

# CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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## **Report on the Actuarial Valuation Prepared as of December 31, 2012**

*October 2013*

October 2, 2013

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, 2012. The report has been prepared in accordance with North Carolina General Statute 135-50 through 135-75.

The 2013 Appropriations Act (Session Law 2013-360) sets contributions at 28.01% of payroll effective for the fiscal year ending June 30, 2014. 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 2014-2015 fiscal year is 26.55% of payroll, which will liquidate the unfunded accrued liability within a 12-year period from July 1, 2014. On this basis, there is a preliminary reserve from undistributed gains equivalent to 1.46% of payroll.

The valuation is based upon membership data and financial information as furnished by the Retirement Systems Division and as summarized in this report. Although reviewed for reasonableness and consistency with the prior valuation, these elements have not been audited by Buck and we cannot certify as to the accuracy and completeness of the data supplied. The valuation is also based on benefit and contribution provisions as presented in this report. If you have reason to believe that the plan provisions are incorrectly described, that important plan provisions relevant to this valuation are not described, or that conditions have changed since the calculations were made, you should contact the authors of this actuarial report prior to relying on this information. The valuation is further based on the actuarial valuation assumptions, approved by the Board of Trustees, as presented 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.

Future actuarial measurements may differ significantly from current measurements due to plan experience differing from that anticipated by the economic and demographic assumptions, increases or decreases expected as part of the natural operation of the methodology used for these measurements, and changes in plan provisions or applicable law. Because of limited scope, Buck performed no analysis of the potential range of such future differences.

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

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.

Respectfully submitted,



Michael A. Ribble, FSA, EA, MAAA  
Principal, Consulting Actuary



Larry Langer, ASA, EA, MAAA  
Principal, Consulting Actuary

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# CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

## SECTION I - SUMMARY OF PRINCIPAL RESULTS

- This report, prepared as of December 31, 2012, 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	12/31/12	12/31/11
Active members		
Number	564	566
Reported compensation	\$ 68,237,144	\$ 67,814,831
Valuation compensation*	70,723,760	70,200,310
Retired members and survivors of deceased members currently receiving benefits		
Number	559	562
Annual allowances	\$ 33,015,346	\$ 32,328,918
Assets		
Actuarial value (AVA)	\$ 481,285,608	\$ 460,647,229
Market value	466,099,097	425,132,791
Actuarial accrued liability (AAL)	\$ 527,585,094	\$ 512,642,885
Unfunded actuarial accrued liability (AAL-AVA)	46,299,486	51,995,656
Funded ratio (AVA/AAL)	91.2%	89.9%
<u>GASB 25/27 for Fiscal Year Ending</u>	<b>June 30, 2015</b>	<b>June 30, 2014</b>
Annual required contribution (ARC) of employer, as a percentage of payroll		
Normal cost	17.55%	18.13%
Accrued liability	8.64	9.53
Death benefit	0.36	0.35
Total	26.55%	28.01%
Impact of legislative changes	N/A	0.00
Final ARC of employer	N/A	28.01%
<u>Appropriations Act for Prior Fiscal Year</u>		
Employer contribution rate, as a percentage of payroll		
Normal cost	17.55%	18.13%
Accrued liability	10.10	8.07
Death benefit	0.36	0.35
Total	28.01%	26.55%
Reserve from undistributed gains/(losses)	1.46%	(1.46)%

\* Reported compensation adjusted to reflect the assumed rate of pay increase prior to the valuation date.

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2. The following table shows a reconciliation of the change in the annual required contribution computed to be 28.01% based on the December 31, 2011 valuation and 26.55% based on the December 31, 2012 valuation.

<b>TABLE II</b>	
<b>RECONCILIATION OF CHANGE IN ANNUAL REQUIRED CONTRIBUTION</b>	
Fiscal year ending June 30, 2014 Preliminary ARC (based on 12/31/11 valuation)	28.01%
Impact of Legislative Changes	<u>0.00</u>
Fiscal year ending June 30, 2014 Final ARC	28.01
Changes Due to Demographic (Gain)/Loss	(1.74)
Changes Due to Investment (Gain)/Loss	0.74
Changes Due to Contributions Greater than ARC	<u>(0.46)</u>
Fiscal year ending June 30, 2015 Preliminary ARC (based on 12/31/12 valuation)	26.55%

3. 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.

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## 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, 2012 upon which the valuation was based. Detailed tabulations of the data are given in Schedule E.

