement without prior Main service

The components of the actuarial contribution requirement are shown below:

	Amount for 2011 – 2012	Percentage of Payroll
Total normal cost	$267,484	10.99%
Less: Member contributions	(103,470)	(4.25)
Net employer normal cost	$164,014	6.74%
Administrative expense allowance	7,500	0.31
Amortization payment (credit)	12,501	0.51
Total employer contribution requirement	$184,015	7.56%

Covered payroll is $2,434,592.

The total approved employer contribution rate is 6.43% of payroll. The employer rate is approved by the Board of Retirement, and no increases are scheduled. The statutory member contribution rate is 4.00% of payroll as of July 1, 2011, but increases of 0.50% are scheduled January 1, 2012 and January 1, 2013. Taking into account the ultimate statutory member rate of 5.00%, the plan has a deficit of 0.38% of payroll. This results in an infinite effective amortization period, since the contribution net of normal cost and administrative expenses is never projected to exceed interest on the Unfunded Actuarial Accrued Liability.

Even if deferred asset appreciation were taken into account on the valuation date, the effective amortization period would still be infinite.

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

	Percentage of Payroll
Employer cost rate as of July 1, 2010	7.53%
Plan change*	(0.19)
Investment gain	(0.06)
Contribution gain	(0.04)
Other Plan experience during the year	0.34
Effect of maintaining 20-year amortization schedule	(0.02)
Employer cost rate as of July 1, 2011	7.56%

* *The scheduled 1.00% of payroll increase in the member contribution rate will ultimately decrease the employer cost rate by 0.94% of payroll, but only one fourth of the increase is reflected in the projected contributions for the 2011-2012 plan year.*

Main System, Judges, National Guard and Law Enforcement Combined

The components of the actuarial contribution requirement are shown below.

	Amount for 2011 – 2012	Percentage of Payroll
Total normal cost	$78,440,986	9.75%
Less: Member contributions	(36,219,442)	(4.50)
Net employer normal cost	$42,221,544	5.25%
Administrative expense allowance	1,120,500	0.14
Amortization payment (credit)	48,116,033	5.98
Total employer contribution requirement	$91,458,077	11.37%

Covered payroll is $804,169,428.

TABLE 7

Main System
Explanation of Change in Employer Cost Rate

	Percent of Payroll
Employer Cost Rate as of July 1, 2010	**10.76%**
Retired Life Mortality	(0.07%)
The release of liability due to deaths among retirees and beneficiaries was greater than expected, decreasing the employer cost rate.	
Active Life Mortality	0.01%
The release of liability due to deaths among active members was less than expected, increasing the employer cost rate.	
Disability Incidence	0.01%
The net change in liability due to disability retirements was greater than expected, increasing the employer cost rate.	
Withdrawals	(0.16)%
The release of liability due to withdrawals prior to retirement was greater than expected, decreasing the employer cost rate.	
Retirement	0.06%
The actual liability due to non-disabled retirements was greater than expected, increasing the employer cost rate.	
Investments	0.68%
On an actuarial value basis, the rate of return on assets was less than the assumed rate of return, increasing the employer cost rate.	
Salary Scale and Service	0.02%
Salaries increased more than expected, increasing the employer cost rate. This is partly offset by part-time workers who earned less than one year of service.	
Contributions	0.45%
Actual contributions received by the System were less than the actuarially determined amount, increasing the required contributions in future years.	

TABLE 7

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

	Percent of Payroll
Administrative Expenses	0.01%
Actual expenses more than expected.	
New and Reinstated Members	0.05%
The addition of new and reinstated members increased the employer cost rate.	
Change in Size and Composition of Active Membership and Miscellaneous Experience	(0.02)%
The demographic characteristics of the active membership changed during the year, decreasing the employer cost rate.	
Plan Provision Changes	(0.21)%
The scheduled 2.00% of payroll increase in the member contribution rate increases the cost rate by 0.29% due to higher expected returns of employee money. Only one-half of the 2012 increase is reflected in the member contributions expected for the current year, which decreases the rate by 0.50%. Ultimately the plan change will decrease the employer cost rate by 1.71% of payroll.	
Assumption Changes	0.00%
There were no changes in actuarial assumptions.	
Funding Schedule	(0.23)%
The effect of maintaining a 20-year funding schedule results in a decrease in cost.	
Employer Cost Rate as of July 1, 2011	**11.36%**

Funding Status

The calculation of funded ratios provides one measure of the progress of funding a retirement plan. The funded ratio is the percentage of plan liabilities covered by plan assets. The greater the ratio, the better funded the retirement plan. 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 funded 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 funded ratios (under the GASB Statement No. 25 standard) for the last ten years are developed in Table 8. These ratios are graphed in Chart 4 on page 30. They show that the funded ratio has deteriorated since July 1, 2001. This is due to investment losses and the fact that the statutory contribution rate is less than the actuarially determined contribution requirement. Furthermore, even if the actuarially determined contribution were made, the amortization policy calculates an amortization payment that is less than the interest on the Unfunded Actuarial Accrued Liability (UAAL), which would cause the UAAL to increase each year.

