REPORT ON THE ACTUARIAL VALUATION OF THE CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA PREPARED AS OF DECEMBER 31, 2010

September 30, 2011

Board of Trustees Consolidated Judicial Retirement System of North Carolina Raleigh, North Carolina

Members of the Board:

We submit herewith our report on the actuarial valuation of the Consolidated Judicial Retirement System of North Carolina prepared as of December 31, 2010. The report has been prepared in accordance with North Carolina General Statute 135-50 through 135-75.

The Appropriations Act of 2011 sets contributions at 25.05% of payroll effective for the fiscal year ending June 30, 2012. The valuation has been prepared in accordance with the parameters of Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) under GASB for the 2012-2013 fiscal year is 25.97% of payroll, which will liquidate the unfunded accrued liability within a 12-year period from July 1, 2012. On this basis, these contributions would provide no undistributed gains.

The Appropriations Act of 2011 also changed the period over which the unfunded actuarial accrued liability is amortized from nine years to 12 years. The annual required contribution rate of 25.97% of payroll reflects this change.

Additionally, the State Pension Plan Solvency Reform Act (Session Law 2011-232) changed the benefit eligibility requirements for members hired on or after August 1, 2011. No members are affected as of December 31, 2010. Therefore, the annual required contribution rate of 25.97% of payroll is not impacted by this legislation.

The plan sponsor selected the assumptions used for the results in this report. We believe that these assumptions are reasonable and comply with the requirements of GASB Nos. 25 and 27. We prepared this report in accordance with the requirements of these standards.

The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained in this report. This report has been prepared in accordance with all applicable Actuarial Standards of Practice, and we are available to answer questions about it.

The Table of Contents, which immediately follows, outlines the material contained in the report.

Respectfully submitted,

Michael A. Ribble, FSA, EA, MAAA Director, Consulting Actuary Larry Langer, ASA, EA, MAAA Principal, Consulting Actuary

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REPORT ON THE ANNUAL VALUATION OF THE CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA PREPARED AS OF DECEMBER 31, 2010

SECTION I - SUMMARY OF PRINCIPAL RESULTS

 This report, prepared as of December 31, 2010, presents the results of the actuarial valuation of the system. For convenience of reference, the principal results of the valuation and a comparison with the preceding year's results are summarized below.

TABLE I SUMMARY OF PRINCIPAL RESULTS

VALUATION DATE	12/31/10	12/31/09
Active members included in valuation		
Number	566	559
Reported compensation	\$ 66,604,988	\$ 66,171,078
Valuation compensation	69,841,031	69,126,535
Beneficiaries	; } } \$	1
Number	543	529
Annual allowances	\$ 30,780,723	\$ 29,483,092
Assets		
Actuarial value	\$ 451,195,513	\$ 439,987,304
Market value	429,772,739	399,511,977
Unfunded accrued liability	\$ 41,410,514	\$ 34,962,037
GASB 25/27 for Fiscal Year Ending	June 30, 2013	June 30, 2012
Annual required contribution (ARC) of employer,		
as a percentage of payroll		}
Normal cost	18.00%	17.79%
Accrued liability	7.62	8.41
Death benefit	<u>0.35</u>	0.34
Total	25.97%	26.54%
Impact of legislative changes	<u>N/A</u>	<u>(1.49</u>)
Final ARC of employer	N/A	25.05%
Appropriations Act for Prior Fiscal Year	 	
Employer contribution rate, as a percentage of	, 1 1	
payroll Normal cost	17.79%	17.29%
Accrued liability	6.92	(2.54)
Death benefit	0.34	0.36
Total	25.05%	15.11%
i Otas	20.0076	10.1170
Preliminary undistributed gains/(losses)	(0.92)%	(9.94)%

The change in benefit eligibility requirements for members hired on or after August 1, 2011 is expected to decrease the annual required contribution for the fiscal year ending June 30, 2013 by approximately 0.06%.

2. The following table shows a reconciliation of the change in the annual required contribution computed to be 26.54% based on the December 31, 2009 valuation and 25.97% based on the December 31, 2010 valuation.

TABLE II
RECONCILIATION OF CHANGE IN ANNUAL REQUIRED CONTRIBUTION

Prior Year's Preliminary ARC (based on 12/31/09 valuation)	26.54%
Impact of Legislative Changes	<u>(1.49%)</u>
Prior Year's Final ARC	25.05%
Changes Due to Demographic Gain/Loss	(0.28)
Changes Due to Investment Gain/Loss	1.05
Changes Due to Contributions Less than ARC	<u>0.15</u>
Current Year's Preliminary ARC (based on 12/31/10 valuation)	25.97%

- Tables summarizing the membership of the system as of the valuation date are shown in Section II.
- 4. The valuation balance sheet showing the assets and liabilities of the retirement system as of the current and previous valuation dates is provided in Section III.
- 5. An allocation of investments by category is shown in Section IV.
- 6. Comments on the valuation results are provided in Section V.
- 7. Comments on the experience and actuarial gains during the valuation year are provided in Section VI.
- 8. Accounting information to be disclosed in the financial statements of the System and the employer is provided in Section VII.
- 9. Schedule A of this report presents the development of the actuarial value of assets.
- 10. Schedule B of this report presents the development of the amortization of the unfunded accrued liability.
- 11. Schedule C of this report outlines the full set of actuarial assumptions and methods employed.
- 12. Schedule D gives a summary of the benefit and contribution provisions of the system.
- 13. Schedule E provides detailed tabulations of the membership of the system as of the valuation date.

