B&CB SOUTH CAROLINA RETIREMENT SYSTEMS
SC Budget and Control Board

Retirement System for Judges and Solicitors of the State of South Carolina (JSRS) Annual Actuarial Valuation as of July 1, 2009

May 10, 2010

State Budget and Control Board
South Carolina Retirement System
P.O. Box 11960
Columbia, SC 29211-1960

Members of the Board:

The laws governing the operation of the Retirement System for Judges and Solicitors of the State of South Carolina (JSRS) provide that actuarial valuations of the assets and liabilities of the System shall be made annually. We have conducted the annual actuarial valuation of the Retirement System as of July 1, 2009 and the results of the valuation are contained in the following report.

A funding objective of the System is that contribution rates as a percentage of payroll will remain relatively level over time. As these contribution rates are set by the Board, the valuation is used to determine the sufficiency of the contributions to maintain or improve the measures of the System's funding progress (i.e. *funded ratio, funding period*) and provide for the complete funding of all actuarial liabilities within 30 years.

In performing the valuation, we relied on data supplied by the System and performed limited tests on the data for consistency and reasonableness. All benefits provided under the South Carolina Code of Laws are included in the valuation. The normal cost and accrued liability of the System are developed using the entry age normal cost method. Under this method, the normal cost is level percent of payroll necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

In determining the System's liabilities, future events, such as investment returns, salary increases, deaths, retirements, etc., are anticipated based upon the set of actuarial assumptions as approved by the Board. The assets of the system for valuation purposes are developed using an asset smoothing technique which spreads the recognition of the unexpected portion market related gains and losses over a period of years with the goal of dampening the impact of market volatility upon valuation results.

An unfunded accrued liability exists in the amount equal to the excess of accrued liability over valuation assets. The amortization period of the System is the number of years required to fully amortize the unfunded accrued liability with the expected amount of employer contributions in excess of the employers' portion of the normal cost. The System's current assets together with the scheduled contributions are expected to fully fund the System's liabilities within 30 years. In our opinion, JSRS continues to operate on an actuarially sound basis.

Future actuarial results may differ significantly from the current results presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; and changes in plan provisions or applicable law. Since the potential impact of such factors is outside the scope of a normal annual actuarial valuation, an analysis of the range of results is not presented herein.

This is to certify that the undersigned are members of the American Academy of Actuaries and have experience in performing valuations for public retirement systems, that the valuation was prepared in accordance with principles of practice prescribed by the Actuarial Standards Board, and that the actuarial calculations were performed by qualified actuaries in accordance with accepted actuarial procedures, based on the current provisions of the retirement system and on actuarial assumptions and methods that are internally consistent and reasonably based on the actual experience of the System.

Respectfully submitted,

John J. Garrett, ASA, FCA, MAAA
Principal and Consulting Actuary

Edward A. Macdonald, ASA, FCA, MAAA
President

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Section I: Board Summary

The table below summarizes the results of the July 1, 2009 actuarial valuation as compared with the prior year. Note that all dollar amounts are shown in thousands.

Table I-1: Comparative Summary of Principal Results

	July 1, 2009	July 1, 2008
Membership		
Number of:		
Active Members[1]	144	144
Retirees and Beneficiaries[2]	184	178
Inactive Members	4	5
Total	318	312
Payroll	$18,661	$18,661
Statutory Contribution Rates (Including Group Insurance)		
Member	10.00%	10.00%
Employer	45.09%	45.09%
Total	55.09%	55.09%
Assets		
Market Value	$99,989	$129,431
Actuarial Value	$141,797	$138,323
Return on Market Value	(21.0%)	(2.6%)
Return on Actuarial Value	4.2%	7.4%
Ratio of Actuarial to Market Value	141.8%	106.9%
Actuarial Information		
Employer Normal Cost %	12.02%	13.39%
Unfunded Actuarial Liability (UAL)	$72,566	$75,083
Funded Ratio	66.1%	64.8%
Amortization Period	16 Years	16 Years
Change in Unfunded Actuarial Liability		
Beginning of Year Unfunded Actuarial Liability	$75,083	$96,400
Interest on Unfunded Actuarial Liability	6,007	7,000
Amortization Payment with Interest	(6,614)	(5,600)
COLA	(4,183)	(3,300)
Salary Experience	(2,132)	(1,700)
Other Liability Experience	(528)	(600)
Benefit Changes	0	0
Assumption Changes	0	(17,000)
Asset Experience	4,933	(100)
Total Increase / (Decrease)	(2,517)	($21,300)
End of Year Unfunded Actuarial Liability	$72,566	$75,100

[1] Represents the number of scheduled positions. The July 1, 2009 count of 144 includes 14 members who were in DROP or retired in place. The July 1, 2008 count of 144 includes 15 members who were retired in place.