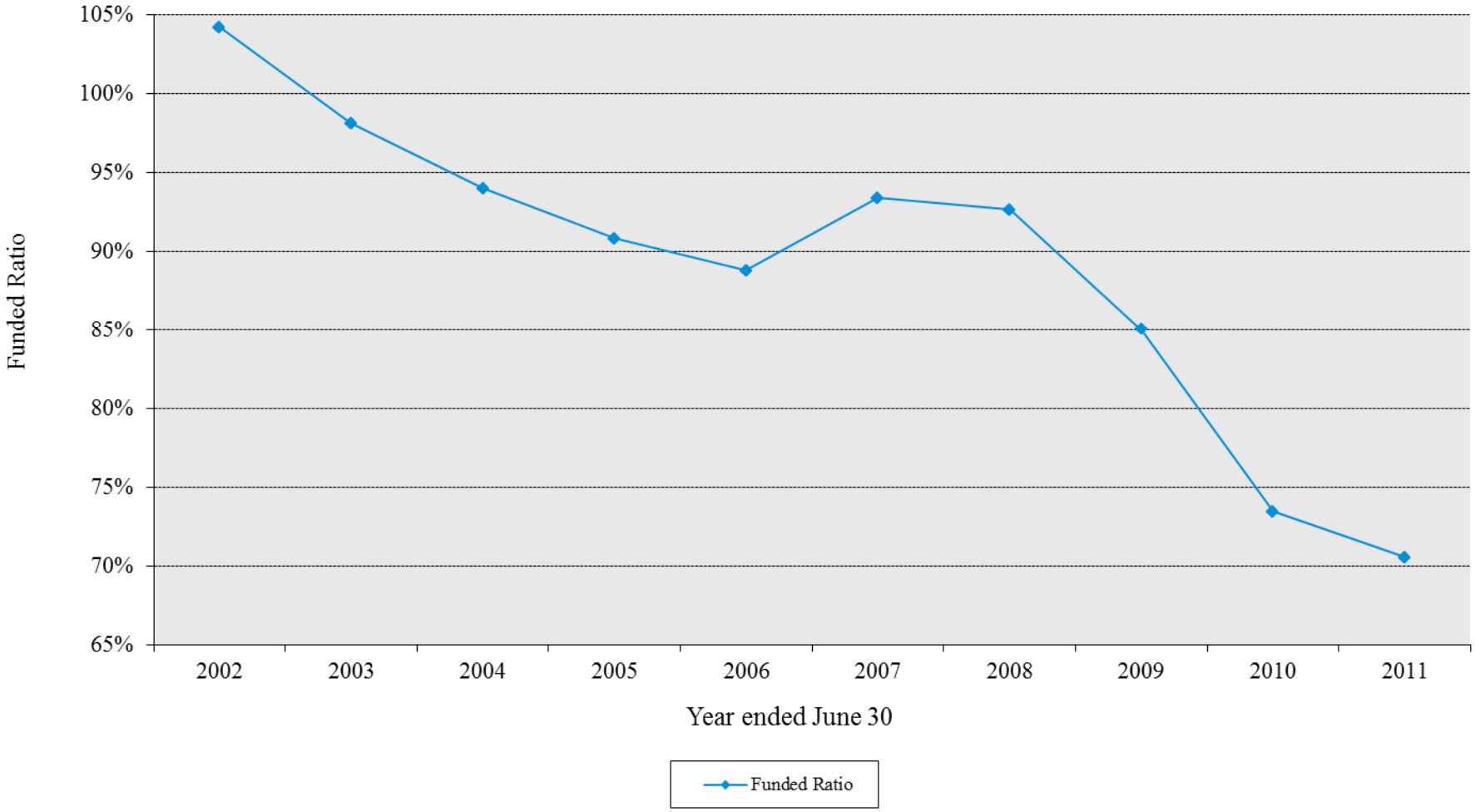
Funded ratios change over time due to several factors. These factors include the level of contributions, actual experience (including investment returns), plan amendments and changes in assumptions. In particular, the actuarial assumptions were changed in 2006 and 2010, changing the funded ratio from what it would have been otherwise.

TABLE 8

Funded Ratio for PERS

As of July 1	Actuarial Accrued Liability	Actuarial Value of Assets	Funded Ratio
2002	$1,103,460,900	$1,150,000,800	104.2
2003	1,188,830,500	1,166,452,100	98.1
2004	1,272,857,600	1,196,533,100	94.0
2005	1,361,182,100	1,236,114,100	90.8
2006	1,480,456,700	1,314,542,900	88.8
2007	1,609,168,600	1,503,137,900	93.4
2008	1,737,627,000	1,609,810,300	92.6
2009	1,901,200,800	1,617,147,800	85.1
2010	2,208,386,100	1,621,723,100	73.4
2011	2,339,833,200	1,650,463,700	70.5

Chart 4
Funded Ratio (PERS)



Actuarial Assumptions and Cost Methods

The actuarial assumptions and cost methods used in the actuarial valuation as of July 1, 2011 are the same as those used in the previous valuation. A summary of the actuarial assumptions and cost methods 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, National Guard and Law Enforcement, the assumed salary increases are service-related during the first five years of service. After five years of service, salary increases are age-related.

For Judges, the assumed salary increase is 5.00% per year for all years of service.

Payroll Growth

For the Main System, National Guard and Law Enforcement, 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 the period over which payments will be received. The valuation uses RP-2000 Combined Healthy Mortality Table set back three years for healthy members and the RP-2000 Disabled Retiree Mortality Table set back one year for males (not set back for females) for disabled members. The table below shows sample mortality rates and life expectancies underlying the healthy-life mortality tables.

	Retired Members			
	Males		Females	
Age	Deaths per 1,000 Lives	Expected Number of Years of Life Remaining	Deaths per 1,000 Lives	Expected Number of Years of Life Remaining
55	2.7	28.4	2.0	31.2
60	4.7	23.9	3.5	26.6
65	8.8	19.5	6.7	22.1
70	16.1	15.6	12.2	18.0
75	27.3	12.0	20.7	14.3
80	46.9	8.9	34.1	11.0
85	80.5	6.3	56.3	8.1

Disability Incidence Rates Before Retirement

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, 33% of the Social Security disability incidence rates are used for males and 20% 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.

Withdrawal rates vary by age. For the Main System, National Guard and Law Enforcement, special withdrawal rates are applied during the first five years of service to recognize higher turnover for short service members. Withdrawal rates end upon the earlier of eligibility for early retirement or the Rule of 85 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:

Age	Early Retirement	Unreduced Retirements*
51		8%
52		8
53		8
54		8
55	2%	8
56	2	10
57	2	10
58	2	10
59	2	10
60	4	10
61	10	20
62	20	35
63	15	25
64	10	30
65		30
66		20
67		20
68		20
69		20
70		20
71		20
72		20
73		20
74		20
75		100

Age 65 or Rule of 85

The retirement rates for Judges begin at age 60. Ten percent of Judges are assumed to retire at ages 60 and 61, 20% 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 and Law Enforcement is assumed to begin at age 55. Twenty percent are assumed to retire at each age from 55 to 63, 50% are assumed to retire at age 64, and 100% are assumed to retire at age 65.

Retirement for inactive vested members of the Main System and Judges is assumed to occur at the earlier of age 64 and the unreduced retirement date for each individual. Retirement for inactive vested members of the National Guard is assumed to occur at age 55. Retirement for inactive vested members of the Law Enforcement is assumed to occur at the earlier of age 55 and the unreduced retirement date for each individual.

Inactive vested members are assumed to elect a refund of contributions in lieu of a deferred pension benefit when it is more valuable than the deferred annuity.

Annual Administrative Expenses

Annual administrative expenses for all Systems combined are assumed to be $1,120,500.

Marital Status for Non-Retired Members

For the Main System, National Guard and Law Enforcement, 80% of male members and 65% of female members are assumed to have spouses at death or retirement. One hundred percent of Judges are assumed to have spouses at retirement or death. Males are assumed to be three 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). A characteristic of this asset valuation method is that, over time, it is more likely than not to produce an actuarial value of assets that is less than the market value of assets.