SECTION II - MEMBERSHIP DATA

Data regarding the membership of the system for use as a basis for the valuation were furnished by the system's office. The following tables summarize the membership of the system as of December 31, 2010 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

TABLE III

THE NUMBER AND REPORTED COMPENSATION OF ACTIVE MEMBERS INCLUDED IN THE VALUATION AS OF DECEMBER 31, 2010

GROUP	NUMBER	AVERAGE AGE	AVERAGE SERVICE		PORTED PENSATION
Justices of Supreme Court and Judges of Court of Appeals	22	58.3	10.8	\$	3,207,557
Judges of the Superior Court and Administrative Officers of the Court	108	56.7	15.6		14,818,433
Judges of the District Court, District Attorneys Clerks of the Superior Court, and Public Defenders	<u>436</u>	<u>52.8</u>	<u>11.7</u>	**************************************	48,578,998
Total	566	53.8	12.4	\$	66,604,988

TABLE IV THE NUMBER, ACCUMULATED CONTRIBUTIONS AND VALUATION COMPENSATION OF TERMINATED VESTED MEMBERS INCLUDED IN THE VALUATION AS OF DECEMBER 31, 2010

GROUP	NUMBER	AVERAGE AGE	AVERAGE SERVICE	ACCUMULATED CONTRIBUTIONS	VALUATION COMPENSATION
Justices of Supreme Court and Judges of Court of Appeals	1	54.1	1.8	\$ 14,138	\$ 129 ,771
Judges of the Superior Court and Administrative Officers of the Court	1	64.8	3.4	26,112	45,395
Judges of the District Court, District Attorneys Clerks of the Superior Court, and Public					
Defenders	<u>46</u>	<u>55.8</u>	<u>4.4</u>	<u>1,364,060</u>	<u>3,170,411</u>
Total	48	55.9	4.3	\$ 1,404,310	\$ 3,345,577

TABLE V

THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES
OF BENEFICIARIES AND SURVIVORS
INCLUDED IN THE VALUATION AS OF DECEMBER 31, 2010

GROUP	NUMBER	AVERAGE AGE	RE	ANNUAL ETIREMENT LOWANCES
Beneficiaries Re	ceiving Service	Retirement Allo	wance	<u>s</u>
Males	298	70.4	\$	20,647,749
Females	<u> 111</u>	69.2	·	5,739,745
Total	409	70.0	\$	26,387,494
Beneficiaries Receiving Disability Retirement Allowa			owance	<u>es</u>
Males	2	61.7	\$	112,498
Females	3	<u>64.0</u>	, , ,	171,071
Total	5	63.1	\$	283,569
Benefits to S	Survivors of Dec	eased Beneficia	ries	***************************************
Males	8	72.5	\$	224,790
Females	<u> 121</u>	<u>78.7</u>	<u> </u>	3,884,870
Total	129	78.4	\$	4,109,660
Grand Total	<u>543</u>	<u>71.9</u>	\$	30,780,723

SECTION III - VALUATION BALANCE SHEET

The following valuation balance sheet shows the assets and liabilities of the retirement system as of the current valuation date of December 31, 2010 and, for comparison purposes, as of the prior valuation date of December 31, 2009. The items shown in the balance sheet are present values actuarially determined as of the relevant valuation date. The development of the actuarial value of assets is presented in Schedule A.

TABLE VI

VALUATION BALANCE SHEET SHOWING THE ASSETS AND LIABILITIES OF THE CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

	7	<u></u>		
	DEC	EMBER 31, 2010	DECI	EMBER 31, 2009
ASSETS	, , 1			
Current actuarial value of assets:		E4 070 400	•	40 000 600
Annuity Savings Fund Pension Accumulation Fund	\$	51,978,400 399,217,113	\$	49,222,622 390,764,682
	<u> </u>			
Total current assets	\$	451,195,513	\$	439,987,304
Future member contributions to Annuity Savings Fund	\$	40,398,973	\$	41,551,909
Prospective contributions to Pension Accumulation Fund:	, , , , , ,			
Normal contributions	\$	127,405,284	\$	130,431,846
Unfunded accrued liability contributions	;	41,410,514		34,962,037
Undistributed gain contributions	; —	(4,999,695)		(47,510,380)
Total prospective contributions	\$	163,816,103	\$	117,883,503
Total Assets	\$	655,410,589	\$	<u>599,422,716</u>
LIABILITIES	i i i i			
Annuity Savings Fund:	!			
Past member contributions	\$	51,978,400	\$	49,222,622
Future member contributions		40,398,973		41,551,909
Total contributions to Annuity Savings Fund	\$	92,377,373	\$	90,774,531
Pension Accumulation Fund:	:			
Benefits currently in payment	\$	275,323,825	\$	265,506,533
Benefits to be paid to current active members	:	292,709,086		290,652,032
Reserve for increases in retirement allowances effective July 1, 2011 (July 1, 2010 for	į			
December 31, 2009 figure)	i !	0		0
Reserve from undistributed gains/(losses)	; :	(4,999,695)		(47,510,380)
35	! 	(· i) - mm.k		, , , , , , , , , , , , , , , , , , , ,
Total benefits payable from Pension Accumulation	! ! !			
Fund	\$	<u>563,033,216</u>	\$	<u>508,648,185</u>
Total Liabilities	\$	655,410,589	<u>\$</u>	599,422 <u>,716</u>

The valuation balance sheet gives the following information with respect to the funds of the system as of December 31, 2010.

Annuity Savings Fund

The Annuity Savings Fund is the fund to which are credited contributions made by members together with interest thereon. When a member retires, the amount of his accumulated contributions is transferred from the Annuity Savings Fund to the Pension Accumulation Fund. The assets credited to the Annuity Savings Fund on December 31, 2010, which represent the accumulated contributions of members to that date, amounted to \$51,978,400. The balance sheet also shows that the future contributions by members have a present value of \$40,398,973. The present value of both past and future contributions of members is therefore equal to \$92,377,373. The liabilities of this fund are also shown to be equal to \$92,377,373.