<b>TABLE III</b>				
<b>THE NUMBER AND REPORTED COMPENSATION OF ACTIVE MEMBERS* INCLUDED IN THE VALUATION AS OF DECEMBER 31, 2012</b>				
<b>GROUP</b>	<b>NUMBER</b>	<b>AVERAGE AGE</b>	<b>AVERAGE SERVICE</b>	<b>REPORTED COMPENSATION</b>
Justices of Supreme Court and Judges of Court of Appeals	21	59.9	12.9	\$ 3,112,524
Judges of the Superior Court and Administrative Officers of the Court	112	58.5	16.2	15,691,603
Judges of the District Court, District Attorneys Clerks of the Superior Court, and Public Defenders	<u>431</u>	<u>53.8</u>	<u>12.5</u>	<u>49,433,017</u>
Total	564	55.0	13.2	\$ 68,237,144

\* Includes members not in receipt of benefits who have reported compensation in 2012.

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<b>TABLE IV</b> <b>THE NUMBER, ACCUMULATED CONTRIBUTIONS AND VALUATION</b> <b>COMPENSATION OF TERMINATED VESTED MEMBERS**</b> <b>INCLUDED IN THE VALUATION AS OF DECEMBER 31, 2012</b>					
<b>GROUP</b>	<b>NUMBER</b>	<b>AVERAGE AGE</b>	<b>AVERAGE SERVICE</b>	<b>ACCUMULATED CONTRIBUTIONS</b>	<b>VALUATION COMPENSATION</b>
Justices of Supreme Court and Judges of Court of Appeals	1	56.1	1.8	\$ 15,291	\$ 129,771
Judges of the Superior Court and Administrative Officers of the Court	1	45.4	8.8	76,126	130,358
Judges of the District Court, District Attorneys Clerks of the Superior Court, and Public Defenders	<u>46</u>	<u>55.1</u>	<u>5.1</u>	<u>1,716,933</u>	<u>3,653,095</u>
Total	48	54.9	5.1	\$ 1,808,350	\$ 3,913,224

\*\* Includes members not in receipt of benefits who did not have reported compensation in 2012.

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TABLE V			
THE NUMBER AND ANNUAL RETIREMENT ALLOWANCES OF RETIRED MEMBERS AND SURVIVORS OF DECEASED MEMBERS CURRENTLY IN RECEIPT OF BENEFITS INCLUDED IN THE VALUATION AS OF DECEMBER 31, 2012			
GROUP	NUMBER	AVERAGE AGE	ANNUAL RETIREMENT ALLOWANCES
<u>Retired Members (Healthy at Retirement)</u>			
Males	308	71.1	\$ 21,817,923
Females	<u>119</u>	<u>69.4</u>	<u>6,423,048</u>
Total	427	70.6	\$ 28,240,971
<u>Retired Members (Disabled at Retirement)***</u>			
Males	3	62.3	\$ 164,664
Females	<u>3</u>	<u>66.4</u>	<u>178,049</u>
Total	6	64.4	\$ 342,713
<u>Survivors of Deceased Members</u>			
Males	10	74.2	\$ 305,402
Females	<u>116</u>	<u>78.1</u>	<u>4,126,260</u>
Total	126	77.8	\$ 4,431,662
Grand Total	<u>559</u>	<u>72.2</u>	<u>\$ 33,015,346</u>

\*\*\* Includes retired members reported as disabled in a prior valuation and not subsequently reported as returned to work.

## 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, 2012 and, for comparison purposes, as of the prior valuation date of December 31, 2011. 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.