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/(surplus) 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 for each member 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 policy of calculating an amortization payment for the Unfunded Actuarial Accrued Liability (UAAL) by using 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, National Guard and Law Enforcement, and 4.0% per year for Judges. This results in a payment towards the UAAL that is less than interest on the UAAL . Under this method, the dollar amount of the UAAL would grow from year to year even if the actuarially required contribution were made and all actuarial assumptions were met.

A. Actuarial Valuation Certificate

December 13, 2011

NORTH DAKOTA PUBLIC EMPLOYEES RETIREMENT SYSTEM

This is to certify that we have prepared an Actuarial Valuation of the System as of July 1, 2011 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 Methods

III. Changes in Actuarial Assumptions and Cost Methods

IV. Summary of Plan Provisions

V. Changes in 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.

To the best of our knowledge, the information supplied in this actuarial valuation is complete and accurate and in our opinion each individual assumption used (a) is reasonably related to the experience of the System and to reasonable expectations and (b) represents our best estimate of anticipated experience under the System.

We are members of the American Academy of Actuaries, and we meet the Qualifications Standards of the American Academy of Actuaries to render the actuarial opinion herein.

We are available to provide further information or to answer any questions regarding the report.

Brad Ramirez, FSA, MAAA, FCA, EA
Consulting Actuary

Mark Hamwee, FSA, MAAA, EA
Vice President & Associate Actuary

Kurt Schneider, ASA, MAAA, EA
Associate Actuary

EXHIBIT I-A

ACTUARIAL VALUATION RESULTS

MAIN SYSTEM

1.	Actuarial accrued liability on July 1, 2011:			
	a.	Active members	$1,398,912,835	
	b.	Special prior service pensions	18,844	
	c.	Retired members and beneficiaries	769,356,320	
	d.	Inactive non-retired members	115,911,020	
	e.	Total		$2,284,199,019
2.	Assets at actuarial value ($1,708,264,257 at market value)			1,603,718,656
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)			680,480,363
4.	Member and employer normal cost for ensuing year*			75,975,824
5.	Estimated annual salaries of covered members			785,388,304
6.	Member normal cost - equals 4.5%** of (5)			35,342,474
7.	Employer normal cost for ensuing year - equals (4) minus (6)			40,633,350
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*			47,490,908
9.	Administrative expenses			1,100,000
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)			89,224,258
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)			11.36%

* *Adjusted for interest to recognize payments through the year.*

** *Reflects a scheduled increase from 4.0% to 5.0% on January 1, 2012. An additional scheduled increase to 6.0% effective January 1, 2013 is not yet recognized.*

EXHIBIT I-B

ACTUARIAL VALUATION RESULTS

JUDGES

1.	Actuarial accrued liability on July 1, 2011:			
	a.	Active members	$17,762,393	
	b.	Retired members and beneficiaries	13,953,319	
	c.	Inactive non-retired members	342,556	
	d.	Total		$32,058,268
2.	Assets at actuarial value ($32,368,881 at market value)			30,387,909
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)			1,670,359
4.	Member and employer normal cost for ensuing year*			1,200,791
5.	Estimated annual salaries of covered members			6,197,204
6.	Member normal cost - equals 5.5%** of (5)			340,845
7.	Employer normal cost for ensuing year - equals (4) minus (6)			859,946
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*			121,329
9.	Administrative expenses			7,500
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)			988,775
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)			15.96%

* *Adjusted for interest to recognize payments through the year.*

** *Reflects a scheduled increase from 5.0% to 6.0% on January 1, 2012. An additional scheduled increase to 7.0% effective January 1, 2013 is not yet recognized.*

EXHIBIT I-C

ACTUARIAL VALUATION RESULTS

NATIONAL GUARD

1.	Actuarial accrued liability on July 1, 2011:			
	a.	Active members	$1,136,781	
	b.	Retired members and beneficiaries	951,672	
	c.	Inactive non-retired members	283,480	
	d.	Total		$2,371,933
2.	Assets at actuarial value ($2,315,331 at market value)			2,173,633
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)			198,300
4.	Member and employer normal cost for ensuing year*			129,765
5.	Estimated annual salaries of covered members			1,323,562
6.	Member normal cost - equals 4% of (5)			52,943
7.	Employer normal cost for ensuing year - equals (4) minus (6)			76,822
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*			13,839
9.	Administrative expenses			3,000
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)			93,661
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)			7.08%

** Adjusted for interest to recognize payments through the year.*

EXHIBIT I-D

ACTUARIAL VALUATION RESULTS

LAW ENFORCEMENT WITH PRIOR MAIN SERVICE

1.	Actuarial accrued liability on July 1, 2011:		
	a. Active members	$13,071,493	
	b. Retired members and beneficiaries	6,870,771	
	c. Inactive non-retired members	596,580	
	d. Total		$20,538,844
2.	Assets at actuarial value ($14,590,482 at market value)		13,697,546
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)		6,841,298
4.	Member and employer normal cost for ensuing year*		867,122
5.	Estimated annual salaries of covered members		8,825,766
6.	Member normal cost - equals 4.3%** of (5)		379,710
7.	Employer normal cost for ensuing year - equals (4) minus (6)		487,412
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*		477,456
9.	Administrative expenses		2,500
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)		967,368
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)		10.96%

* *Adjusted for interest to recognize payments through the year.*

** *Reflects a scheduled increase from 4.0% to 5.0% for members employed by the Bureau of Criminal Investigation (BCI) and from 4.0% to 4.5% for other members on January 1, 2012. An additional scheduled increase to 6.0% for BCI members and to 5.0% for other members effective January 1, 2013 is not yet recognized.*

EXHIBIT I-E

ACTUARIAL VALUATION RESULTS

LAW ENFORCEMENT WITHOUT PRIOR MAIN SERVICE

1.	Actuarial accrued liability on July 1, 2011:		
	a. Active members	$585,726	
	b. Retired members and beneficiaries	0	
	c. Inactive non-retired members	79,365	
	d. Total		$665,091
2.	Assets at actuarial value ($517,647 at market value)		485,967
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)		179,124
4.	Member and employer normal cost for ensuing year*		267,484
5.	Estimated annual salaries of covered members		2,434,592
6.	Member normal cost - equals 4.25%** of (5)		103,470
7.	Employer normal cost for ensuing year - equals (4) minus (6)		164,014
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*		12,501
9.	Administrative expenses		7,500
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)		184,015
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)		7.56%

* *Adjusted for interest to recognize payments through the year.*

** *Reflects a scheduled increase from 4.0% to 4.5% on January 1, 2012. An additional scheduled increase to 5.0% effective January 1, 2013 is not yet recognized.*