Pension Accumulation Fund

The Pension Accumulation Fund is the fund to which the contributions made by the employer are credited and from which are paid all benefits on account of beneficiaries and their survivors.

The actuarial value of assets creditable to the Pension Accumulation Fund on December 31, 2010 amounted to \$399,217,113. The liabilities on account of active members amounted to \$292,709,086. In addition, the balance sheet indicates liabilities of \$275,323,825 on account of all benefits payable to beneficiaries and survivors as of December 31, 2010. The balance sheet also shows a reserve from undistributed gains/(losses) of \$(4,999,695). The total liabilities of the Pension Accumulation Fund, therefore, amounted to \$563,033,216. The difference between these liabilities and the current assets credited to this fund is \$163,816,103 which represents the present value of future contributions to be made by the employer. Of this amount, \$127,405,284 represents the present value of prospective normal contributions by the employer, \$41,410,514 represents the present value of prospective unfunded accrued liability contributions and the balance of \$(4,999,695) represents the present value of prospective contributions on account of undistributed gains/(losses).



SECTION IV - ASSET ALLOCATION

The following table shows an allocation of investments by category for the Annuity Savings Fund and Pension Accumulation Fund as of December 31, 2010.

TABLE VII

ALLOCATION OF INVESTMENTS BY CATEGORY
FOR THE ANNUITY SAVINGS FUND AND
PENSION ACCUMULATION FUND AS OF DECEMBER 31, 2010

Cash and Receivables	0.4%
Fixed Income (LTIF)	35.4%
Public Equity	51.2%
Other*	<u>13.0%</u>
Total	100.0%

^{*} Real Estate, Alternatives, Inflation and Credit.

SECTION V - COMMENTS ON VALUATION

G.S. 135-69 of the retirement act provides that the State shall make a normal contribution and an unfunded accrued liability contribution. The normal contribution rate payable by the State was determined by dividing the one-year normal cost based on the projected unit credit method by the payroll and is equal to 18.00% of compensation exclusive of the rate necessary to provide one year's compensation upon death in active service. The normal contribution of 18.00% of payroll is payable to the Retirement System. The normal rate necessary to provide the death benefit on a one-year term basis was calculated to be 0.35% of compensation and is payable to the Death Benefit Fund. The total normal rate is therefore equal to 18.35% of compensation.

The Appropriations Act of 2011 also changed the period over which the unfunded actuarial accrued liability is amortized from nine years to 12 years. Additionally, the State Pension Plan Solvency Reform Act (Session Law 2011-232) changed the benefit eligibility requirements for members hired on or after August 1, 2011. No members are affected as of December 31, 2010.

The present valuation indicates that if the total contribution rate is set at 25.05% of compensation beginning July 1, 2011 in accordance with the Appropriations Act, the accrued liability rate would be equal to 6.92 % of payroll effective July 1, 2011. The required employer contribution is 25.97% of payroll effective July 1, 2012, which will liquidate the unfunded accrued liability within a 12-year period from July 1, 2012.

SECTION VI - COMMENTS ON EXPERIENCE AND GAINS

The following table shows a detailed reconciliation of the change in unfunded accrued liability since the prior valuation.

TABLE VIII

RECONCILIATION OF CHANGE IN UNFUNDED ACCRUED LIABILITY

SINCE THE PRIOR VALUATION

(IN MILLIONS)

Unfunded accrued liability as of 12/31/09	\$ 35.0
Normal cost during 2010	16.4
Reduction due to actual contributions during 2010	(15.3)
Interest on unfunded accrued liability, normal cost and contributions	3.1
Asset (gain)/loss	5.4
Accrued liability (gain)/loss	(3.2)
Unfunded accrued liability as of 12/31/10	\$ 41.4

The valuation results indicated that there is no preliminary reserve from undistributed gains. Each 1.0% increase in retirement allowances as of July 1, 2012 to beneficiaries on the retirement roll on July 1, 2011 and a prorated portion of each 1.0% increase as of July 1, 2012 for beneficiaries who retired after July 1, 2011 but before June 30, 2012 is equivalent to 0.58% of payroll.

SECTION VII - ACCOUNTING INFORMATION

Statement Nos. 25 and 27 of the Governmental Accounting Standards Board (GASB) set forth certain items of information to be disclosed in the financial statements of the System and the employer. One such item is a distribution of the number of employees by type of membership, as follows:

NUMBER OF ACTIVE AND RETIRED PARTICIPANTS AS OF DECEMBER 31, 2010

GROUP	NUMBER
Retired participants and beneficiaries currently receiving benefits	543
Terminated participants and beneficiaries entitled to benefits but not yet receiving	;
benefits	48
Active participants	<u>566</u>
Total	1,157

2. Another such item is the schedule of funding progress as shown below.

SCHEDULE OF FUNDING PROGRESS

Actuarial Valuation <u>Date</u>	Actuarial Value of Assets <u>(a)</u>	Actuarial Accrued Liability (AAL) PUC (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
12/31/05	\$382,500,770	\$355,498,047	\$(27,002,723)	107.6%	\$51,017,609	(52.9)%
12/31/06	406,014,726	378,489,964	(27,524,762)	107.3	53,347,855	(51.6)
12/31/07	430,356,059	418,137,429	(12,218,630)	102.9	61,338,143	(19.9)
12/31/08	433,552,760	441,932,606	8,379,846	98.1	65,082,979	12.9
12/31/09	439,987,304	474,949,341	34,962,037	92.6	66,171,078	52.8
12/31/10	451,195,513	492,606,027	41,410,514	91.6	66,604,988	62.2

3. Following is a reconciliation of the preliminary employer annual required contribution rate to the final employer annual required contribution for fiscal year ending June 30, 2011.