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<b>TABLE VI</b> <b>VALUATION BALANCE SHEET</b> <b>SHOWING THE ASSETS AND LIABILITIES OF THE</b> <b>CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA</b>		
	<b>DECEMBER 31, 2012</b>	<b>DECEMBER 31, 2011</b>
<b>ASSETS</b>		
Current actuarial value of assets:		
Annuity Savings Fund	\$ 58,602,290	\$ 53,951,667
Pension Accumulation Fund	<u>422,683,318</u>	<u>406,695,562</u>
Total current assets	\$ 481,285,608	\$ 460,647,229
Future member contributions to Annuity Savings Fund	\$ 37,791,818	\$ 39,771,688
Prospective contributions to Pension Accumulation Fund:		
Normal contributions	\$ 119,682,660	\$ 126,021,056
Unfunded accrued liability contributions	46,299,486	51,995,656
Undistributed gain contributions	<u>7,827,545</u>	<u>(7,966,107)</u>
Total prospective contributions	\$ <u>173,809,691</u>	\$ <u>170,050,605</u>
Total Assets	\$ <u><u>692,887,117</u></u>	\$ <u><u>670,469,522</u></u>
<b>LIABILITIES</b>		
Annuity Savings Fund:		
Past member contributions	\$ 58,602,290	\$ 53,951,667
Future member contributions	<u>37,791,818</u>	<u>39,771,688</u>
Total contributions to Annuity Savings Fund	\$ 96,394,108	\$ 93,723,355
Pension Accumulation Fund:		
Benefits currently in payment	\$ 292,281,547	\$ 287,879,823
Benefits to be paid to current active members	296,383,917	293,899,389
Reserve for increases in retirement allowances effective July 1, 2013 (July 1, 2012 for December 31, 2011 figure)	0	2,933,062
Reserve from undistributed gains/(losses)	<u>7,827,545</u>	<u>(7,966,107)</u>
Total benefits payable from Pension Accumulation Fund	\$ <u>596,493,009</u>	\$ <u>576,746,167</u>
Total Liabilities	\$ <u><u>692,887,117</u></u>	\$ <u><u>670,469,522</u></u>

# CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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The valuation balance sheet gives the following information with respect to the funds of the system as of December 31, 2012.

## 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, 2012, which represent the accumulated contributions of members to that date, amounted to \$58,602,290. The balance sheet also shows that the future contributions by members have a present value of \$37,791,818. The present value of both past and future contributions of members is therefore equal to \$96,394,108. The liabilities of this fund are also shown to be equal to \$96,394,108.

## 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, 2012 amounted to \$422,683,318. The liabilities on account of active members amounted to \$296,383,917. In addition, the balance sheet indicates liabilities of \$292,281,547 on account of all benefits payable to retired members and survivors of deceased members as of December 31, 2012. The balance sheet also shows a reserve from undistributed gains/(losses) of \$7,827,545 and a reserve for increases in retirement allowances of \$0. The total liabilities of the Pension Accumulation Fund, therefore, amounted to \$596,493,009. The difference between these liabilities and the current assets credited to this fund is \$173,809,691 which represents the present value of future contributions to be made by the employer. Of this amount, \$119,682,660 represents the present value of prospective normal contributions by the employer, \$46,299,486 represents the present value of prospective unfunded accrued liability contributions and the balance of \$7,827,545 represents the present value of prospective contributions on account of undistributed gains/(losses).

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## **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, 2012.

<b>TABLE VII</b>	
<b>ALLOCATION OF INVESTMENTS BY CATEGORY FOR THE ANNUITY SAVINGS FUND AND PENSION ACCUMULATION FUND AS OF DECEMBER 31, 2012</b>	
Cash and Receivables	0.6%
Fixed Income (LTIF)	35.2%
Public Equity	44.4%
Other*	<u>19.8%</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 17.55% of payroll exclusive of the rate necessary to provide one year's compensation upon death in active service. The normal rate necessary to provide the death benefit on a one-year term basis was calculated to be 0.36% of payroll and is payable to the Death Benefit Fund. The total normal rate is therefore equal to 17.91% of payroll.

The actuarial accrued liability is calculated as the present value of future projected benefits of the retirement system less the present value of future normal costs. The accrued liability contribution rate is determined based on the amortization Schedule for Unfunded Actuarial Accrued Liability, as shown in Schedule B of this report, and will liquidate the unfunded accrued liability within a 12-year period from July 1, 2014. As shown in Schedule B, the accrued liability contribution rate should be set at 8.64% of payroll.

## **CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA**

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The December 31, 2011 valuation suggested that the total employer contribution rate be set at 28.01% of payroll for the fiscal year ending June 30, 2014. Subsequently, the 2013 Appropriations Act (Session Laws 2013-360) set contributions at 28.01% of payroll effective for the fiscal year ending June 30, 2014. As a result of this December 31, 2012 valuation, the preliminary total employer contribution rate should be set at 26.55% of payroll for the fiscal year ending June 30, 2015, subject to the impact of any future legislative changes effective during that fiscal year. The valuation has been prepared in accordance with the parameters of Statement Nos. 25 and 27 of the Governmental Accounting Standards Board and all applicable Actuarial Standards of Practice. The annual required contribution (ARC) under GASB for the fiscal year ending June 30, 2015 is 26.55% of payroll.