EXHIBIT I-F

ACTUARIAL VALUATION RESULTS

MAIN SYSTEM, JUDGES, NATIONAL GUARD AND LAW ENFORCEMENT PLAN COMBINED

1.	Actuarial accrued liability on July 1, 2011:		
	a. Active members	$1,431,469,228	
	b. Special prior service pensions	18,844	
	c. Retired members and beneficiaries	791,132,082	
	d. Inactive non-retired members	117,213,001	
	e. Total		$2,339,833,115
2.	Assets at actuarial value ($1,758,056,598 at market value)		1,650,463,711
3.	Unfunded/(Surplus) actuarial accrued liability - equals (1) minus (2)		689,369,444
4.	Member and employer normal cost for ensuing year*		78,440,986
5.	Estimated annual salaries of covered members		804,169,428
6.	Member normal cost		36,219,442
7.	Employer normal cost for ensuing year - equals (4) minus (6)		42,221,544
8.	Amortization payment - equals 20-year amortization of item (3) as a level percent of aggregate salary*		48,116,033
9.	Administrative expenses		1,120,500
10.	Total employer cost for ensuing year - equals (7) plus (8) plus (9)		91,458,077
11.	Total employer cost as percentage of payroll - equals (10) divided by (5)		11.37%

** Adjusted for interest to recognize payments through the year.*

EXHIBIT II

ACTUARIAL ASSUMPTIONS AND COST METHODS

1. Mortality Tables:

Healthy: The RP-2000 Combined Healthy Mortality Table, set back three years.

Disabled: The RP-2000 Disabled Retiree Mortality Table, set back one year for males (not set back for females).

These mortality tables were determined to contain provision appropriate to reasonably reflect future mortality improvement, based on a review of mortality experience in 2010.

2. Disability Incidence Rates:

Before age 65:	Males	33% of OASDI disability incidence rates.
	Females	20% of OASDI disability incidence rates.
Age 65 and later:		0.25% per year.

Sample rates are as follows:

Age	Male	Female
20	0.02%	0.01%
30	0.04	0.02
40	0.07	0.04
50	0.20	0.12
60	0.54	0.33

3. Annual Withdrawal Rates:

Main System:

First five years of service:

	Years of Service				
Age	0	1	2	3	4
29 & Under	22%	18%	16%	14%	14%
30 - 39	16	14	12	12	11
40 & Over	12	10	10	8	7

EXHIBIT II (continued)

Ultimate withdrawal rates after five years service:

Age	Rate
20 - 24	8.8%
25 - 29	8.8
30 - 34	5.5
35 - 39	4.7
40 - 44	3.9
45 - 49	3.7
50 - 54	3.4
55 - 59	0.1
60 & Over	0.2

National Guard and Law Enforcement:

First five years of service:

	Years of Service				
Age	0	1	2	3	4
29 & Under	25%	23%	20%	17%	15%
30 - 39	20	17	15	13	11
40 & Over	17	15	12	10	7

Ultimate withdrawal rates after five years service:

Age	Rate
20 - 24	8.8%
25 - 29	8.8
30 - 34	5.5
35 - 39	4.7
40 - 44	3.9
45 - 49	3.7
50 - 54	3.4
55 - 59	0.1
60 & Over	0.2

EXHIBIT II (continued)

Judges:

Age	Rate
20 – 24	2.2%
25 – 29	2.2
30 – 34	1.4
35 – 39	1.2
40 – 44	1.0
45 – 49	0.9
50 – 54	0.8
55 – 59	0.0
60 & Over	0.1

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 for Rule of 85.

Judges:

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

National Guard and Law Enforcement:

Age 50 and 3 years of service.

4. Refund of Employee Contributions:

Inactive vested members are assumed to elect a refund of employee contributions in lieu of deferred pension benefits when it is more valuable than the deferred annuity.

EXHIBIT II (continued)

5. Retirement Rates for Active Members:

Main System:

Age	Early Retirement	Unreduced Retirements
51		8%
52		8
53		8
54		8
55	2%	8
56	2	10
57	2	10
58	2	10
59	2	10
60	4	10
61	10	20
62	20	35
63	15	25
64	10	30
65		30
66		20
67		20
68		20
69		20
70		20
71		20
72		20
73		20
74		20
75		100

Judges:

Age	Rate
60	10%
61	10
62	20
63	20
64	20
65	50
66	50
67	50
68	50
69	50
70	100

EXHIBIT II (continued)

National Guard and Law Enforcement:

Age	Rate
55	20%
56	20
57	20
58	20
59	20
60	20
61	20
62	20
63	20
64	50
65	100

6. Retirement Age for Inactive Vested Members:

Main System and Judges:

The earlier of:

- Age 64.
- Unreduced retirement date for each individual.

National Guard:

Age 55.

Law Enforcement:

The earlier of:

- Age 55.
- Unreduced retirement date for each individual.

7. Interest Rate:

8.00% per annum, net of investment expenses.

8. Annual Administrative Expenses:

Main System:	$1,100,000
Judges:	$7,500
National Guard:	$3,000
Law Enforcement with Prior Main Service:	$2,500
Law Enforcement without Prior Main Service:	$7,500

EXHIBIT II (continued)

9. Salary Scale:

Main System, National Guard, and Law Enforcement:

Less than five years of service:

Service	Percentage Increase
0	8.25%
1	7.25
2	6.75
3	6.50
4	6.25

Five or more years of service (sample rates are as follows):

Age	Percentage Increase	Age	Percentage Increase
25	6.25%	45	5.11%
30	5.93	50	5.02
35	5.50	55	4.93
40	5.23	60	4.86

Judges:

5.00% per annum for all years of service.

10. Payroll Growth:

Main System, National Guard and Law Enforcement:	4.50% per annum
Judges:	4.00% per annum

11. Percent Married and Age of Spouse:

Main System, National Guard, and Law Enforcement:

At retirement or death, 80% of male members and 65% of female members are assumed to have spouses. Males are assumed to be three years older than their female spouses.

Judges:

At retirement or death, 100% of members are assumed to have spouses. Males are assumed to be three years older than their female spouses.

EXHIBIT II (continued)

12. Part-Time Employees:

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

13. 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.

14. Actuarial Cost Method:

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

15. 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. A characteristic of this asset valuation method is that, over time, it is more likely than not to produce an actuarial value of assets that is less than the market value of assets.

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

Eligibility: 50%

Consumer Price Index Increases: 3.5% per annum

Wage Base Increases: 5.0% per annum

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

None assumed.