[2] Includes 14 members as of July 1, 2009 and 15 members as of July 1, 2008 who were in DROP or retired in place.

Section I: Board Summary

Summary of Key Findings

The current employer contribution rate for the System is 45.09%. The contribution is used to pay the employer's portion of the normal cost and to amortize the unfunded actuarial liability (UAL).

The actuarially determined employer normal cost contribution rate decreased from 13.39% to 12.09% of covered payroll for FY 2011. Therefore, the net contribution towards the UAL increased from 31.70% to 33.07% of covered payroll. The unfunded actuarial liability decreased from $75.1 million to $72.6 million. The resulting amortization period decreased from 16.3 years to 15.7 years. We note the following key findings:

- The UAL grew by $6.0 million due to interest and decreased by $6.6 million due to the amortization payment. This results in a 1 year decrease to the amortization period.

- The System experienced an actuarial loss on plan assets of $4.9 million as a result of investment return on the actuarial value of assets being less than the assumed rate. The loss increased the amortization period by 2.3 years. Table III-3 provides the calculation of the investment loss for this year.

- The System experienced a net actuarial gain $6.8 million on plan liabilities due to non-investment related experience. Table IV-4 provides the reconciliation of the UAAL which is summarized as follows:

    1. The System experienced a $2.1 million gain due to salary experience which reduced the funding period by 0.6 years, and a $4.2 million gain on cost of living increases to retired members which reduced the funding period by 1.1 years.

    2. In addition, there was a small liability gain primarily attributable to the System turnover experience. The gain decreased plan liabilities by $0.6 million and did not have a material impact on the funding period.

    3. Other factors resulted in a 0.2 year decrease in the amortization period. These factors had a minor direct impact on the UAL.

Section II of the report provides summarized information on the membership data used in the valuation. Section III of the report covers the System's assets and Section IV of the report covers the System's liabilities. The results of the valuation are provided in Section V of the report and the accounting information is in Section VI. The appendices provide additional information on: A) the System members;

B) the actuarial assumptions and methods; and C) the summary of plan provisions. It is important to note that all information contained in this report for periods prior to July 1, 2009 were produced by a prior actuarial consulting firm.

Section II: Membership Data

Data regarding the membership of the System for use in the valuation were furnished by the Retirement Systems. The following table summarizes the membership data as of July 1, 2009 and is compared with that reported for the prior year.

Table II-1: Summary of Membership Data

	July 1, 2009	July 1, 2008
Active Members		
Total Number of Active Members[1]	144	144
Total Annual Compensation	$18,661	$18,661
Number of DROP & Retired-in-Place Members	14	15
Total Annual Compensation	$1,762	$1,899
Retirees and Beneficiaries		
Number of Service Retirements	128	123
Total Annual Benefit Payments	$12,039	$11,437
Number of Disability Retirements	1	1
Total Annual Benefit Payments	$93	$93
Number of Beneficiaries	55	54
Total Annual Benefit Payments	$1,613	$1,570
Inactive Members		
Number of Non-vested Inactive Members	3	4
Number of Vested Inactive Members	1	1

All dollar amounts are in thousands.

[1] Represents the number of scheduled positions and includes the 14 (15 as of July 1, 2008) participants who are either in the DROP or have retired in place.

Section III: System Assets

The following tables provide information on the System's assets and cash flow.

Table III-1: Market Value Reconciliation and Cash Flow	July 1, 2009	July 1, 2008
1. Beginning of Year Market Value of Assets	$129,431	$137,191
Income		
2. Employer Contributions	$8,414	$7,613
3. Member Contributions	2,524	1,353
Total Contributions	$10,938	$8,966
4. Investment Income (net of expenses)	($26,845)	($3,474)
Disbursements		
5. Benefit Payments	$13,618	$13,315
6. Transfers	($83)	($63)
7. Net Change in Market Value of Assets (2 + 3 + 4 - 5 - 6)	($29,442)	($7,760)
8. End of Year Market Value of Assets (1 + 7)	$99,989	$129,431
Approximate Rate of Return on Market Value of Assets	(21.0%)	(2.6%)
Net Cash Flow (Contributions less Disbursements)	($2,597)	($4,286)
Cash Flow as a % of Average Market Value	(2.3%)	(3.2%)

All dollar amounts are in thousands.

A mature System such as JSRS is expected to exhibit negative net cash flow as the number of members receiving benefit payments becomes a larger portion of total membership. In a year with a significant increase or decrease in the market value of assets, the cash flow as a percent of market value will likewise fluctuate.