The undistributed gain of 1.46% of payroll is the difference between the employer contribution rate set forth in the 2013 Appropriation Act of 28.01% and the Annual Required Contribution (ARC) of 26.55% under GASB 25/27 using an amortization period of 12 years as required by the Legislature. The undistributed gain as a result of this valuation provides the General Assembly the ability to increase retirement benefits equal to approximately 1.46% of payroll. Alternatively, the employer contribution rate could be reduced to 26.55% with no undistributed gain available for a cost of living adjustment or other benefit improvements.

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## 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.

<b>TABLE VIII</b>	
<b>RECONCILIATION OF CHANGE IN UNFUNDED ACCRUED LIABILITY SINCE THE PRIOR VALUATION (IN MILLIONS)</b>	
Unfunded accrued liability as of 12/31/11	\$ 52.0
Normal cost during 2012	16.9
Reduction due to actual contributions during 2012	(24.6)
Interest on unfunded accrued liability, normal cost and contributions	4.1
Asset (gain)/loss	3.8
Accrued liability (gain)/loss	(5.9)
Impact of Legislative changes	---
Unfunded accrued liability as of 12/31/12	\$ 46.3

The valuation results indicated that there is a preliminary reserve from undistributed gains of 1.46% of payroll. Each 1.0% increase in retirement allowances as of July 1, 2014 to retired members and survivors of deceased members currently in receipt of benefits on July 1, 2013 and a prorated portion of each 1.0% increase as of July 1, 2014 for retired members and survivors of deceased members who commence benefits after July 1, 2013 but before June 30, 2014 is equivalent to 0.59% of payroll.

# CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

## 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, 2012	
GROUP	NUMBER
Retired members and survivors of deceased members currently receiving benefits	559
Terminated members and survivors of deceased members entitled to benefits but not yet receiving benefits	48
Active members	<u>564</u>
Total	1,171

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

SCHEDULE OF FUNDING PROGRESS						
Actuarial Valuation Date	Actuarial Value of Assets (a)	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)
12/31/07	\$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
12/31/11	460,647,229	512,642,885	51,995,656	89.9	67,814,831	76.7
12/31/12	481,285,608	527,585,094	46,299,486	91.2	68,237,144	67.9

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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, 2013.

<b>Fiscal Year Ending June 30, 2013</b>	
Preliminary Annual Required Contribution Rate	
Normal Cost	18.00%
Accrued Liability	7.62
Death Benefit	0.35
Total	25.97%
Impact of Legislative Changes	0.58
Final Annual Required Contribution Rate	26.55%
Payroll	\$ 69,685,709
Annual Required Contribution	\$ 18,502,000

The appropriation for fiscal year ending June 30, 2013 is 26.55%.

4. Following is the calculation of the annual pension cost and net pension obligation for the fiscal year ending June 30, 2013.

### Annual Pension Cost and Net Pension Obligation for Fiscal Year Ending 6/30/2013

(a) Employer annual required contribution	\$ 18,502,000
(b) Interest on net pension obligation	29,000
(c) Adjustment to annual required contribution	(55,000)
(d) Annual pension cost: (a) + (b) + (c)	\$ 18,476,000
(e) Employer contributions made for fiscal year ending 6/30/2013	18,502,000
(f) Increase (decrease) in net pension obligation: (d) - (e)	\$ (26,000)
(g) Net pension obligation beginning of fiscal year	401,000
(h) Net pension obligation end of fiscal year: (f) + (g)	\$ 375,000

TREND INFORMATION			
Year Ending	Annual Pension Cost (APC)	Percentage APC Contributed	Net Pension Obligation
June 30, 2011	\$13,330,000	77.0	\$428,000
June 30, 2012	17,177,000	100.2	401,000
June 30, 2013	18,476,000	100.1	375,000

## CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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.

<b>2014/2015 FISCAL YEAR ANNUAL REQUIRED CONTRIBUTION (ARC) BASED ON THE VALUATION AS OF DECEMBER 31, 2012</b>	
<b>ANNUAL REQUIRED CONTRIBUTION (ARC)</b>	<b>RATE</b>
Normal Cost	17.55%
Accrued Liability	8.64
Death Benefit	<u>0.36</u>
Total	26.55%

6. Additional information as of December 31, 2012 follows.

Valuation date	12/31/12
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	3.00%
** Includes inflation and productivity of	3.50%
Cost-of-living adjustments	N/A

# CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

## SCHEDULE A

DEVELOPMENT OF ACTUARIAL VALUE OF ASSETS FOR THE YEAR ENDING DECEMBER 31, 2012		
1.	Actuarial Value of Assets as of December 31, 2011	\$ 460,647,229
2.	2012 Net Cash Flow	
	a. Contributions	24,602,853
	b. Disbursements	<u>33,251,265</u>
	c. Net Cash Flow: (a) - (b)	(8,648,412)
3.	Expected Investment Return: [(1) x .0725] + [(2)c x .03625]	33,083,419
4.	Expected Actuarial Value of Assets as of December 31, 2012: (1) + (2)c + (3)	485,082,236
5.	Market Value of Assets as of December 31, 2012	466,099,097
6.	Excess of Market Value over Expected Actuarial Value of Assets: (5) - (4)	(18,983,139)
7.	20% Adjustment towards Market Value: (6) x .20	(3,796,628)
8.	Preliminary Actuarial Value of Assets as of December 31, 2012: (4) + (7)	481,285,608
9.	Final Actuarial Value of Assets as of December 31, 2012 [(8) not less than 80% of (5) and not greater than 120% of (5)]	481,285,608
10.	Rate of investment return on actuarial value	6.42%
11.	Rate of investment return on market value	11.79%

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## SCHEDULE B

AMORTIZATION SCHEDULE FOR UNFUNDED ACTUARIAL ACCRUED LIABILITY			
DATE ESTABLISHED	OUTSTANDING BALANCES		ANNUAL PAYMENT
	INCEPTION	DECEMBER 31, 2012	
December 31, 2009	\$ 34,962,037	\$ 35,565,897	\$ 4,783,952
December 31, 2010	3,913,729	4,229,301	535,526
December 31, 2011	10,017,079	10,743,318	1,370,665
December 31, 2012	(4,239,030)	<u>(4,239,030)</u>	<u>(580,038)</u>
Total		\$ 46,299,486	\$ 6,110,105
Valuation Compensation			\$ 70,723,760
Unfunded Accrued Liability Contribution Rate			8.64%

# CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

## 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. The next experience investigation will be based on the five-year period ending December 31, 2014. The actuary will present this investigation during the fall of 2015 for adoption by the Board of Trustees with the intent of using the assumptions recommended in the December 31, 2014 experience review beginning with the December 31, 2014 annual valuation.

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					
<u>Age</u>	<u>Disability</u>	<u>Base Mortality*</u>		<u>Service</u>	<u>Salary Increase</u>
		<u>Male</u>	<u>Female</u>		
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:

<u>Age</u>	<u>Service</u>					
	<u>5</u>	<u>10</u>	<u>15</u>	<u>20</u>	<u>25</u>	<u>30</u>
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

## CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

Note: For members hired on or after August 1, 2011, retirement rates are reduced to 0% if service is less than 10 years since they are not eligible to retire with less than 10 years of service. In their first year of eligibility, retirement rates for these members are an accumulation of the rates assumed above for all previous years. All other retirement rates for such members are equal to those shown above.

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 (Retired Members and Survivors of Deceased Members)						
Age	Retirees (Healthy at Retirement)		Survivors of Deceased Members		Retirees (Disabled at Retirement)	
	Male	Female	Male	Female	Male	Female
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 retirees healthy at retirement and survivors of deceased members after such tables have been set back or set forward) are as follows:

Age	Male Projection Scale	Female Projection Scale
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 survivors of deceased members and set forward two years for female survivors 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 set back or set forward.

## **CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA**

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**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. The rates from ages 71 to 79 are smoothed based on the active rate at age 70 and the retiree rate at age 80. Retiree rates are used for ages 80 and beyond.

**MORTALITY PROJECTION (NON-DISABLED):** All mortality rates are projected from December 31, 2003 using generational improvement with 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 male spouses four years older than female spouses.

**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.

**CHANGES SINCE PRIOR VALUATION:** None.

# **CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA**

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## **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.

"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**

A service retirement allowance is payable to any member who retires from service and:

- (a) had attained age 50 and was in service on October 8, 1981;
- (b) if hired before August 1, 2011, has attained age 50 and completed five or more years of creditable service; or
- (c) if hired on or after August 1, 2011, has attained age 50 and completed ten or more years of creditable service.

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.