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

Participation Under Chapter 54-52.2:	If not elected:	None.
	If elected:	100% of active members of the Main System, National Guard and Law Enforcement.

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 for current PERS members or cost methods since the preceding valuation. However, former PERS members with a vested benefit who are currently active in the Highway Patrolmen's Retirement System (HPRS) are valued using the demographic assumptions used in that valuation. The HPRS did change several assumptions as of July 1, 2011. There are 22 former Main members and 1 former Law Enforcement With Prior Main Service member who are included in the current PERS valuation. The change in the Main and Law Enforcement contribution rates as a result of the change in these assumptions is 0.00% of payroll. See the HPRS valuation for a complete summary of current and prior assumptions for those members.

EXHIBIT IV

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. <u>Normal Service Retirement:</u>

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 three consecutive years of service.

Law Enforcement:

Attainment of age 55 and three consecutive years of service, or age plus service equal to at least 85 (Rule of 85).

Benefit:

Main System, National Guard and Law Enforcement:

2.00% of final average salary multiplied by service.

Judges:

3.50% of final average salary for each of the first ten years of service, 2.80% for each of the next ten years of service, and 1.25% for service in excess of twenty years.

2. <u>Early Retirement:</u>

Eligibility:

Main System:

Attainment of age 55 with three years of service.

Judges:

Attainment of age 55 with five years of service.

National Guard and Law Enforcement:

Attainment of age 50 with three 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 or the age at which the Rule of 85 is met.

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.

Law Enforcement:

The Normal Service Retirement Benefit as determined above. A benefit that begins before age 55 (or Rule of 85, if earlier) is reduced by one-half of one percent for each month before age 55 or the age at which the Rule of 85 is met.

3. <u>Disability Benefit</u>:

Eligibility:

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

Benefit:

Main System, National Guard and Law Enforcement:

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 IV (continued)

4. <u>Deferred Vested Retirement</u>:

Eligibility:

Main System, National Guard and Law Enforcement:

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.

Law Enforcement:

The Normal Service Retirement Benefit payable at age 55 or the Rule of 85, if earlier. Reduced early retirement benefit can be selected upon attainment of age 50.

5. <u>Pre-Retirement Death Benefits</u>:

Eligibility:

Main System, National Guard and Law Enforcement:

Three years of service.

Judges:

Five years of service.

Benefit:

Main System, National Guard and Law Enforcement:

One of the following options:

- Lump sum payment of member's accumulated contributions with interest.
- 50% of the member's accrued benefit (not reduced on account of age) payable for the surviving spouse's lifetime.
- Continuation portion of 100% joint and survivor annuity (only if participant was eligible for normal retirement).
- A partial lump sum payment in addition to the one of the annuity options above.

Judges:

One of the following options:

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

Eligibility:

Main System, Judges, National Guard and Law Enforcement:

Not vested or no surviving spouse.

Benefit:

Main System, Judges, National Guard and Law Enforcement:

Lump sum payment of member's accumulated contributions with interest.

6. <u>Refund of Member Contributions</u>:

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

EXHIBIT IV (continued)

7. Accumulated Member Contributions:

Member contributions accumulate with interest at the following rates:

Time Period	Per Annum Interest Rate
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

8. Standard and Optional Forms of Payment:

Standard form of payment:

Main System, National Guard and Law Enforcement:

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

Judges:

Monthly benefit for life, with 50% payable to an eligible survivor.

Optional forms of payment:

- Life annuity (for Judges)
- 50% joint and survivor annuity with pop-up (for Main System, National Guard and Law Enforcement)
- 100% joint and survivor annuity with pop-up
- Twenty-year certain and life annuity
- Ten-year certain and life annuity
- Social Security level income annuity
- A partial lump sum payment in addition to one of the annuity options above.
- Effective March 1, 2011, an actuarially equivalent graduated benefit option with either a one percent or two percent increase to be applied the first day of January of each year. Not available for disability or early retirements or in combination with a partial lump sum option, a deferred normal retirement option, or a Social Security level income annuity.

EXHIBIT IV (continued)

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 and Law Enforcement); differ between permanent full-time employees and part-time temporary employees. Rates are as follow:

	Rates Set by Statute		Rates Determined by the Board of Retirement
	Employees	Employer	Employer
Main System Full-Time Employees	4.00%	4.12%	
Effective January 2012	5.00%	5.12%	
Effective January 2013	6.00%	6.12%	
Main System Part-Time Employees	8.12%	0.00%	
Effective January 2012	10.12%	0.00%	
Effective January 2013	12.12%	0.00%	
Judges	5.00%	14.52%	
Effective January 2012	6.00%	15.52%	
Effective January 2013	7.00%	16.52%	
National Guard	4.00%		6.50%
	Employee Rate for Employees of Political Subdivisions	Employee Rate for Employees of the BCI	
Law Enforcement with prior Main service	4.00%	4.00%	8.31%
Effective January 2012	4.50%	5.00%	
Effective January 2013	5.00%	6.00%	
Law Enforcement without prior Main service	4.00%		6.43%
Effective January 2012	4.50%		
Effective January 2013	5.00%		

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 12 of service credit, $25 or 1% of the member's monthly salary, whichever is greater.

2. For months 13 through 24 of service credit, $25 or 2% of the member's monthly salary, whichever is greater.

3. For months 25 through 36 of service credit, $25 or 3% of the member's monthly salary, whichever is greater.

4. For service exceeding 36 months, $25 or 4% of the member's monthly salary, whichever is greater.

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

11. <u>Rollovers</u>:

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

EXHIBIT V

CHANGES IN PLAN PROVISIONS

As a result of legislation passed in 2011, the contribution rates are scheduled to increase in January of 2012 and again in January of 2013 by the following amounts:

	Employees	Employer
Main System Full-Time Employees	1.00%	1.00%
Main System Part-Time Employees	2.00%	
Judges	1.00%	1.00%

	Employees of Political Subdivisions	Employees of the BCI
Law Enforcement	0.50%	1.00%

B. Census Tables

			Table Designation
I.	Active Members		
	(A)	Number of active members grouped by nearest age and years of employment:	
		Males	9-A
		Females	9-B
		All	9-C
	(B)	Number of active members grouped by nearest age and salary:	
		Males	10-A
		Females	10-B
		All	10-C
II.	Current Plan Pensions		
	(A)	Distribution of pensions awarded during the year by amount of benefit and type of pension:	
		Males	11-A
		Females	11-B
		All	11-C
	(B)	Distribution of pensions awarded during the year by nearest age and type of pension:	
		Males	12-A
		Females	12-B
		All	12-C
	(C)	Distribution of pensions in force by amount of benefit and type of pension:	
		Males	13-A
		Females	13-B
		All	13-C
	(D)	Distribution of pensions in force by nearest age and type of pension:	
		Males	14-A
		Females	14-B
		All	14-C
III.	Special Prior Service Pensions		
	(A)	Distribution of pensions in force by amount of benefit:	15
	(B)	Distribution of pensions in force by nearest age:	16