Section III: System Assets

Development of Actuarial Value of Assets

The Actuarial Value of Assets represents a "smoothed" value developed with the purpose to dampen the impact of market volatility on the assets used in determining valuation results. The Actuarial Value of Assets has been calculated by spreading the recognition of excess investment income over ten years (five years for income prior to July 1, 2007). The amount of excess investment income in each year is the difference between expected and actual market value investment income. Table III-2 provides the calculation of the amount of the current year market value excess investment income to be phased-in as well as the total amount of deferred excess investment income from the current and prior years calculated in the development of the actuarial value of assets.

Table III-2: Development of Actuarial Value of Assets

Calculation of Current Year Excess Investment Income	
1. Market Value of Assets at Beginning of Year	$129,431
2. Value of DROP Accounts at Beginning of Year	349
3. DROP Net Cash Flow During the Year	349
4. Total Net Cash Flow During the Year (3 + Table III-1 Net Cash Flow)	(2,248)
5. Market Value of Assets at End of Year	99,989
6. Value of DROP Accounts at End of Year	698
7. Actual Investment Income During the Year Based on Market Value	(26,845)
8. Expected Earnings for the Year	
a. Market Value of Assets, Beginning of Year [(1 + 2) x 8.00%]	10,382
b. Net Cash Flow (4 x 8.00% x .5)	(90)
c. Total (a + b)	10,292
9. Current Year Excess Investment Income (7 – 8c)	(37,137)
Calculation of Total Amount of Deferred Excess Investment Income	
10. Amounts of Excess Investment Income from Current and Prior Years	

Valuation Year	Excess Investment Income	Percent Deferred	Amount Deferred
2009	($37,137)	90%	(33,423)
2008	(13,277)	80%	(10,622)
2007	7,052	40%	2,821
2006	(2,921)	20%	(584)
Total Amount of Deferred Excess Investment Income			($41,808)

11. Actuarial Value of Assets as of July 1, 2009 (5 - 10)	$141,797
Approximate Rate of Return on Actuarial Value of Assets	4.2%

All dollar amounts are in thousands.

Section III: System Assets

The actuarial valuation assumes the investment income on the assets of the System is 8.00% annually. This assumption is based upon the reasonable long-term expected return on the assets. In each year, the System will experience actuarial gains and losses due to the actual investment return of the assets.

Table III-3: Calculation of Actuarial Investment Gain/(Loss)

1. Actuarial Value of Assets at Beginning of Year	$138,323
2. Value of DROP Accounts Beginning of Year	349
3. Total Net Cash Flow (Table III-2(4))	(2,248)
4. Expected Return on Actuarial Value of Assets [(1 + 2) x 8.00% + 3 x 8.00% x .5]	11,004
5. Value of DROP Accounts End of Year	698
6. Expected Actuarial Value of Assets at End of Year (1 + 2 + 3 + 4 - 5)	$146,730
7. Actual Actuarial Value of Assets at End of Year (Table III-2(11))	$141,797
8. Actuarial Gain/(Loss) Due to Investment Experience (7 - 6)	($4,933)

All dollar amounts are in thousands.

As recommended in the latest experience study (covering the 5 year period ending June 30, 2007), the Board moved to adopt an increase to the asset smoothing period from 5 to 10 years for gains and losses experienced after June 30, 2007. The change to a longer asset smoothing period had the purpose of adjusting for the additional expected volatility of returns due to less restrictive asset allocation and the expansion of allowable asset classes in which the system can now invest. Maintaining a restriction on the asset smoothing method, such as the corridor, is contrary to the implementation of an extended smoothing period.

Section IV: System Liabilities

The present value of benefits is the value as of the valuation date of all future benefits expected to be paid to current members of the System. Table IV-1 presents the present value of benefits by category as of the valuation date.

Table IV-1: Present Value of Benefits	
Active Members	
Service Retirement	$90,350
Disability Retirement	4,957
Survivors' Benefits	3,441
Total for Active Members	$98,748
Inactive Members	
Non-Vested (Refund only)	$83
Vested	447
Total for Inactive Members	$530
Retirees and Beneficiaries	
Service Retirements	$128,238
Disability Retirements	660
Beneficiaries	15,566
Total for Retirees and Beneficiaries	$144,464
Total Present Value of Benefits	$243,742

All dollar amounts are in thousands.

An actuarial cost method allocates each individual's present value of benefits to past and future years of service. The actuarial accrued liability includes the portion of the active member present value of benefits allocated to past service as well as the entire present value of benefits for retirees, beneficiaries and inactive members. Table IV-2 presents the actuarial accrued liability as of the valuation date for active members.

