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**Report of the Actuary on the
Annual Valuation of the
Shelby County Retirement System**

Prepared as of June 30, 2010





Cavanaugh Macdonald

CONSULTING, LLC

The experience and dedication you deserve

October 26, 2010

Board of Commissioners
Shelby County Retirement System
160 North Main Street, Suite 950
Memphis, TN 38103

Members of the Board:

We are pleased to submit the results of the actuarial valuation of the Shelby County Retirement System prepared as of June 30, 2010. The purpose of this report is to provide a summary of the funded status of the System as of June 30, 2010, to recommend rates of contribution and to provide accounting information under Governmental Accounting Standards Board Statements No. 25 and 27 (GASB 25 and 27).

On the basis of the valuation, it is recommended that employer contributions to the System be set at a rate of 9.68% of payroll for the fiscal year ending June 30, 2012. The promised benefits of the System are included in the calculated contribution rate which is developed using the projected unit credit cost method. Ten-year smoothed market value of plan assets is used for the actuarial value of assets. Gains and losses are reflected in the unfunded accrued liability that is being amortized by regular annual contributions within a 30-year period. The initial obligation for Plan C is being amortized by annual contributions within a 16-year period.

Since the previous valuation, no changes were made to the assumptions, methods, or plan provisions.

The valuation has been prepared in accordance with the parameters set forth in Statement Nos. 25 and 27 of the Governmental Accounting Standards Board. The annual required contribution (ARC) for the County under GASB for the fiscal year ending June 30, 2012 is 9.68% of payroll, based on a weighted 16-year period for amortization of the unfunded accrued liability.

We have prepared the Schedule of Active Member Valuation Data, Schedule of Retirees and Beneficiaries, and the Analysis of Financial Experience for the actuarial section of the Annual Report and the Schedule of Funding Progress for the financial section of the Annual Report.

This is to certify that the independent consulting actuary is a Member of the American Academy of Actuaries and has 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 System and on actuarial assumptions that are internally consistent and reasonably based on the actual experience of the System. While not verifying the data at source, the actuary performed tests for consistency and reasonability.

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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; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); 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.

We trust that the report will meet the approval of the Board and will furnish the desired information concerning the financial condition of the System.

Respectfully submitted,

A handwritten signature in blue ink that reads "Edward J. Koebel".

Edward J. Koebel, EA, FCA, MAAA
Principal and Senior Actuary

A handwritten signature in blue ink that reads "Edward A. Macdonald".

Edward A. Macdonald, ASA, FCA, MAAA
President

EJK/EAM:bdm



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**SHELBY COUNTY RETIREMENT SYSTEM
REPORT OF THE ACTUARY
ON THE VALUATION
PREPARED AS OF JUNE 30, 2010**

SECTION I – SUMMARY OF PRINCIPAL RESULTS

1. For convenience of reference, the principal results of the current and preceding valuations are summarized below.

Valuation Date	June 30, 2010	June 30, 2009
Active members:		
Number	6,197	6,332
Annualized compensation	\$ 266,559,324	\$ 271,887,613
Retired members and beneficiaries:		
Number	2,849	2,749
Annual allowances	\$ 48,482,628	\$ 46,108,815
Number of participants with deferred benefits	338	342
Assets:		
Market Value	\$ 825,764,292	\$ 735,872,504
Actuarial Value	1,053,055,938	1,052,639,514
Unfunded actuarial accrued liability	\$ 31,296,621	\$ (26,772,516)
Weighted Amortization Period	16 years	15 years
Fiscal Year Ending	June 30, 2012	June 30, 2011
County annual required contribution rate (ARC):		
Normal	8.41%	8.09%
Accrued liability	<u>1.27</u>	<u>(1.26)</u>
Total	9.68%	6.83%

2. The major benefit and contribution provisions of the Plan as reflected in the valuation are summarized in Schedule E. There have been no changes since the previous valuation.