()	
	Fiscal Year Ending <u>June 30, 2011</u>
Preliminary Annual Required Contribution Rate	
Normal Cost	17.29%
Accrued Liability	1.60
Death Benefit	0.36
Total	19.25%
Impact of Legislative Changes	0.00
Final Annual Required Contribution Rate	19.25%
Payroll	\$ 67,956,102
Annual Required Contribution	\$ 13,082,000

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2011.

Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending 6/30/2011

(a)	Employer annual required contribution	\$13,082,000
(b)	Interest on net pension obligation	(191,000)
(c)	Adjustment to annual required contribution	439,000
(d)	Annual pension cost: (a) + (b) + (c)	\$13,330,000
(e)	Employer contributions made for fiscal year ending 6/30/2011	<u> 10,268,000</u>
(f)	Increase (decrease) in net pension obligation: (d) - (e)	\$ 3,062,000
(g)	Net pension obligation beginning of fiscal year	_(2,634,000)
(h)	Net pension obligation end of fiscal year: (f) + (g)	\$ 428,000

TREND INFORMATION

Year Ending	Annual Pension Cost (APC)	Percentage APC Contributed	Net Pension Obligation
June 30, 2009	\$8,510,000	104.1%	\$(2,791,000)
June 30, 2010	10,405,000	98.5	(2,634,000)
June 30, 2011	13,330,000	77.0	428,000

5. The annual required contribution (ARC) of the employer as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below. The accrued liability rate is based on amortization schedule shown in Schedule B.

2012/2013 FISCAL YEAR
ANNUAL REQUIRED CONTRIBUTION (ARC)
BASED ON THE VALUATION AS OF DECEMBER 31, 2010

ANNUAL REQUIRED CONTRIBUTION (ARC)	RATE
Normal Cost	18.00%
Accrued Liability	7.62
Death Benefit	<u>0.35</u>
Total	25.97%

6. Additional information as of December 31, 2010 follows.

Valuation date	12/31/10
Actuarial cost method	Projected unit credit
Amortization method	Level dollar closed
Amortization period	12 years
Asset valuation method	20% of market value plus 80% of expected actuarial value (not greater than 120% of market value and not less than 80% of market value)
Actuarial assumptions:	
Investment rate of return*	7.25%
Projected salary increases**	5.00% - 5.95%
Includes inflation of Includes inflation and productivity of	3.00% 3.50%
Cost-of-living adjustments	N/A

SCHEDULE A

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS FOR THE YEAR ENDING DECEMBER 31, 2010

1.	Actuarial Value of Assets as of December 31, 2009	\$	439,987,304
2.	2010 Net Cash Flow a. Contributions b. Disbursements c. Net Cash Flow: (a) - (b)	vaccourmen	15,298,272 30,096,996 (14,798,724)
3.	Expected Investment Return: [(1) x .0725] + [(2)c x .03625]		31,362,626
4.	Expected Actuarial Value of Assets as of December 31, 2010: (1) + (2)c + (3)		456,551,206
5.	Market Value of Assets as of December 31, 2010		429,772,739
6.	Excess of Market Value over Expected Actuarial Value of Assets: (5) - (4)		(26,778,467)
7.	20% Adjustment towards Market Value: (6) x .20		(5,355,693)
8.	Preliminary Actuarial Value of Assets as of December 31, 2010: (4) + (7)		451,195,513
9.	Final Actuarial Value of Assets as of December 31, 2010 [(8) not less than 80% of (5) and not greater than 120% of (5)]		451,195,513
10.	Rate of investment return on actuarial value		6.01%
11.	Rate of investment return on market value		11.49%

SCHEDULE B

AMORTIZATION SCHEDULE FOR UNFUNDED ACTUARIAL ACCRUED LIABILITY

DATE ESTABLISHED	OUTSTANDING INCEPTION			ANCES EMBER 31, 2010	ANNUAL PAYMENT		
December 31, 2009	\$	34,962,037	\$	37,496,785	\$	4,783,952	
December 31, 2010		3,913,729	! !	3,913,729		535,526	
Total			\$	41,410,514	\$	5,319,478	
			1				
Valuation Compensation					\$	69,841,031	
Unfunded Accrued Liability Contribution Rate						7.62%	

SCHEDULE C

STATEMENT OF ACTUARIAL ASSUMPTIONS AND METHODS

Assumptions are based on the experience investigation prepared as of December 31, 2009 and adopted by the Board of Trustees on October 21, 2010.

INTEREST RATE: 7.25% per annum compounded annually.

INFLATION: Both general and wage inflation are assumed to be 3.00% per annum.

PRODUCTIVITY INCREASE: 0.50% per annum.

WITHDRAWAL: No termination of employment is assumed to occur prior to retirement, other than death or disability.

SEPARATIONS BEFORE RETIREMENT AND SALARY INCREASES: Representative values of the assumed annual rates of separation and annual rate of salary increases are as follows:

Annual Rate of

Age	Disability	Base N	Mortality*	<u>Service</u>	Salary Increase
		Male	Female		
25	.0001	.0004	.0002	0	.0595
30	.0001	.0005	.0003	5	.0570
35	.0003	.0008	.0005	10	.0545
40	.0007	.0011	.0008	15	.0525
45	.0014	.0016	.0012	20	.0520
50	.0023	.0023	.0018	25	.0500
55	.0047	.0033	.0028	30	.0500
60	.0077	.0054	.0043	35	.0500
64	.0098	.0076	.0058	40	.0500

^{*} Base mortality rates as of December 31, 2003.