Table IV-2: Actuarial Accrued Liability	
Active Members	
Service Retirement	$67,339
Disability Retirement	1,029
Survivors' Benefits	1,001
Total for Active Members	$69,369
Total for Inactive Members (Table IV-1)	530
Total for Retirees and Beneficiaries (Table IV-1)	$144,464
Total Actuarial Accrued Liability	$214,363

All dollar amounts are in thousands.

The funded ratio of the System is the ratio of the actuarial value of assets (Table III-2) divided by the actuarial accrued liability (Table IV-2) as of the valuation date. As of July 1, 2009, the funded ratio of the System is 66.1% as compared to the ratio in prior valuation of 64.8%. The ratio is a commonly used measure of the funding progress of a System and can be useful in reviewing the historical trend of a System's funding progress. Such a review should also consider the impact to this measure over the historical period due to changes to plan benefits, changes to the actuarial assumptions and methods, and significant impact that investment experience can have on the ratio over short-term periods. We caution that no single "point in time" measure can provide a universal basis for comparing one System to another.

Under the valuation funding method, an unfunded actuarial accrued liability (UAAL) exists to the extent that the actuarial accrued liability exceeds the actuarial value of assets as presented in Section III. The calculation of the UAAL as of the valuation date is shown in Table IV-3.

Table IV-3: Unfunded Actuarial Accrued Liability (UAAL)	
1. Total Actuarial Accrued Liability (Table IV-2)	$214,363
2. Actuarial Value of Assets (Table III-2(11))	$141,797
Unfunded Actuarial Accrued Liability (UAAL) (1 – 2)	$72,566

All dollar amounts are in thousands.

Although the terminology used to describe the excess of the System's actuarial accrued liability over the System's actuarial value of assets is call the "unfunded" actuarial accrued liability, there is a dedicated source of funding for this liability. The scheduled contributions are expected to completely fund the System's liabilities (pay off the UAAL) within 16 years.

The calculation of the System's actuarial assets and liabilities require the use of several assumptions concerning the future experience of the System and its members. In each annual valuation, the latest year of actual experience is compared to that expected by the prior valuation. The differences are actuarial gains and losses which decrease or increase the UAAL. Table IV-4 provides for the reconciliation of the UAAL and shows the primary sources of this year's gains and losses due to actuarial experience.

Table IV-4: Reconciliation of the UAAL

1. Beginning of Year UAAL	$75,083
2. Expected Amortization Payment	(6,359)
3. Expected Interest (1 x 8.00% + 2 x 8.00% x .5)	5,752
4. Expected End of Year UAAL (1 + 2 + 3)	$74,476
5. Actuarial Experience (Gain)/Loss	
COLA	(4,183)
Salary Experience	(2,132)
Other Liability Experience	(528)
Asset Experience	4,933
Total Actuarial (Gain)/Loss	($1,910)
6. End of Year UAAL (4 + 5)	$72,566

All dollar amounts are in thousands.

Section V: Actuarial Valuation Results

The employer contribution rate established by the Board funds the employers' portion of the normal cost and amortizes the UAAL over a period not to exceed 30 years. The primary result of the actuarial valuation is to test the sufficiency of the employer contribution rate to meet these funding requirements.

Section IV of this report presented the System's actuarial accrued liability as the portion of the present value of benefits allocated to past years of service. The portion of the active members' present value of benefits allocated to future years of service is funded through annual normal cost contributions comprised of both active member and employer contributions. The System's annual normal cost rate is calculated as a percent of covered payroll which is expected to remain level over all future years of service. The portion of the total normal cost rate in excess of the active member contribution rate is the employer normal cost rate. The normal cost rate developed as of the valuation date is presented in Table V-1.

Table V-1: Normal Cost Rate

Normal Cost Rate of Active Members by Expected Benefit Type	
Service Retirement	17.45%
Disability Retirement	2.79%
Survivors' Benefits	1.78%
Total Normal Cost Rate for Active Members	22.02%
Less: Active Member Contribution Rate	10.00%
Employer's Normal Cost Rate	12.02%

The established employer contribution rate, currently 45.09% of active member payroll, is available to fund the annual normal cost and amortize the UAAL as a level percent of payroll. In addition, there are other, less significant sources of UAAL amortization funding based upon the payroll of DROP and retired in place participants in the System. The contribution rates of these groups, along with the rate of active member payroll which is available to amortize the UAAL, is shown in Table V-2.