##### **Unreduced Allowance**

An unreduced annual service retirement allowance is payable to a member who:

- (a) if hired before August 1, 2011, has attained age 65 and completed five years of creditable service;
- (b) if hired on or after August 1, 2011, has attained age 65 and completed ten years of creditable service; or
- (c) has attained age 50 and completed 24 years of creditable service.

## CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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The Service Retirement Allowance is equal to:

- (i) 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.

### Reduced Allowance

A reduced annual service retirement allowance is payable to a member who retires:

- (a) if hired before August 1, 2011, prior to the earlier of attainment of age 65 and completion of five years of creditable service;
- (b) if hired on or after August 1, 2011, prior to the earlier of attainment of age 65 and completion of ten years of creditable service; or
- (c) prior to attainment of age 50 or the completion of 24 years of creditable service.

The reduced amount 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.

### Maximum Amount

The maximum annual service retirement allowance (on an unreduced basis) is the amount which, when added to the member's benefit payable from the Teachers' and State Employees' Retirement System, Local Governmental Employees' Retirement System, or Legislative Retirement System (all on an unreduced basis) would total 75% of the member's final compensation.

## CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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Minimum Amount	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	<p>Any member who separates from service prior to age 50 and:</p> <ul style="list-style-type: none"><li>(a) if hired before August 1, 2011, completed five years of creditable service; or</li><li>(b) if hired on or after August 1, 2011, completed ten years of creditable service;</li></ul> <p>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.</p>
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.

## CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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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	<p>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.</p> <p>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.</p>
Other Death Benefits	Upon the death of a member in service, other benefits may be provided by the Death Benefit Plan.
Return of Contributions	<p>Any member who terminates service other than by retirement or death is entitled to the return of his accumulated contributions.</p> <p>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.</p> <p>The current interest rate on member contributions is 4%.</p>
Optional Allowances	<p>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:</p> <p>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</p> <p>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</p> <p>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</p>

## CONSOLIDATED JUDICIAL RETIREMENT SYSTEM OF NORTH CAROLINA

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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

#### Member Contributions

Each member contributes 6% of his annual compensation.

#### Employer Contributions

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.

### Changes Since Prior Valuation

None.

# SCHEDULE E

## DETAILED TABULATIONS OF THE DATA

TABLE 1

THE NUMBER AND AVERAGE REPORTED COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY AGE AND SERVICE  
AS OF DECEMBER 31, 2012

AGE	YEARS OF SERVICE										Total
	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	
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
	0	0	0	0	0	0	0	0	0	0	0
30 to 34	0	4	0	0	0	0	0	0	0	0	4
	0	110,028	0	0	0	0	0	0	0	0	110,028
35 to 39	0	10	3	1	0	0	0	0	0	0	14
	0	109,470	113,548	115,736	0	0	0	0	0	0	110,791
40 to 44	0	25	25	9	1	2	0	0	0	0	62
	0	110,593	117,052	118,386	137,307	86,880	0	0	0	0	113,994
45 to 49	1	25	17	28	8	5	0	0	0	0	84
	16,351	106,907	108,355	125,878	125,619	126,612	0	0	0	0	115,401
50 to 54	1	15	28	17	11	12	4	3	0	0	91
	23,395	104,770	116,982	119,869	129,223	133,495	129,443	92,291	0	0	117,871
55 to 59	1	22	16	16	19	19	8	8	6	0	115
	37,697	111,427	116,991	120,459	132,402	132,503	140,454	123,294	102,732	0	122,155
60 to 64	1	14	20	19	18	13	11	9	4	5	114
	36,278	110,105	117,093	125,140	140,431	134,818	144,873	142,079	110,322	104,091	126,419
65 to 69	1	10	9	9	11	9	1	11	2	0	63
	9,224	116,736	123,513	125,118	134,920	143,301	102,792	144,863	112,719	0	128,727
70 & up	0	1	1	0	5	4	2	2	0	2	17
	0	82,896	127,907	0	133,567	135,654	137,306	143,763	0	102,792	128,763
Total	5	126	119	99	73	64	26	33	12	7	564
	24,589	109,420	116,283	122,976	133,686	132,989	138,939	134,029	106,927	103,720	120,988