TABLE 9-A

Census of Members in Active Service on July 1, 2011
by Nearest Age and Years of Employment in PERS

(Males - Main System, Judges, National Guard, and Law Enforcement)

		Years of Employment							
Nearest Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Total	8,154	3,307	1,478	1,084	686	645	446	358	150
Under 20	4	4	-	-	-	-	-	-	-
20-24	209	209	-	-	-	-	-	-	-
25-29	651	570	81	-	-	-	-	-	-
30-34	745	483	215	47	-	-	-	-	-
35-39	777	376	194	173	34	-	-	-	-
40-44	859	349	177	171	117	45	-	-	-
45-49	1,032	344	202	157	148	130	50	1	-
50-54	1,261	349	207	173	122	171	136	97	6
55-59	1,299	325	173	177	123	155	144	144	58
60-64	933	200	143	119	104	109	90	99	69
65-69	281	70	59	45	32	27	20	13	15
70-74	74	22	16	17	4	7	5	2	1
75 & Over	29	6	11	5	2	1	1	2	1

TABLE 9-B

Census of Members in Active Service on July 1, 2011
by Nearest Age and Years of Employment in PERS

(Females - Main System, Judges, National Guard, and Law Enforcement)

		Years of Employment							
Nearest Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Total	12,541	4,983	2,435	1,890	1,088	946	632	401	166
Under 20	4	4	-	-	-	-	-	-	-
20-24	238	238	-	-	-	-	-	-	-
25-29	842	768	74	-	-	-	-	-	-
30-34	1,030	675	288	67	-	-	-	-	-
35-39	1,152	621	283	213	34	1	-	-	-
40-44	1,402	667	322	222	128	60	3	-	-
45-49	1,793	617	414	291	176	169	115	11	-
50-54	2,260	630	409	405	251	204	206	144	11
55-59	2,090	436	341	384	278	254	165	150	82
60-64	1,306	243	222	230	174	200	112	70	55
65-69	306	57	58	49	36	48	22	22	14
70-74	85	23	14	23	5	9	8	2	1
75 & Over	33	4	10	6	6	1	1	2	3

TABLE 9-C

Census of Members in Active Service on July 1, 2011
by Nearest Age and Years of Employment in PERS

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

		Years of Employment							
Nearest Age	Total	Under 5	5-9	10-14	15-19	20-24	25-29	30-34	35 & Over
Total	20,695	8,290	3,913	2,974	1,774	1,591	1,078	759	316
Under 20	8	8	-	-	-	-	-	-	-
20-24	447	447	-	-	-	-	-	-	-
25-29	1,493	1,338	155	-	-	-	-	-	-
30-34	1,775	1,158	503	114	-	-	-	-	-
35-39	1,929	997	477	386	68	1	-	-	-
40-44	2,261	1,016	499	393	245	105	3	-	-
45-49	2,825	961	616	448	324	299	165	12	-
50-54	3,521	979	616	578	373	375	342	241	17
55-59	3,389	761	514	561	401	409	309	294	140
60-64	2,239	443	365	349	278	309	202	169	124
65-69	587	127	117	94	68	75	42	35	29
70-74	159	45	30	40	9	16	13	4	2
75 & Over	62	10	21	11	8	2	2	4	4

TABLE 10-A

Census of Members in Active Service on July 1, 2011
by Nearest Age and Salary

(Males - Main System, Judges, National Guard, and Law Enforcement)

		Salary									
Nearest Age	Total	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	8,154	136	194	226	486	780	1,182	1,243	1,015	811	2,081
Under 20	4	-	1	2	1	-	-	-	-	-	-
20-24	209	14	6	13	33	45	47	26	22	1	2
25-29	651	18	8	34	55	67	158	130	88	37	56
30-34	745	12	9	15	41	65	116	140	139	80	128
35-39	777	8	7	13	39	71	102	136	110	98	193
40-44	859	11	14	16	38	68	129	126	106	97	254
45-49	1,032	13	17	13	48	98	153	161	119	110	300
50-54	1,261	13	20	26	58	110	174	193	154	129	384
55-59	1,299	9	35	27	70	114	164	182	148	141	409
60-64	933	16	35	34	63	97	101	117	98	99	273
65-69	281	10	25	19	27	33	31	28	25	17	66
70-74	74	7	12	8	9	9	6	3	6	2	12
75 & Over	29	5	5	6	4	3	1	1	-	-	4

TABLE 10-B

Census of Members in Active Service on July 1, 2011
by Nearest Age and Salary

(Females - Main System, Judges, National Guard, and Law Enforcement)

		Salary									
Nearest Age	Total	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	12,541	285	775	1,419	1,659	1,899	1,627	1,578	1,101	743	1,455
Under 20	4	2	-	1	-	1	-	-	-	-	-
20-24	238	23	43	37	45	34	30	19	6	1	-
25-29	842	54	60	93	117	151	114	132	73	25	23
30-34	1,030	15	75	91	103	160	149	162	124	68	83
35-39	1,152	40	85	112	126	161	134	163	106	71	154
40-44	1,402	37	103	190	165	197	158	176	119	72	185
45-49	1,793	27	100	219	233	255	239	219	154	110	237
50-54	2,260	30	106	253	335	334	281	268	180	158	315
55-59	2,090	21	90	222	294	308	283	250	207	144	271
60-64	1,306	15	68	133	185	235	187	141	110	79	153
65-69	306	7	24	46	36	48	45	39	16	14	31
70-74	85	10	13	18	13	11	7	7	4	-	2
75 & Over	33	4	8	4	7	4	-	2	2	1	1

TABLE 10-C

Census of Members in Active Service on July 1, 2011
by Nearest Age and Salary

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

		Salary									
Nearest Age	Total	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	20,695	421	969	1,645	2,145	2,679	2,809	2,821	2,116	1,554	3,536
Under 20	8	2	1	3	1	1	-	-	-	-	-
20-24	447	37	49	50	78	79	77	45	28	2	2
25-29	1,493	72	68	127	172	218	272	262	161	62	79
30-34	1,775	27	84	106	144	225	265	302	263	148	211
35-39	1,929	48	92	125	165	232	236	299	216	169	347
40-44	2,261	48	117	206	203	265	287	302	225	169	439
45-49	2,825	40	117	232	281	353	392	380	273	220	537
50-54	3,521	43	126	279	393	444	455	461	334	287	699
55-59	3,389	30	125	249	364	422	447	432	355	285	680
60-64	2,239	31	103	167	248	332	288	258	208	178	426
65-69	587	17	49	65	63	81	76	67	41	31	97
70-74	159	17	25	26	22	20	13	10	10	2	14
75 & Over	62	9	13	10	11	7	1	3	2	1	5