Table V-2: UAAL Amortization Rate

Calculation of Amortization Rate on Active Member Payroll

	% of Payroll
Statutory Employer Contribution Rate	45.09%
Less: Employer Normal Cost Rate (Table V-1)	12.02%
Employer Contribution Rate Available to Amortize UAAL	33.07%
Additional Sources of Amortization Funding	**% of Payroll**
DROP participants	55.09%
Retired in Place participants	55.09%

The System's amortization period or funding period is the calculated number of years necessary to fully amortize the UAAL with the available contribution amounts from all sources. The calculation assumes that the payroll of all sources, active members, DROP participants and retired in place participants, will increase at an annual rate of 3.25% each future year. The assumed rate of payroll growth reflects the System's assumption for long-term wage inflation and does not anticipate future increases in number of participants. Based upon this method, as of July 1, 2009 the calculated amortization period required to fully amortize UAAL (Table IV-3) with the expected amortization funding from all sources is 15.7 years.

If all actuarial assumptions were met exactly, the amortization period would be expected to have decreased by 1 year from the period calculated in the prior valuation. The actual experience of the latest valuation has decreased the amortization period by 0.6 years. The sources and magnitude of changes to the calculated amortization period due to the actual experience over the plan year are provided in Table V-3.

Table V-3: Reconciliation of Calculated Amortization Period

		Years
1. Amortization Period Calculated as of July 1, 2008		16.3
2. Change in years due to:		
Expected Decrease	(1.0)	
COLA Experience	(1.1)	
Salary Experience	(0.6)	
Other Liability Experience	(0.2)	
Asset Experience	2.3	
Total	(0.6)	
3. Amortization Period Calculated as of July 1, 2009 (1 + 2)		15.7

Section VI: Accounting Statement Information

The Tables provided in this Section present disclosure information necessary to comply with GASB requirements and information relevant for the annual financial reporting of the System.

Table VI-1: GASB Statement No. 25 Schedule of Funding Progress

Actuarial Valuation as of July 1	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Actuarial Assets as a % of Actuarial Liabilities	Unfunded AAL (UAAL)	Annual Active Member Payroll	UAAL as a % of Active Member Payroll
2009	$141,797	$214,363	66.1%	$72,566	$18,661	388.9%
2008	138,323	213,406	64.8%	75,083	18,661	402.4%
2007	132,990	229,388	58.0%	96,398	16,407	587.5%
2006	124,837	211,384	59.1%	86,547	15,929	543.3%
2005	118,888	204,847	58.0%	85,959	15,465	555.8%
2004	112,016	185,052	60.5%	73,036	14,870	491.2%
2003	106,114	166,655	63.7%	60,541	14,437	419.3%
2002	100,074	166,440	60.1%	66,366	14,211	467.0%
2001	94,795	159,246	59.5%	64,451	14,109	456.8%
2000	87,536	144,631	60.5%	57,095	13,214	432.1%

All dollar amounts are in thousands.

Table VI-2: Solvency Test

	Actuarial Accrued Liability for:						
Actuarial Valuation as of July 1	Active Member Contributions	Retirants & Beneficiaries	Employer Funded Portion of Active Members	Valuation Assets	Portion of Aggregate Accrued Liabilities Covered by Assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2009	$18,431	$144,464	$51,468	$141,797	100%	85.4%	0.0%
2008	17,367	141,510	54,529	138,323	100%	85.5%	0.0%
2007	18,999	149,435	60,954	132,990	100%	76.3%	0.0%
2006	21,857	112,823	76,704	124,837	100%	91.3%	0.0%
2005	20,005	110,876	73,966	118,888	100%	89.2%	0.0%
2004	17,640	106,159	61,253	112,016	100%	88.9%	0.0%
2003	16,545	96,409	53,701	106,114	100%	92.9%	0.0%
2002	16,162	101,716	48,562	100,074	100%	82.5%	0.0%
2001	15,254	97,512	46,480	94,795	100%	81.6%	0.0%
2000	12,979	94,633	37,019	87,536	100%	78.8%	0.0%

All dollar amounts are in thousands.

Table VI-3: Active Member and Payroll Information

Actuarial Valuation as of July 1	Number of Employers	Number of Active Members	Annual Payroll ($000's)	Annual Average Pay	Percentage Increase in Average Pay
2009	3	144	$18,661	$129,590	0.00%
2008	3	144	18,661	129,590	1.10%
2007	2	128	16,407	128,176	3.00%
2006	2	128	15,929	124,445	3.00%
2005	2	128	15,465	120,820	4.00%
2004	2	128	14,870	116,172	3.00%
2003	2	128	14,437	112,789	1.59%
2002	2	128	14,211	111,026	0.73%
2001	2	128	14,109	110,223	4.26%
2000	2	125	13,214	105,715	4.49%