**SCHEDULE E**

**TABLE 2**

**THE NUMBER AND REPORTED COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY AGE  
AS OF DECEMBER 31, 2012**

Age	Men		Women	
	Number	Amount	Number	Amount
33	2	\$ 220,056		
34	2	220,056		
35			1	\$ 110,028
36	1	115,308		
37	1	110,028	4	461,625
38	2	241,569	1	61,418
39			4	451,100
40	3	340,102	5	550,140
41	10	1,172,234	3	363,071
42	4	485,761	9	976,042
43	5	583,062	4	492,269
44	8	860,318	11	1,244,646
45	9	1,009,399	7	773,876
46	9	1,150,800	9	942,176
47	15	1,766,749	7	863,010
48	6	695,641	9	1,003,076
49	6	697,432	7	791,502
50	12	1,547,422	9	909,569
51	7	870,823	7	805,198
52	11	1,344,073	10	1,181,480
53	15	1,820,920	7	718,743
54	5	670,438	8	857,599
55	14	1,614,198	3	312,502
56	17	2,218,518	10	1,038,453
57	11	1,408,848	9	1,056,302
58	21	2,740,955	9	1,082,857
59	16	1,976,942	5	598,288
60	19	2,458,930	5	480,305
61	21	2,716,956	3	397,676
62	14	1,799,746	4	560,499
63	20	2,488,834	4	459,025
64	19	2,519,204	5	530,556
65	14	1,773,143	2	277,238
66	18	2,247,024		
67	10	1,334,874	3	356,927
68	9	1,151,728	1	110,028
69	6	858,857		
70	8	1,089,860	2	303,711
71	2	280,206		
73			1	98,808
74	1	82,896		
75			1	102,792
76	1	127,907		
82			1	102,792
Total	374	\$ 46,811,817	190	\$ 21,425,327

**SCHEDULE E**

**TABLE 3**

**THE NUMBER AND REPORTED COMPENSATION OF  
ACTIVE MEMBERS DISTRIBUTED BY SERVICE  
AS OF DECEMBER 31, 2012**

Years of Service	Men		Women	
	Number	Amount	Number	Amount
0	2	\$ 46,920	3	\$ 76,024
1	5	460,271	6	536,135
2	31	3,560,124	19	1,981,478
3	11	1,301,332	6	632,944
4	24	2,729,551	24	2,585,143
5	12	1,362,513	9	1,052,198
6	37	4,299,807	16	1,764,958
7	9	1,062,705	5	636,442
8	17	2,052,974	9	1,086,423
9	3	317,496	2	202,188
10	15	1,835,076	12	1,360,338
11	6	796,913	2	240,455
12	16	1,963,026	10	1,298,268
13	12	1,477,169	3	370,946
14	18	2,206,136	5	626,312
15	7	948,769	4	484,410
16	9	1,179,673	5	669,983
17	7	895,862	3	373,706
18	22	2,991,639	2	294,523
19	11	1,538,085	3	382,427
20	8	1,131,443	3	421,957
21	4	533,720	2	220,837
22	17	2,349,286	2	243,260
23	3	333,336	3	341,251
24	17	2,413,203	5	522,982
25			1	131,154
26	7	982,446	1	98,808
27	3	399,354	1	120,588
28	8	1,129,221	1	175,803
29	4	575,039		
30	6	905,960	2	241,176
31	3	333,081	4	493,791
32	4	598,166		
33	9	1,284,075	3	289,970
34	2	276,734		
35	1	148,827	3	304,048
36	2	217,481	1	102,792
37			4	411,166
39			1	98,808
40	1	87,202	2	243,260
41	1	87,202	2	205,583
44			1	102,792
Total	374	\$ 46,811,817	190	\$ 21,425,327

**SCHEDULE E****TABLE 4**

**THE NUMBER AND ACCUMULATED CONTRIBUTIONS OF  
TERMINATED VESTED MEMBERS DISTRIBUTED BY AGE  
AS OF DECEMBER 31, 2012**

Age	Men		Women	
	Number	Amount	Number	Amount
35			1	\$ 11,012
42	2	\$ 20,414		
43	1	37,936		
45	3	132,482		
46			2	71,413
48	1	27,916	2	113,131
49	3	255,882	1	4,304
50	1	29,639	1	28,449
51			3	167,652
52	2	80,009		
53	1	33,919		
55			2	214,138
56	2	83,404	1	78,472
57			1	4,517
58	1	6,189		
59	1	33,919	1	1,195
60	2	98,651	1	3,359
62	1	16,937	1	35,967
63	2	31,452		
64	1	44,785		
65	1	15,001		
68	1	52,432		
69	1	12,298		
70	1	3,371	1	30,728
75	1	12,675	1	14,702
Total	29	\$ 1,029,311	19	\$ 779,039