SERVICE RETIREMENT: Representative values of the assumed annual rates of service retirement are as follows:

	Service								
<u>Age</u>	5	10	15	20	25	30			
50					.075	.075			
55	.030	.030	.030	.030	.075	.075			
60	.030	.030	.030	.030	.075	.075			
65	.100	.100	.100	.100	.250	.250			
70	1.000	1.000	1.000	1.000	1.000	1.000			

Representative values of the assumed post-retirement mortality rates as of December 31, 2003 prior to any mortality improvements are as follows:

Annual Rate of Death after Retirement (Health Retirees, Beneficiaries and Disabled Retirees)

	<u>Healthy</u>	<u>Retirees</u>		ciaries of d <u>Members</u>	Disabled Retirees		
<u>Age</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	<u>Male</u>	<u>Female</u>	
55	.0061	.0039	.0061	.0044	.0277	.0176	
60	.0090	.0069	.0090	.0077	.0342	.0229	
65	.0149	.0114	.0149	.0125	.0407	.0296	
70	.0246	.0186	.0246	.0207	.0483	.0401	
75	.0422	.0310	.0422	.0341	.0596	.0558	
80	.0720	.0508	.0720	.0563	.0775	.0771	

MORTALITY IMPROVEMENTS: Representative values of the assumed mortality improvement rates (applied to pre-retirement mortality rate for active members and post-retirement mortality rates for healthy retirees and beneficiaries of deceased members after such tables have been set back or set forward) are as follows:

Λ ~ 0	Male	Female
<u>Age</u>	Projection Scale	<u>Projection Scale</u>
25	0.010	0.014
30	0.005	0.010
35	0.005	0.011
40	0.008	0.015
45	0.013	0.016
50	0.018	0.017
55	0.019	0.008
60	0.016	0.005
65	0.014	0.005
70	0.015	0.005
75	0.014	0.008
80	0.010	0.007

DEATHS AFTER RETIREMENT (NON-DISABLED): According to the RP-2000 Mortality tables for retirees. These tables are set forward one year for males and females. These tables are also set forward one year for male beneficiaries of deceased members and set forward two years for female beneficiaries of deceased members. The base retiree RP-2000 tables have no rates prior to age 50. The active employee rates of RP-2000 are used for ages less than 50 prior to any adjustments for setbacks.

DEATH AFTER DISABILITY: RP-2000 Mortality tables for disabled annuitants set back six years for males and set forward one year for females.

DEATHS PRIOR TO RETIREMENT: According to the RP-2000 Mortality tables for active employees. These tables are set forward one year for males and females. The base RP-2000 tables for active employees have no rates after age 70. A blend of active rates and retired rates are used from ages 70 to 80 prior to any set back and adjustments.



MORTALITY PROJECTION (NON-DISABLED): All mortality rates are projected from December 31, 2003 using Scale AA.

TIMING OF ASSUMPTIONS: All withdrawals, deaths, disabilities, retirements and salary increases are assumed to occur July 1 of each year.

LIABILITY FOR INACTIVE MEMBERS: The liability for members who terminated prior to five years of creditable service is estimated to be 100% of the member's accumulated contributions. The liability for members who terminated after completing five years of creditable service is estimated based on the member's current age and the service and reported compensation at termination of employment.

ADMINISTRATIVE EXPENSES: 0.75% of normal cost.

MARRIAGE ASSUMPTION: 90% of male members married and 50% of female members married with the husband four years older than his wife.

REPORTED COMPENSATION: Calendar year compensation as furnished by the system's office.

VALUATION COMPENSATION: Reported compensation adjusted to reflect the assumed rate of pay as of the valuation date.

VALUATION METHOD: Projected unit credit. Projected benefits and the corresponding liabilities are allocated based on proration by creditable service.

ASSET VALUATION METHOD: Actuarial value, as developed in Schedule A. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected actuarial value of assets, based on the assumed valuation rate of return. The amount recognized each year is 20% of the difference between market value and expected actuarial value. The actuarial value of assets is not allowed to be greater than 120% of the market value of assets or less than 80% of the market value of assets.



SCHEDULE D

SUMMARY OF MAIN BENEFIT AND CONTRIBUTION PROVISIONS

All justices, judges, district attorneys, and public defenders of the General Court of Justice, and clerks of the Superior Court are eligible for membership.

The State Pension Plan Solvency Reform Act (Session Law 2011-232) changed the benefit eligibility requirements for members hired on or after August 1, 2011. No members are affected by the change in eligibility requirements as of December 31, 2010 and such changes are not reflected in the benefit provisions described below.

"Final compensation" as used in the summary means the annual rate of compensation of the member at his date of termination or death. "Average final compensation" means the average annual compensation during the 48 consecutive calendar months of membership producing the highest average. "Creditable service" includes all service rendered as a justice of the Supreme Court, judge of the Court of Appeals, judge of the Superior Court, judge of the District Court Division of the General Court of Justice, Administrative Officer of the Courts, District Attorney, Public Defender or as a Clerk of the Superior Court.

BENEFITS

Service Retirement Allowance

Conditions for Allowance

Any member who had attained age 50 and was in service on October 8, 1981 or any other member who has attained age 50 and has completed five or more years of creditable service may retire on a service retirement allowance. Retirement is compulsory at age 72 if the member is a justice or judge of the Appellate, Superior, or District Divisions of the General Court of Justice and at age 70 for each other member.