Table VI-4: Schedule of Retirants Added to and Removed from Rolls

	Added to Rolls		Removed from Rolls		Roll End of Year			
Year Ended July 1	Number	Annual Allowances ($000's)	Number	Annual Allowances ($000's)	Number	Annual Allowances ($000's)	% Increase in Annual Allowances	Average Annual Allowances
2009	10	$903	4	$259	184	$13,744	4.9%	$74,696
2008	6	545	3	156	178	13,100	3.1%	73,596
2007	32	2,690	1	30	175	12,711	26.5%	72,634
2006	4	464	1	28	144	10,051	4.5%	69,799
2005	3	581	1	27	141	9,615	6.1%	68,191
2004	11	925	2	139	139	9,061	9.5%	65,190
2003	11	716	7	493	130	8,275	2.8%	63,654
2002	13	706	5	248	126	8,052	6.0%	63,905
2001	9	685	6	442	118	7,594	3.3%	64,356
2000	7	772	4	276	115	7,351	7.2%	63,926

Table VI-5: Retired Members and Beneficiaries as of July 1, 2009		
Group	**Number**	**Annual Retirement Allowances**
Service Retirements		
Employees:		
Male	117	$11,376,305
Female	11	662,613
Total	128	$12,038,918
Disability Retirements		
Employees:		
Male	1	$92,914
Female	0	0
Total	1	$92,914
Beneficiaries of Deceased Retired and Active Members		
Male	5	$41,608
Female	50	1,571,051
Total	55	$1,612,659
Grand Total	**184**	**$13,744,491**

Appendix A: Additional Membership Data

Table A-1: Schedule of Active Participant Data as of July 1, 2009

	Years of Service								
AGE	Under 5	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 & up	Total
Under 35	1								1
Avg. Pay	127,933								127,933
35 to 39	4								4
Avg. Pay	123,400								123,400
40 to 44	8	1	1	3					13
Avg. Pay	128,773	126,883	130,312	129,169					128,837
45 to 49	7	3	3	3	4				20
Avg. Pay	125,579	129,169	128,026	129,169	130,312				127,970
50 to 54	5	1	7	5	6	4			28
Avg. Pay	129,599	130,312	129,313	129,735	130,219	128,597			129,567
55 to 59	9		5	6	2	6	4		32
Avg. Pay	118,439		127,569	128,688	128,597	132,369	126,107		125,993
60 to 64	8	1		3	2	4	8		26
Avg. Pay	127,698	130,312		128,026	130,312	130,312	126,013		127,921
65 & up	2		3	1	1	5	8		20
Avg. Pay	130,245		129,169	126,883	130,312	131,684	127,173		129,050
Total	44	6	19	21	15	19	20		144
Avg. Pay	125,609	129,169	128,681	128,894	130,046	130,962	126,496		127,933

Table A-2: Comparative Summary of Active Data

	Prior Year	Current Year
Average Age	54.51 years	55.01 years
Average Service	15.65 years	15.36 years
Average Pay	$ 129,470	$ 127,933
Percent Female	19.1%	18.8%

Note: Average Pay is based on actual annualized earnings.

Appendix A: Additional Membership Data

Table A-3: Distribution of Participants Receiving Benefits as of July 1, 2009

NUMBER OF RETIRED MEMBERS AND THEIR BENEFITS BY AGE

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	1	$ 93,319	$ 93,319
50 – 54	2	141,102	70,551
55 – 59	10	811,888	81,189
60 – 64	28	2,543,230	90,830
65 – 69	34	3,389,879	99,702
70 – 74	21	1,966,227	93,630
75 – 79	15	1,494,294	99,620
80 & Over	17	1,598,979	94,058
Total	128	$ 12,038,918	$ 94,054

NUMBER OF DISABLED RETIREES AND THEIR BENEFITS BY AGE

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	0	$ 0	$ 0
50 – 54	0	0	0
55 – 59	0	0	0
60 – 64	0	0	0
65 – 69	0	0	0
70 – 74	0	0	0
75 – 79	1	92,914	92,914
80 & Over	0	0	0
Total	1	$ 92,914	$ 92,914

NUMBER OF BENEFICIARIES AND THEIR BENEFITS BY AGE

Age	Number of Members	Total Annual Benefits	Average Annual Benefits
Under 50	7	$ 94,207	$ 13,458
50 – 54	3	59,403	19,801
55 – 59	4	112,458	28,115
60 – 64	5	175,775	35,155
65 – 69	2	69,036	34,518
70 – 74	5	165,099	33,020
75 – 79	7	227,760	32,537
80 & Over	22	708,921	32,224
Total	55	$ 1,612,659	$ 29,321

Appendix A: Additional Membership Data

Appendix B: Actuarial Assumptions and Methods

Investment Rate of Return

Assumed annual rate of 8.00% net of investment and administrative expenses composed of a 3.00% inflation component and a 5.00% real rate of return component.