TABLE 11-A

Pensions Awarded During the Year Ended June 30, 2011
by Type of Pension and Monthly Amount

(Males - Main System, Judges, National Guard, and Law Enforcement)

Monthly Amount	Total	Type of Pension			
		Normal	Early	Rule of 85	Disability
Total	256	100	106	39	11
Under $200	19	15	-	4	-
200-399	29	18	-	9	2
400-599	22	8	-	11	3
600-799	17	5	2	7	3
800-999	20	14	1	4	1
1,000-1,199	14	10	1	2	1
1,200-1,399	15	3	12	-	-
1,400-1,599	19	4	14	1	-
1,600-1,799	10	4	5	-	1
1,800-1,999	15	4	11	-	-
2,000-2,199	8	1	7	-	-
2,200-2,399	7	1	6	-	-
2,400-2,599	12	1	11	-	-
2,600-2,799	7	1	6	-	-
2,800-2,999	3	-	3	-	-
3,000-3,199	5	2	3	-	-
3,200-3,399	5	-	5	-	-
3,400-3,599	5	1	4	-	-
3,600-3,799	1	-	1	-	-
3,800-3,999	-	-	-	-	-
4,000-4,199	6	1	4	1	-
4,200-4,399	3	-	3	-	-
4,400-4,599	3	1	2	-	-
4,600-4,799	1	1	-	-	-
4,800-4,999	1	1	-	-	-
5,000 & Over	9	4	5	-	-

TABLE 11-B

Pensions Awarded During the Year Ended June 30, 2011
by Type of Pension and Monthly Amount

(Females - Main System, Judges, National Guard, and Law Enforcement)

Monthly Amount	Total	Type of Pension			
		Normal	Early	Rule of 85	Disability
Total	296	106	97	87	6
Under $200	42	25	-	17	-
200-399	32	13	-	19	-
400-599	38	20	-	15	3
600-799	20	7	1	10	2
800-999	28	8	9	10	1
1,000-1,199	21	6	10	5	-
1,200-1,399	11	5	4	2	-
1,400-1,599	11	3	6	2	-
1,600-1,799	15	2	11	2	-
1,800-1,999	12	3	7	2	-
2,000-2,199	17	4	10	3	-
2,200-2,399	16	4	12	-	-
2,400-2,599	7	-	7	-	-
2,600-2,799	2	1	1	-	-
2,800-2,999	1	-	1	-	-
3,000-3,199	9	2	7	-	-
3,200-3,399	4	1	3	-	-
3,400-3,599	2	1	1	-	-
3,600-3,799	3	-	3	-	-
3,800-3,999	1	-	1	-	-
4,000-4,199	1	1	-	-	-
4,200-4,399	-	-	-	-	-
4,400-4,599	-	-	-	-	-
4,600-4,799	1	-	1	-	-
4,800-4,999	-	-	-	-	-
5,000 & Over	2	-	2	-	-

TABLE 11-C

Pensions Awarded During the Year Ended June 30, 2011
by Type of Pension and Monthly Amount

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

Monthly Amount	Total	Type of Pension			
		Normal	Early	Rule of 85	Disability
Total	552	206	203	126	17
Under $200	61	40	-	21	-
200-399	61	31	-	28	2
400-599	60	28	-	26	6
600-799	37	12	3	17	5
800-999	48	22	10	14	2
1,000-1,199	35	16	11	7	1
1,200-1,399	26	8	16	2	-
1,400-1,599	30	7	20	3	-
1,600-1,799	25	6	16	2	1
1,800-1,999	27	7	18	2	-
2,000-2,199	25	5	17	3	-
2,200-2,399	23	5	18	-	-
2,400-2,599	19	1	18	-	-
2,600-2,799	9	2	7	-	-
2,800-2,999	4	-	4	-	-
3,000-3,199	14	4	10	-	-
3,200-3,399	9	1	8	-	-
3,400-3,599	7	2	5	-	-
3,600-3,799	4	-	4	-	-
3,800-3,999	1	-	1	-	-
4,000-4,199	7	2	4	1	-
4,200-4,399	3	-	3	-	-
4,400-4,599	3	1	2	-	-
4,600-4,799	2	1	1	-	-
4,800-4,999	1	1	-	-	-
5,000 & Over	11	4	7	-	-

TABLE 12-A

Pensions Awarded During the Year Ended June 30, 2011
by Type of Pension and Nearest Age

(Males - Main System, Judges, National Guard, and Law Enforcement)

		Type of Pension			
Nearest Age	Total	Normal	Early	Rule of 85	Disability
Total	256	100	106	39	11
Under 50	1	-	-	-	1
50-54	11	-	10	-	1
55-59	37	4	22	8	3
60-64	100	2	68	24	6
65-69	75	62	6	7	-
70-74	23	23	-	-	-
75 & Over	9	9	-	-	-

TABLE 12-B

Pensions Awarded During the Year Ended June 30, 2011
by Type of Pension and Nearest Age

(Females - Main System, Judges, National Guard, and Law Enforcement)

		Type of Pension			
Nearest Age	Total	Normal	Early	Rule of 85	Disability
Total	296	106	97	87	6
Under 50	2	-	-	-	2
50-54	7	-	5	1	1
55-59	36	-	23	11	2
60-64	120	-	57	62	1
65-69	93	68	12	13	-
70-74	27	27	-	-	-
75 & Over	11	11	-	-	-

TABLE 12-C

Pensions Awarded During the Year Ended June 30, 2011
by Type of Pension and Nearest Age

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

		Type of Pension			
Nearest Age	Total	Normal	Early	Rule of 85	Disability
Total	552	206	203	126	17
Under 50	3	-	-	-	3
50-54	18	-	15	1	2
55-59	73	4	45	19	5
60-64	220	2	125	86	7
65-69	168	130	18	20	-
70-74	50	50	-	-	-
75 & Over	20	20	-	-	-

TABLE 13-A

Current Plan Pensions in Force on July 1, 2011
by Type of Pension and Monthly Amount

(Males - Main System, Judges, National Guard, and Law Enforcement)