3. Schedule D of this report outlines the full set of actuarial assumptions and methods used in the valuation. Schedule B shows the development of the actuarial value of assets. There have been no changes since the previous valuation.
4. The projected unit credit actuarial cost method was used to prepare the valuation.
5. Comments on the valuation results as of June 30, 2010 are given in Section IV and further discussion of the contributions is set out in Section V.

SECTION II – MEMBERSHIP DATA

1. Data regarding the membership of the System for use as a basis of the valuation were furnished by the County. The valuation included 6,197 active members with annualized compensation totaling \$266,559,324.

THE NUMBER AND ANNUAL BASE EARNINGS OF ACTIVE MEMBERS AS OF JUNE 30, 2010

	NUMBER	TOTAL ANNUAL BASE EARNINGS
Plan B	42	\$ 2,712,890
Plan A	2,551	107,158,064
Plan C	<u>3,604</u>	<u>156,688,370</u>
Total	6,197	\$ 266,559,324



2. The following table shows the number of retired members and beneficiaries as of June 30, 2010 together with the amount of their annual retirement benefits payable under the System as of that date.

**THE NUMBER AND ANNUAL BENEFITS OF
RETIRED MEMBERS AND BENEFICIARIES
AS OF JUNE 30, 2010**

TYPE OF RETIREMENT	PLAN B	PLAN A	PLAN C	TOTAL
Service:				
Number	895	1,152	139	2,186
Annual Benefits	\$19,995,517	\$15,717,803	\$3,403,558	\$39,116,878
Disability:				
Number	31	90	0	121
Annual Benefits	\$430,549	\$1,954,796	\$0	\$2,385,345
Survivors:				
Number	304	229	9	542
Annual Benefits	\$4,450,613	\$2,369,285	\$160,507	\$6,980,405
Total:				
Number	1,230	1,471	148	2,849
Annual Benefits	\$24,876,679	\$20,041,884	\$3,564,065	\$48,482,628

*In addition, there are 338 participants entitled to deferred annual benefits totaling \$5,931,196.

3. Table 1 of Schedule F shows a reconciliation of the membership from June 30, 2009 to June 30, 2010. Tables 2, 3 and 4 of Schedule F show the distribution by age and years of membership service of the number of active members included in the valuation by plan, while Tables 5, 6 and 7 show the number and annual benefits of retired members and beneficiaries included in the valuation by plan, distributed by age.



SECTION III – ASSETS

As of June 30, 2010, the total market value of assets amounted to \$825,764,292, as reported by the auditor. The actuarial value of assets used for the current valuation was \$1,053,055,938. Schedule B shows the development of the actuarial value of assets as of June 30, 2010.

SECTION IV – COMMENTS ON VALUATION

1. Schedule A of this report outlines the results of the actuarial valuation. The valuation was prepared in accordance with the actuarial assumptions and the actuarial cost method, which are described in Schedule D.
2. The valuation shows that the liability on account of benefits payable to all Plan B participants amounts to \$237,518,751. The liability on account of benefits payable to all Plan A participants amounts to \$425,519,528. The liability on account of benefits payable to all Plan C participants amounts to \$421,314,280. Therefore, the total actuarial accrued liability of the System amounts to \$1,084,352,559. Against these liabilities, the System has present assets for valuation purposes of \$1,053,055,938. When this amount is deducted from the actuarial accrued liability of \$1,084,352,559, there remains \$31,296,621 as the unfunded actuarial accrued liability.
3. The normal contribution rate is equal to the actuarial present value of benefits accruing during the current year divided by the annual active members' payroll. The normal contribution rate is determined to be 8.41% of payroll.



SECTION V – CONTRIBUTIONS PAYABLE

1. The contributions consist of a normal contribution and an accrued liability contribution as determined by actuarial valuation.
2. The normal contribution rate is calculated as the level percentage of payroll which, if applied for the average new member during the entire period of his anticipated covered service, would be required to meet the cost of all benefits payable on his behalf. On the basis of the valuation, the normal contribution rate was determined to be 8.41%.
3. A contribution of 1.27% of payroll will liquidate the unfunded accrued liability within a weighted 16-year period.
4. The total County contribution rate required for the fiscal year ending June 30, 2012 is, therefore, 9.68% of payroll.
5. The following table summarizes the employer contributions which were determined by the June 30, 2010 valuation and are recommended for use.