Rates of Annual Salary Increase

Rates of salary are assumed to increase at an annual rate of 3.25%

Active Member Decrement Rates

a. Table below provides a summary of the assumed rates of mortality while actively employed, and disability. No withdrawal from active membership is assumed.

Annual Rates of Decrements				
Age	**Pre-Retirement Mortality**		**Disability**	
	Male	Female	Male	Female
25	0.06%	0.03%	0.04%	0.05%
30	0.07%	0.04%	0.06%	0.07%
35	0.07%	0.04%	0.08%	0.07%
40	0.10%	0.05%	0.15%	0.12%
45	0.18%	0.08%	0.25%	0.25%
50	0.30%	0.13%	0.40%	0.40%
55	0.46%	0.21%	0.65%	0.65%
60	0.65%	0.33%	1.00%	1.00%
65	0.99%	0.54%	1.25%	1.25%

Appendix B: Actuarial Assumptions and Methods

b. Normal Retirement Rates differ based upon the member being eligible to Retire in Place (RIP) prior to reaching age 72. 100% of participants are assumed to retire upon reaching the mandatory retirement age of 72. Upon meeting the retirement eligibility requirement, participants are assumed to retire at the following rates:

ASSUMED RATES OF RETIREMENT							
Solicitors and Public Defenders				Judges			
Age	Service	RIP Eligible	Not RIP Eligible	Age	Service	RIP Eligible	Not RIP Eligible
70 to 72	15 to 19	12%	12%	70 to 72	15 to 19	12%	12%
65 to 69	20 to 23	40%	40%	65 to 69	20 to 24	40%	40%
Any	24	20%	40%	Any	25	15%	25%
Any	25	15%	25%	Any	26	10%	15%
Any	26	10%	12%	Any	27	10%	15%
Any	27	10%	12%	Any	28	10%	15%
Any	28	10%	12%	Any	29	10%	15%
Any	29	5%	12%	Any	30	5%	15%
Any	30	5%	12%	Any	31	5%	15%
Any	31*	12%*	35%	Any	32*	12%*	35%
Any	32+	12%	12%	Any	33+	12%	15%

* Additionally, the remaining 88% of eligible members are assumed to retire in Place.

Post-Retirement Mortality

Assumed rate of mortality for healthy retirees and beneficiaries is the 1983 Group Annuity Mortality Table rates. A separate table of mortality rates is used for disabled retirees. The following are sample rates for retirees and beneficiaries:

Post-Retirement Mortality Assumption				
	Healthy		Disabled	
Age	Male	Female	Male	Female
60	0.92%	0.42%	4.88%	2.88%
65	1.56%	0.71%	5.95%	3.66%
70	2.75%	1.24%	7.63%	4.88%
75	4.46%	2.40%	10.22%	6.77%
80	7.41%	4.29%	14.17%	9.71%
85	11.48%	6.99%	20.09%	14.16%

Marriage Assumption

95% of all active members are assumed to be married, with female spouses being 4 years younger than males.

Asset Valuation Method

The actuarial value of assets is equal to the market value of assets less a ten-year phase in of the excess (shortfall) between expected market investment return and actual net investment income (excess returns and shortfalls determined prior to July 1, 2008 remain with a five-year phase in).

Appendix B: Actuarial Assumptions and Methods

Actuarial Cost Method

The contribution rate is set by statute for both employees and employers. The funding period is determined, as described below, using the Entry Age Normal actuarial cost method. The Entry Age Normal actuarial cost method allocates the plan's actuarial present value of future benefits to various periods based upon service. The portion of the present value of future benefits allocated to years of service prior to the valuation date is the actuarial accrued liability, and the portion allocated to years following the valuation date is the present value of future normal costs. The normal cost is determined for each active member as the level percent of payroll necessary to fully fund the expected benefits to be earned over the career of each individual active member. The normal cost is partially funded with active member contributions with the remainder funded by employer contributions.

An unfunded accrued liability exists in the amount equal to the excess of accrued liability over valuation assets. The amortization period of the System is the number of years required to fully amortize the unfunded accrued liability with the expected amount of employer contributions in excess of the employers' portion of the normal cost.

The calculation of the amortization period takes into account scheduled increases to contribution rates applicable to future years and payroll growth. Also, the calculation of the amortization period reflects additional contributions the System receives with respect to return to work retirees. These contributions are assumed to grow at the same payroll growth rate as for active employees. It is assumed that amortization payments are made monthly at the end of the month.

Future Cost-of-living Increases

Benefits are assumed to increase 3.25% annually beginning on the July 1st next following receipt of 12 monthly benefit payments.