Amount of Allowance

The annual service retirement allowance payable to a member who has attained age 65 and completed five years of creditable service or who has attained age 50 and completed 24 years of creditable service is equal to:

- 4.02% of his final compensation multiplied by the number of years of his creditable service rendered as a justice of the Supreme Court or judge of the Court of Appeals, plus
- (ii) 3.52% of his final compensation multiplied by the number of years of his creditable service rendered as a judge of



the Superior Court or as Administrative Officer of the Courts, plus

- (iii) 3.02% of his final compensation multiplied by the number of years of his creditable service rendered as a judge of the District Court, District Attorney, Public Defender, or Clerk of the Superior Court, plus
- (iv) A service retirement allowance computed on his average final compensation, his service transferred from the Teachers' and State Employees' Retirement System or the Local Governmental Employees' Retirement System and the applicable formula accrual rate from the previous system.

The maximum annual service retirement allowance is 75% of the member's final compensation. The annual service retirement allowance payable upon retirement prior to the earlier of attainment of age 65 and the completion of five years of creditable service or attainment of age 50 and the completion of 24 years of creditable service is an allowance as computed above reduced by 3% for each year that the member's retirement date precedes the date upon which the member would have attained age 65 or completed 24 years of service had he remained in service, whichever is earlier.

In no event will a member whose creditable service commenced prior to January 1, 1974 as a justice of the Supreme Court, as a judge of the Court of Appeals, as an Administrative Officer of the courts, or as a judge of the Superior Court, receive a smaller retirement allowance than he would have received under Chapter 7-A of the General Statutes.

Disability Retirement Allowance

Condition for Allowance

Any member who becomes permanently and totally disabled prior to the attainment of age 65 and who has completed at least five years of creditable service may be retired by the Board of Trustees on a disability retirement allowance. Any retired member may also apply for a disability retirement allowance within the first three years of retirement.

Amount of Allowance

The disability retirement allowance is computed as a service retirement allowance based on the number of years of creditable service the member would have had had he remained in service to the earliest date he could have retired on an unreduced service retirement allowance.

Deferred Allowance

Any member who separates from service prior to age 50 after completing five or more years of creditable service and who leaves his total accumulated contributions in the system may receive a deferred allowance, beginning at age 50, computed in the same way as a service retirement allowance on the basis of his creditable service and compensation to the date of separation.

Spouse Benefit

Conditions for Benefit

Upon the death of a member in active service after his attainment of age 50 and completion of five years of creditable service a death benefit is payable to his surviving spouse.

Amount of Benefit

The surviving spouse receives a lump sum payment equal to the member's final compensation. In addition the surviving spouse receives an annual retirement allowance, until death or remarriage, equal to 50% of the service retirement allowance to which the member would have been entitled had he retired on the first day of the calendar month coincident with or next following his date of death reduced by 2% for each year that the member's age exceeds that of his spouse.

Lump Sum Death Benefit

Upon the death of a member in active service prior to his attainment of age 50 a lump sum payment equal to his accumulated contributions plus his final compensation is made to his designated beneficiary or estate.

Death after Retirement

Upon the death of a retired member while in receipt of a service retirement allowance or after age 65 if in receipt of a disability retirement allowance an allowance is paid to his spouse, until death or remarriage, equal to one-half the allowance which was payable to the member prior to his death reduced by 2% for each year that the member's age exceeds that of his spouse.

Upon the death of a member in receipt of a disability retirement allowance prior to age 65, an allowance is paid to his spouse, until death or remarriage, equal to one-half the service retirement allowance he would have received had he remained in service up to his date of death reduced by 2% for each year that the member's age exceeds that of his spouse.

Other Death Benefits

Upon the death of a member in service, other benefits may be provided by the Death Benefit Plan.

Return of Contributions

Any member who terminates service other than by retirement or death is entitled to the return of his accumulated contributions.

If the total retirement allowance payments to a retired member, spouse and/or beneficiary under option are less than the member's accumulated contributions at retirement, the excess is paid to the designated beneficiary or legal representatives.

The current interest rate on member contributions is 4%.

Optional Allowances

In lieu of the full retirement allowance, any member may elect to receive a reduced retirement allowance equal in value to the full allowance, with the provision that:

Option 1 - At the death of the member within 10 years from his retirement date, an amount equal to his accumulated contributions at retirement, less 1/120 for each month he has received a retirement allowance payment, is paid to his estate, or to a person designated by the member, or

Option 2 - At the death of the member his allowance shall be continued throughout the life of such other person as the member shall have designated at the time of his retirement, or

Option 3 - At the death of the member one-half of his allowance shall be continued throughout the life of such other person as the member shall have designated at the time of his retirement, or

Option 4 - At retirement, any member may elect to receive a retirement allowance in such amount that, together with his Social Security benefit, he will receive approximately the same income per annum before and after the earliest age at which he becomes eligible to receive the Social Security benefit. A member who elects to receive his allowance under this option is deemed to have elected Option 1 also, or

Option 5 - At retirement, the member may elect to receive a reduced retirement allowance during his life with some other benefit approved by the Board of Trustees payable after he dies, or he may elect to receive a reduced retirement allowance under the provisions of Option 2 or Option 3 in conjunction with the provisions of Option 1, or

Option 6 - A member may elect either Option 2 or Option 3 with the added provision that in the event the designated beneficiary predeceases the member, the retirement allowance payable to the member after the designated beneficiary's death shall be equal to the retirement allowance which would have been payable had the member not elected the Option.

Unused Sick Leave

Unused sick leave counts as creditable service at retirement. Sick leave which was converted from unused vacation leave is also creditable. One month of credit is allowed for each 20 days of unused sick leave, plus an additional month for any part of 20 days left over.