Monthly Amount	Total	Type of Pension			
		Normal	Early	Service*	Disability
Total	3,014	942	1,233	686	153
Under $200	294	172	10	105	7
200-399	424	168	9	194	53
400-599	352	116	15	165	56
600-799	233	94	19	99	21
800-999	220	89	70	53	8
1,000-1,199	233	76	127	27	3
1,200-1,399	215	47	153	14	1
1,400-1,599	174	39	124	10	1
1,600-1,799	140	27	109	3	1
1,800-1,999	132	23	104	4	1
2,000-2,199	109	14	92	2	1
2,200-2,399	100	11	84	5	-
2,400-2,599	91	9	82	-	-
2,600-2,799	67	10	57	-	-
2,800-2,999	43	8	34	1	-
3,000-3,199	33	6	26	1	-
3,200-3,399	41	6	35	-	-
3,400-3,599	23	2	19	2	-
3,600-3,799	10	2	8	-	-
3,800-3,999	12	3	9	-	-
4,000-4,199	15	4	10	1	-
4,200-4,399	12	1	11	-	-
4,400-4,599	11	3	8	-	-
4,600-4,799	6	3	3	-	-
4,800-4,999	4	3	1	-	-
5,000 & Over	20	6	14	-	-

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

TABLE 13-B

Current Plan Pensions in Force on July 1, 2011
by Type of Pension and Monthly Amount

(Females - Main System, Judges, National Guard, and Law Enforcement)

Monthly Amount	Total	Type of Pension			
		Normal	Early	Service*	Disability
Total	4,041	1,280	1,156	1,427	178
Under $200	663	261	10	382	10
200-399	910	322	9	514	65
400-599	645	242	24	313	66
600-799	371	136	92	114	29
800-999	347	99	188	52	8
1,000-1,199	285	66	188	31	-
1,200-1,399	218	52	159	7	-
1,400-1,599	153	29	121	3	-
1,600-1,799	120	17	99	4	-
1,800-1,999	85	14	68	3	-
2,000-2,199	66	15	48	3	-
2,200-2,399	57	9	48	-	-
2,400-2,599	28	1	26	1	-
2,600-2,799	21	2	19	-	-
2,800-2,999	15	2	13	-	-
3,000-3,199	14	3	11	-	-
3,200-3,399	13	2	11	-	-
3,400-3,599	6	1	5	-	-
3,600-3,799	7	2	5	-	-
3,800-3,999	5	2	3	-	-
4,000-4,199	3	1	2	-	-
4,200-4,399	2	1	1	-	-
4,400-4,599	-	-	-	-	-
4,600-4,799	1	-	1	-	-
4,800-4,999	1	1	-	-	-
5,000 & Over	5	-	5	-	-

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

TABLE 13-C

Current Plan Pensions in Force on July 1, 2011
by Type of Pension and Monthly Amount

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

Monthly Amount	Total	Type of Pension			
		Normal	Early	Service*	Disability
Total	7,055	2,222	2,389	2,113	331
Under $200	957	433	20	487	17
200-399	1,334	490	18	708	118
400-599	997	358	39	478	122
600-799	604	230	111	213	50
800-999	567	188	258	105	16
1,000-1,199	518	142	315	58	3
1,200-1,399	433	99	312	21	1
1,400-1,599	327	68	245	13	1
1,600-1,799	260	44	208	7	1
1,800-1,999	217	37	172	7	1
2,000-2,199	175	29	140	5	1
2,200-2,399	157	20	132	5	-
2,400-2,599	119	10	108	1	-
2,600-2,799	88	12	76	-	-
2,800-2,999	58	10	47	1	-
3,000-3,199	47	9	37	1	-
3,200-3,399	54	8	46	-	-
3,400-3,599	29	3	24	2	-
3,600-3,799	17	4	13	-	-
3,800-3,999	17	5	12	-	-
4,000-4,199	18	5	12	1	-
4,200-4,399	14	2	12	-	-
4,400-4,599	11	3	8	-	-
4,600-4,799	7	3	4	-	-
4,800-4,999	5	4	1	-	-
5,000 & Over	25	6	19	-	-

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

TABLE 14-A

Current Plan Pensions in Force on July 1, 2011
by Type of Pension and Nearest Age

(Males - Main System, Judges, National Guard, and Law Enforcement)

		Type of Pension			
Nearest Age	Total	Normal	Early	Service*	Disability
Total	3,014	942	1,233	686	153
Under 50	8	-	-	-	8
50-54	32	-	15	1	16
55-59	135	9	91	16	19
60-64	474	10	302	116	46
65-69	685	169	310	183	23
70-74	605	246	225	123	11
75-79	482	184	178	100	20
80-84	319	155	82	77	5
85-89	185	107	30	44	4
90 & Over	89	62	-	26	1

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

TABLE 14-B

Current Plan Pensions in Force on July 1, 2011
by Type of Pension and Nearest Age

(Females - Main System, Judges, National Guard, and Law Enforcement)

		Type of Pension			
Nearest Age	Total	Normal	Early	Service*	Disability
Total	4,041	1,280	1,156	1,427	178
Under 50	12	-	-	-	12
50-54	32	-	12	1	19
55-59	176	-	117	34	25
60-64	531	1	290	206	34
65-69	940	253	346	307	34
70-74	818	301	211	277	29
75-79	636	245	117	259	15
80-84	447	207	42	193	5
85-89	284	154	21	104	5
90 & Over	165	119	-	46	-

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

TABLE 14-C

Current Plan Pensions in Force on July 1, 2011
by Type of Pension and Nearest Age

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

		Type of Pension			
Nearest Age	Total	Normal	Early	Service*	Disability
Total	7,055	2,222	2,389	2,113	331
Under 50	20	-	-	-	20
50-54	64	-	27	2	35
55-59	311	9	208	50	44
60-64	1,005	11	592	322	80
65-69	1,625	422	656	490	57
70-74	1,423	547	436	400	40
75-79	1,118	429	295	359	35
80-84	766	362	124	270	10
85-89	469	261	51	148	9
90 & Over	254	181	-	72	1

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

TABLE 15

Special Prior Service Pensions in Force on July 1, 2011
by Monthly Amount

Monthly Amount	Male	Female	Total
Total	4	10	14
Under $20	1	2	3
20-39	2	3	5
40-59	-	3	3
60-79	1	1	2
80-99	-	1	1

TABLE 16

Special Prior Service Pensions in Force on July 1, 2011
by Nearest Age

Nearest Age	Male	Female	Total
Total	4	10	14
90-94	1	2	3
95-99	2	6	8
100 & Over	1	2	3

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