Administrative and Investment Expenses

The investment return assumption represents the expected return net of all administrative and investment expenses.

Payroll Growth Rate

The total annual payroll of active members (also applies rehired retiree participants) is assumed to increase at an annual rate of 3.25%. This rate does not anticipate increases in the number of members.

Changes from Prior Valuation

None.

Appendix C: Summary of Plan Provisions

This summary of plan provisions is based on our understanding of the benefits as described by the South Carolina Code of Laws, summary plan descriptions and the South Carolina Retirement Systems. It is intended to only describe the essential features of the plan. All eligibility requirements and benefit amounts shall be determined in strict accordance with the law.

Effective Date

July 1, 1979

Eligibility Requirements

All solicitors, public defenders, judges of circuit or family courts or the Court of Appeals, and the justices of the Supreme Court in the State of South Carolina are required to participate upon taking office.

Creditable Service

Creditable service means service during which contributions have been made. This is counted in years, months, and days.

There are a number of different types of services that may be purchased by an employee under special rules, such as military service.

Service Requirement

Eligibility - Attainment of age 70 with 15 years of creditable service, or age 65 with 20 years of creditable service, or 25 years for judges and 24 years for solicitors and public defenders regardless of age. In addition, age 65 with 4 years in JSRS plus 25 years in another system. The mandatory retirement age is 72.

Benefit - 71.3% of the current active salary of the position from which the member retired. Members who retired after July 1, 1990, receive an additional 2.67% of compensation for each year of service beyond 25 years for judges and 24 years for solicitors and public defenders but not to exceed 90% of compensation.

Disability Retirement

Eligibility - Disability prior to normal retirement age with at least 5 years of creditable service.

Benefit - The disability benefit is computed in the same manner as the service retirement benefit.

Death Benefits

Single Member

> An annuity equal to the amount that would have been payable had the member retired the day of death, calculated under the optional form of payment and payable to the designated beneficiary, plus the Group Life Insurance Benefit.

Married Member

> An annuity equal to one-third of the amount that would have been payable had the member retired the day of death, payable to the surviving spouse until her death, plus the Group Life Insurance Benefit.

Appendix C: Summary of Plan Provisions

Group Life Insurance Benefit

A lump-sum payment equal to one year's salary payable to the beneficiary upon the death of an active member with at least one year of creditable service. The service requirement will be waived for deaths resulting from actual performance of duties.

Employee Contributions

The member contribution rate is 10%. Accumulated member contributions are credited with interest at the rate of 4% per year.

Vested Benefit Upon Termination

Eligibility - 100% vesting upon completion of 10 years of creditable service for judges and 8 years for solicitors.

Benefit Service retirement benefit computed as if the member has 24 years of creditable service, prorated by actual years of creditable service at date of separation. The benefit will commence at age 65. For members who began service before July 1, 2004, the benefit commences at age 55.

Termination Benefit

Eligibility - Elect return of accumulated employee contributions.

Benefit - Return of employee contributions plus interest.

Normal Form of Retirement Income

Single Member - Monthly life annuity with guaranteed return of employee contributions plus interest.

Married Member - A joint and 33 1/3% joint and survivor annuity unless a contingent beneficiary is named.

Optional Forms of Retirement Income

Beneficiary other than spouse - Calculate the maximum payment to the member, then apply JSRS calculated option factor by using the SCRS Option C factor for current age of member and beneficiary. Beneficiary(ies) receives 1/3 of the benefit payable to the retired member. The JSRS option factor is calculated as follows:

JSRS Option Factor = (3 x SCRS Opt. C Factor) / (1 + 2 x SCRS Opt. C. Factor)

Future Cost of Living Adjustment

For a retired member and his/her spouse, the adjustment reflects the increase in the current salary of the position from which the member retired.

For a contingent beneficiary other than the spouse, the amount is the increase in the calendar year CPI not in excess of 4%.

Appendix C: Summary of Plan Provisions

Retire in Place

Members who have accrued 90% percent of salary (32 years for Judges and 31 year for Solicitors and Public Defenders) may elect to “retire in place”. Those eligible members electing to retire in place will begin to receive their accrued retirement benefits while remaining employed, not accrue additional benefits, and continue to contribute 10% of their compensation from active employment. For the purpose of group life insurance benefits, these members are treated as active employees.

A member who has not yet reached the age of 60 years, but who is eligible to retire in place will have his or her retirement benefit paid into a deferred retirement option program (DROP).   Upon reaching the age of 60 years (or retirement if earlier), the balance of the member’s deferred retirement benefit is distributed to the member and the member begins receiving their retirement benefit directly.

Changes from Prior Valuation

None