**COUNTY ANNUAL REQUIRED CONTRIBUTIONS (ARC)
FOR FISCAL YEAR ENDING JUNE 30, 2012**

CONTRIBUTION	PERCENTAGE OF ACTIVE MEMBERS' COMPENSATION
Normal	8.41%
Accrued Liability	<u>1.27</u>
Total	9.68%



SECTION VI – ACCOUNTING INFORMATION

1. Governmental Accounting Standards Board Statements 25 and 27 set forth certain items of required supplementary 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 JUNE 30, 2010**

GROUP	PLAN B	PLAN A	PLAN C	TOTAL
Retired participants and beneficiaries currently receiving benefits	1,230	1,471	148	2,849
Terminated participants and beneficiaries entitled to benefits but not yet receiving benefits	5	277	56	338
Active Participants	<u>42</u>	<u>2,551</u>	<u>3,604</u>	<u>6,197</u>
Total	1,277	4,299	3,808	9,384

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

**SCHEDULE OF FUNDING PROGRESS
Dollar Amounts in Thousands**

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)
6/30/2005	\$885,049	\$780,801	\$(104,248)	113.4%	\$241,509	(43.2)%
6/30/2006	933,730	860,179	(73,551)	108.6	241,404	(30.5)
6/30/2007	992,145	934,829	(57,316)	106.1	249,839	(22.9)
6/30/2008	1,040,514	1,000,475	(40,039)	104.0	260,108	(15.4)
6/30/2009	1,052,640	1,025,867	(26,773)	102.6	271,888	(9.8)
6/30/2010	1,053,056	1,084,353	31,297	97.1	266,559	11.7

All figures prior to June 30, 2009 were reported by a prior actuarial firm.



3. Another such item is the schedule of employer contributions as shown below.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

FISCAL YEAR ENDING	ANNUAL REQUIRED CONTRIBUTION	PERCENT CONTRIBUTED
6/30/2005	\$9,645,830	195%
6/30/2006	10,322,629	182
6/30/2007	11,037,956	170
6/30/2008	12,956,023	145
6/30/2009	15,261,041	123
6/30/2010	16,652,005	116

4. The annual required contribution (ARC) as a percentage of payroll, determined in accordance with the parameters of GASB 25/27, is shown below.

EMPLOYER ANNUAL REQUIRED CONTRIBUTION (ARC)	FISCAL YEAR ENDING JUNE 30, 2012
Normal	8.41%
Accrued liability	<u>1.27</u>
Total	9.68%

5. Additional information as of June 30, 2010 follows:

Valuation date	6/30/2010
Actuarial cost method	Projected unit credit
Amortization period	Level dollar open
Remaining amortization period*	16 years
Asset valuation method	Ten-year smoothed market value
Actuarial assumptions:	
Investment rate of return (includes inflation)	8.25%
Projected salary increases	3.00% - 8.50%
Cost-of-living adjustments	CPI-U up to 4% for Plan A and Plan C

* This period is a weighted average of the amortization for Plan C (16 years) and the amortization of the unfunded accrued liability (30 years).



SECTION VII – EXPERIENCE

Actual experience will never (except by coincidence) coincide exactly with assumed experience. It is assumed that gains and losses will be in balance over a period of years, but sizable year to year fluctuations are common. Detail on the derivation of the experience gain/(loss) for the year ended June 30, 2010 is shown below.