Post-Retirement Increases in Allowance

Future increases in allowances may be granted at the discretion of the State.

CONTRIBUTIONS

By Members

Each member contributes 6% of his annual compensation.

By State

The State makes annual contributions consisting of a normal contribution and an accrued liability contribution. The normal contribution covers the liability on account of current service and is determined by the actuary after each valuation.

The accrued liability contribution covers the liability on account of service rendered before the establishment of the retirement system and the liability on account of increases in benefits for service rendered prior to the effective date of any amendment.



TABLE 1

THE NUMBER AND AVERAGE REPORTED COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE AS OF DECEMBER 31, 2010

					YEARS C	F SERVI	CE				
AGE	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Under 25	0	0	0	0	0	0	0	0	0	0	0
	0	0	0	0	0	0	0	0	0	0	0
25 to 29	0	0	0	0	0	0	0	0	0	0	0
25 10 29	0						0	0	0	0	0
30 to 34	0	_		=			0	0	0	0	4
	U	109,372	109,372	Ü	0	0	0	0	0	U	109,372
35 to 39	0	18	7	1	0	0	0	0	0	0	26
	0	112,284	113,889	131,231	0	0	0	0	0	0	113,445
40 to 44	3	30	17	17	1	1	0	0	0	0	69
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						86,361		0	0		107,704
					_	_	_	_	•	•	0.4
4 5 to 49		29 108 859				5 133 114	2 124,872	0	0		81 114,074
	7,000	100,000	111,210	, 22,200	101,001	100,114	124,012	Ū	J	Ü	114,014
50 to 54		20					6		_		101
	12,041	104,535	112,907	115,810	130,574	134,939	117,197	96,795	102,177	0	111,056
55 to 59	2	33	10	19	17	19	11	7	4	0	122
	7,283	106,370	125,549	125,335	129,213	136,833	136,344	140,367	101,760	0	121,701
60 to 64	4	20	15	40	4 5	1.4	15	0	4	0	106
60 to 64	7.430						137,050				106 124,803
	,,,,,,	,	,		, , , , , , ,		,,,,,,,				,
65 to 69		5	-	7			7			-	50
	7,926	108,283	132,925	131,939	130,869	134,396	150,856	150,136	125,057	0	128,923
70 & up	0	1	0	0	0	1	0	1	2	2	7
	0	82,401	0	0	0	97,219	0	127,148	125,057	125,057	115,285
Total	16	159	90	98	67	54	41	25	14	2	566
ισιαι							135,718				

TABLE 2

THE NUMBER AND REPORTED COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY AGE AS OF DECEMBER 31, 2010

		Men			Women	
Age	Number		Amount	Number		Amount
24	2	o th	240 744			
31 33	2	\$	218,744	1	\$	109,372
34	1		109,372	'	Ψ	103,372
35	•		100,012	3		328,116
36	1		119,305	-		,
37			•	3		338,604
38	3		332,402	4		437,488
39	9		1,038,434	3		355,219
40	4		459,266	8		804,272
41	4		443,578	4		473,879
42	8		839,385	11		1,037,595
43	10		1,013,545	6		645,388
44	7		898,474	7		816,193
45	12		1,337,765	7		846,683
46	6		673,274	8		712,979
47	7		798,172	6		663,184
48	13		1,649,967	9		1,000,835
49	6		733,852	7		823,267
50	11		1,213,481	10		1,063,841
51	15		1,769,141	7		633,209
52	5		657,180	9		830,708
53	14		1,562,528	3		289,958
54	16		2,059,250	11		1,137,344
55	11		1,348,973	9		951,902
56	22		2,785,444	10		1,192,578
57	15		1,863,320	5		555,388
58	21		2,534,011	3		317,579
59	21		2,692,175	5		606,101
60	15		1,829,035	6		790,199
61	22		2,706,989	6		694,706
62	20		2,590,871	5		525,717
63	13		1,644,306	2		264,027
64	17		2,183,286			
65	13		1,734,906	3		354,798
66	10		1,069,948	1		109,372
67	9		1,247,862			
68	9		1,190,177	2		301,871

TABLE 2

THE NUMBER AND REPORTED COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY AGE AS OF DECEMBER 31, 2010

CONTINUED

		Men		Women		
Age	Number		Amount	Number		Amount
69	3	\$	437,202			
71	1		147,937	1	\$	97,219
72	1		82,401			
73				1		102,177
74	2		275,085			
80				1		102,177
Total	379	\$	46,291,043	187	\$	20,313,945

TABLE 3

THE NUMBER AND REPORTED COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY SERVICE AS OF DECEMBER 31, 2010

Years						
of		Men	Women			
Service	Number		Amount	Number		Amount
0	8	\$	84,175	8	\$	56,757
1	12		1,287,708	5		431,781
2	26		2,906,725	29		3,109,039
3	13		1,454,188	9		1,008,826
4	42		4,605,157	23		2,379,584
5	11		1,237,838	5		604,712
6	17		2,007,739	10		1,159,8 4 9
7	3		315,593	3		306,765
8	17		2,115,816	12		1,366,13 4
9	9		1,159,637	3		323,501
10	21		2,452,687	10		1,237,041
11	12		1,451,541	3		368,737
12	18		2,180,496	6		742,207
13	8		1,046,743	5		603,282
14	10		1,251,411	5		640,093
15	8		997,785	3		354,360
16	21		2,813,297	2		279,110
17	10		1,393,544	4		479,871
18	9		1,248,802	4		564,397
19	4		512,370	2		213,451
20	17		2,304,859	4		489,389
21	2		267,329			
22	16		2,283,585	3		331,349
23	2		288,590	1		130,372
24	7		972,641	2		214,515
25	3		405,582	1		119,872
26	10		1,389,117	2		300,249
27	6		788,217	_		
28	9		1,359,829	3		348,305
29	4		466,439	3		386,844
30	4		594,593	1		114,616
31	8		1,161,592	1		92,289
32	2		275,085			400.000
33	2		295,874	1		100,602
34	3		297,926	3		300,273
35	^		005.07.	4		408,708
36	2		295,874			