**SCHEDULE E**

**TABLE 5**

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS (HEALTHY AT RETIREMENT) AND  
SURVIVORS OF DECEASED MEMBERS BY AGE AS OF DECEMBER 31, 2012**

Age	Men		Women	
	Number	Amount	Number	Amount
46			1	\$ 17,081
48			2	25,838
50			1	18,195
51			1	80,432
52	1	\$ 21,046		
53	1	37,772		
54	1	6,174	1	72,019
55			3	156,399
56	2	150,305	6	355,935
57			4	260,830
58	5	280,347	2	101,996
59	9	577,564	6	311,536
60	7	490,823	5	303,445
61	11	558,571	8	486,330
62	9	614,640	6	424,303
63	16	1,173,953	9	568,163
64	13	902,468	5	254,659
65	14	1,014,990	6	400,651
66	18	1,460,033	8	353,466
67	22	1,574,528	9	494,247
68	11	716,992	4	208,996
69	12	840,936	4	185,619
70	16	1,111,634	6	437,965
71	11	871,861	10	371,767
72	10	855,678	3	136,522
73	13	1,198,476	8	492,868
74	10	856,902	6	287,138
75	9	622,845	6	170,781
76	13	954,737	5	299,492
77	11	638,481	7	294,633
78	5	261,657	9	327,775
79	8	552,817	2	48,908
80	7	440,951	7	383,279
81	6	369,889	5	346,500
82	9	624,603	4	154,380
83	7	432,416	8	292,754
84	8	462,227	7	160,477
85	2	70,865	8	226,623
86	4	230,970	6	190,674
87	4	283,135	3	111,741

**SCHEDULE E**

**TABLE 5**

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS (HEALTHY AT RETIREMENT) AND  
SURVIVORS OF DECEASED MEMBERS BY AGE AS OF DECEMBER 31, 2012**

CONTINUED

Age	Men		Women	
	Number	Amount	Number	Amount
88	2	\$ 154,094	4	\$ 53,193
89	1	98,772	7	128,187
90	5	278,908	5	103,299
91	1	35,553	1	20,648
92	2	104,540	5	93,489
93	2	190,170	4	102,349
94			3	109,429
95			2	75,543
97			3	48,756
Total	318	\$ 22,123,323	235	\$ 10,549,310

**SCHEDULE E****TABLE 6**

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS (HEALTHY AT RETIREMENT) AND  
SURVIVORS OF DECEASED MEMBERS BY ANNUITY TYPE AS OF DECEMBER 31, 2012**

Annuity Type	Men		Women	
	Number	Amount	Number	Amount
Maximum	204	\$ 14,976,629	99	\$ 5,393,862
Option 1	4	326,600	2	59,560
Option 2	19	757,776	3	179,485
Option 3	30	2,533,774	1	33,984
Option 4	2	139,906	8	437,742
Option 5-2	10	349,980	0	0
Option 5-3	33	2,551,605	4	245,867
Option 6-2	0	0	0	0
Option 6-3	0	0	0	0
Other	6	181,651	2	72,550
Survivors of Deceased Members	10	305,402	116	4,126,260
Total	318	\$ 22,123,323	235	\$ 10,549,310

**SCHEDULE E**

**TABLE 7**

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS (DISABLED AT RETIREMENT)  
BY AGE AS OF DECEMBER 31, 2012**

Age	Men		Women	
	Number	Amount	Number	Amount
56	1	\$ 68,323		
60	1	51,041		
62			1	\$ 95,438
64			1	51,970
72	1	45,300		
73			1	30,641
Total	3	\$ 164,664	3	\$ 178,049

**SCHEDULE E**

**TABLE 8**

**THE DISTRIBUTION OF THE NUMBER AND ANNUAL  
RETIREMENT ALLOWANCES OF RETIRED MEMBERS (DISABLED AT RETIREMENT)  
BY ANNUITY TYPE AS OF DECEMBER 31, 2012**

Annuity Type	Men		Women	
	Number	Amount	Number	Amount
Maximum	1	\$ 68,323	2	\$ 126,079
Option 1	1	45,300	0	0
Option 2	1	51,041	0	0
Option 3	0	0	1	51,970
Option 4	0	0	0	0
Option 5-2	0	0	0	0
Option 5-3	0	0	0	0
Option 6-2	0	0	0	0
Option 6-3	0	0	0	0
Other	0	0	0	0
Total	3	\$ 164,664	3	\$ 178,049