	<u>\$ Thousands</u>
(1) UAAL* as of June 30, 2009	\$ (26,772.5)
(2) Normal cost from last valuation	21,985.0
(3) Actual employer contributions	19,390.2
(4) Interest accrual: $(1) \times .08 + [(2) - (3)] \times .04$	<u>(2,038.0)</u>
(5) Expected UAAL before changes: $(1) + (2) - (3) + (4)$	\$ (26,215.7)
(6) Change due to plan amendments	0.0
(7) Change due to actuarial assumptions or methods	<u>0.0</u>
(8) Expected UAAL after changes: $(5) + (6) + (7)$	\$ (26,215.7)
(9) Actual UAAL as of June 30, 2010	\$ 31,296.6
(10) Gain/(loss): $(8) - (9)$	\$ (57,512.3)
(11) Gain/(loss) as percent of actuarial accrued liabilities for prior year (\$1,025,867.0)	(5.6)%

*Unfunded actuarial accrued liability.

Valuation Date December 31	Actuarial Gain/(Loss) as a % of Beginning Accrued Liabilities
2010	(5.6)%



SCHEDULE A

**DEVELOPMENT OF THE COUNTY CONTRIBUTION REQUIREMENT
AS OF JUNE 30, 2010**

(1)	Actuarial Accrued Liability:	
(a)	Plan B	
(i)	Actives and Transfers	\$ 16,873,248
(ii)	Retired, Beneficiaries, Disabled, Deferred	<u>220,645,503</u>
(iii)	Total = (i) + (ii)	\$ 237,518,751
(b)	Plan A	
(i)	Actives and Transfers	\$ 204,786,538
(ii)	Retired, Beneficiaries, Disabled, Deferred	<u>220,732,990</u>
(iii)	Total = (i) + (ii)	\$ 425,519,528
(c)	Plan C	
(i)	Actives and Transfers	\$ 374,314,652
(ii)	Retired, Beneficiaries, Disabled, Deferred	<u>46,999,628</u>
(iii)	Total = (i) + (ii)	\$ 421,314,280
(d)	Total = (a)iii + (b)iii + (c)iii	\$ 1,084,352,559
(2)	Actuarial Asset Value	\$ 1,053,055,938
(3)	(Surplus) or Obligation	
(a)	Remaining Obligation due to Plan C	\$ 33,588,218
(b)	Remaining (Surplus) or Obligation	<u>(2,291,598)</u>
(c)	Net (Surplus) or Obligation = (1)d – (2)	\$ 31,296,621
(4)	Amortization of (Surplus) or Obligation	
(a)	Amortization of Obligation due to Plan C over 20 years from July 1, 2006	\$ 3,561,714
(b)	Amortization of Unfunded Accrued Liability over 30 years from July 1, 2010	<u>(192,496)</u>
(c)	Total = (a) + (b)	\$ 3,369,218



SCHEDULE A
(continued)

(5)	Total Normal Cost	
(a)	Plan B	\$ 270,012
(b)	Plan A	10,479,682
(c)	Plan C	<u>21,294,781</u>
(d)	Total = (a) + (b) + (c)	\$ 32,044,475
(6)	Expected Employee Contributions	
(a)	Plan B Participants	\$ (217,031)
(b)	Plan C Participants	<u>(9,401,302)</u>
(c)	Total = (a) + (b)	\$ (9,618,333)
(7)	Employer Normal Cost	
(a)	Plan B = (5)a + (6)a	52,981
(b)	Plan A = (5)b	10,479,682
(c)	Plan C = (5)c + (6)b	<u>11,893,479</u>
(d)	Total = (a) + (b) + (c)	\$ 22,426,142
(8)	Total County Contribution = (4) + (7)	\$ 25,795,360
(9)	Actual 2009 Active Payroll	
(a)	Plan B	\$ 2,712,890
(b)	Plan A	107,158,064
(c)	Plan C	<u>156,688,370</u>
(d)	Total = (a) + (b) + (c)	\$ 266,559,324
(10)	County Contribution Rate	
(a)	Normal Cost	8.41%
(b)	Amortization of Plan C	1.34
(c)	Amortization of Surplus	<u>(0.07)</u>
(d)	Total = (a) + (b) + (c)	9.68%