TABLE 3

THE NUMBER AND REPORTED COMPENSATION OF ACTIVE MEMBERS DISTRIBUTED BY SERVICE AS OF DECEMBER 31, 2010

CONTINUED

Years of		Men		V	Vomen	
Service	Number		Amount	Number		Amount
37				2	\$	202,686
38	1	\$	86,361	2		241,808
39	1		86,361	2		200,394
41	1		147,937			
42				1		102,177
Total	379	\$	46,291,043	187	\$	20,313,945

TABLE 4

THE NUMBER AND ACCUMULATED CONTRIBUTIONS OF TERMINATED VESTED MEMBERS DISTRIBUTED BY AGE AS OF DECEMBER 31, 2010

		Men			Women	
Age	Number		Amount	Number		Amount
40	4	\$	8,180			
41	1 1	Φ	35,074			
43	2					
43 44	4		52,105	2	\$	66,025
4 4 46				2 2	Φ	104,596
47	1		11,092	1		3,979
49	•		11,092	3		155,003
50	2		73,973	3		100,000
51	1		31,360			
53			51,300	2		197,983
54	3		106,958	1		72,552
55	3		100,930	1		4,176
56	1		5,722	'		7,170
57	1		31,360	1		1,105
58	2		91,208	i		3,106
59	_		01,500	1		8,696
60	1		15,659	1		33,254
61			29,079	•		,
62	2 3		67,854			
63	1		13,870			
65	2		28,015	1		10,235
66	2		79,441			,,
67			1	1		5,812
68	1		3,116	1		28,410
73	1		11,719	1		13,593
Total	28	\$	695,785	20	\$	708,525

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES AND SURVIVORS BY AGE AS OF DECEMBER 31, 2010

SERVICE RETIREMENTS AND DEPENDENTS OF DECEASED BENEFICIARIES

		Men			Women	
Age	Number		Amount	Number		Amount
<i></i>	4	•	07 000			
51 53	1	\$	37,398	4	æ	00.000
53 54	1		53,649	1 5	\$	82,288 247,036
55	'		55,049	3		169,827
56	3		163,834	2		130,034
57	8		484,313	4		234,729
58	6		398,927	3		170,337
59	10		451,626	5		281,849
60	8		518,635	5		368,757
61	15		1,029,285	5		223,960
62	10		679,833	5		225,573
63	12		882,071	7		442,188
64	18		1,456,100	9		416,116
65	19		1,424,840	7		414,996
66	10		691,688	1		64,606
67	10		691,332	4		208,358
68	13		890,813	7		444,631
69	11		870,978	5		244,131
70	10		847,206	4		70,501
71	12		1,075,657	5		280,338
72	10		903,681	6		372,729
73	9		616,678	1		71,549
74	12		870,282	4		262,824
75	11		632,159	5		220,865
76	4		239,553	6		312,833
77	9		618,481	2		120,287
78	8		443,027	6		214,025
79	7		358,760	4		97,525
80	8		585,469	5		207,962
81	9		485,968	6		282,702
82	9		573,383	5		263,098
83	5		218,503	8		311,390
84	4		228,683	8		169,670
85	5		310,214	6		188,678
86	3		217,522	2		71,838
87	2		150,767	12		305,684
88	6		348,597	7		260,968
89	•		100 504	6 2		194,803
90	2		103,504	2		68,520

TABLE 5

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES AND SURVIVORS BY AGE AS OF DECEMBER 31, 2010

SERVICE RETIREMENTS AND DEPENDENTS OF DECEASED BENEFICIARIES

CONTINUED

		Men			Women	
Age	Number		Amount	Number		Amount
91	2	\$	188,287	7	\$	203,805
92				3		50,745
93	1		56,886	4		63,411
94				2		40,658
95	2		54,926	8		220,639
96	1		19,024	4		60,175
97				2		62,025
98				2		53,054
100				1		13,915
101				3		53,996
103				1		38,338
104				1		15,408
106				2		7,202
107				1		4,837
108				1		4,694
109				1		5,097
111				1		8,411
Total	306	\$	20,872,539	232	\$	9,624,615
Maximum	206	\$	14,579,413	93	\$	4,856,113
Cash Refund	4		323,366	2		58,970
100% J&S	17		795,626	2		98,072
50% J&S	26		2,127,866			
Soc Sec Level	2		138,520	7		344,769
Odd Surv	7		236,739	2		71,832
100% J&S Popup	8		339,917			
50% J&S Popup	28		2,106,302	5		309,988
Beneficiary	8		224,790	121		3,884,871

TABLE 6

THE DISTRIBUTION OF THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF BENEFICIARIES BY AGE AS OF DECEMBER 31, 2010

DISABILITY RETIREMENTS

				Men			
	Age	Number		Amount	Number		Amount
	54	1	\$	67,646			
	59				1	\$	89,278
	62				1		51,456
	70	1		44,852			
	71			·	1		30,337
	Total	2	\$	112,498	3	\$	171,071
Maximum		1	\$	67,646	2	\$	119,615
Cash Refund		1		44,852			
50% J&S				•	1		51,456