SCHEDULE B

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial Value of Assets as of June 30, 2009	\$ 1,052,639,514
(2)	Market Value of Assets as of June 30, 2010	\$ 825,764,292
(3)	Market Value of Assets as of June 30, 2009	\$ 735,872,504
(4)	Net Cash Flow During Plan Year	
(a)	Contributions	\$ 28,771,378
(b)	Benefit Payments	(51,858,539)
(c)	Administration Expenses	<u>(1,138,746)</u>
(d)	Net Cash Flow: (a) + (b) + (c)	\$ (24,225,907)
(5)	Investment Income	
(a)	Market Total: (2) – (3) – (4)d	\$ 114,117,695
(b)	Assumed Rate	8.25%
(c)	Amount for Immediate Recognition	\$ 60,816,520
(d)	Amount for Phased-In Recognition: (5)a – (5)c	\$ 53,301,175
(6)	Recognized Amounts for Plan Year	
(a)	Current Year: 0.10 x (5)d	\$ 5,330,118
(b)	First Prior Year	(29,407,425)
(c)	Second Prior Year	(13,897,942)
(d)	Third Prior Year	8,985,741
(e)	Fourth Prior Year	1,165,919
(f)	Fifth Prior Year	(820,593)
(g)	Sixth Prior Year	4,392,506
(h)	Seventh Prior Year	(1,597,241)
(i)	Eighth Prior Year	(9,162,409)
(j)	Ninth Prior Year	<u>(1,162,862)</u>
(k)	Total Recognized Investment Gain/(Loss)	\$ (36,174,188)
(7)	Actuarial Value of Assets as of June 30, 2010 (1) + (4)d + (5)c + (6)k	\$ 1,053,055,938
(8)	Rate of Return on Actuarial Value	2.26%



SCHEDULE C

ASSET INFORMATION

<i>Receipts</i>		
(1) Employee Contributions		\$ 9,381,228
(2) Employer Contributions		19,390,150
(3) Investment Income		<u>114,117,695</u>
(4) Total Receipts		\$142,889,073
<i>Disbursements</i>		
(5) Retirement	\$ 48,159,243	
(6) Refunds and Cashouts	3,699,296	
(7) Administrative Expenses	<u>1,138,746</u>	
(8) Total Disbursements		\$ 52,997,285
(9) Excess of Receipts Over Disbursements: (4) - (8)		\$ 89,891,788
<i>Reconciliation of Asset Balances</i>		
(10) Market Value at June 30, 2009		\$735,872,504
(11) Excess of Receipts Over Disbursements		<u>89,891,788</u>
(12) Market Value at June 30, 2010		\$825,764,292
(13) Estimated Rate of Return on Market Value of Assets		15.60%



SCHEDULE D

OUTLINE OF ACTUARIAL ASSUMPTIONS AND METHODS

INVESTMENT RATE OF RETURN: 8.25% per year (net after administrative expenses).

SALARY INCREASES:

Age	Increase per year
20-24	8.5%
25-29	8.0
30-34	7.5
35-39	7.0
40-44	6.0
45-49	5.5
50-54	5.0
55-59	4.5
60-64	4.0
65 +	3.0

EXPENSES: None.

COST-OF-LIVING ADJUSTMENT: 2.50% per year, compounded for Plan A and Plan C.

PERCENT MARRIED: 65% of active members are assumed to be married with the male three years older than his spouse.

ASSETS: Actuarial value, as developed in Schedule C. The actuarial value of assets recognizes a portion of the difference between the market value of assets and the expected market value of assets, based on the assumed valuation rate of return. The amount recognized each year is 10% of the difference between market value and expected market value.

VALUATION METHOD: Projected Unit Credit actuarial cost method.



SEPARATIONS FROM SERVICE: Representative values of the assumed rates of death, disability, withdrawal, service retirement and early retirement are as follows:

Plan B

Age	Annual Rate of					
	Death*		Disability*		Withdrawal**	
	Male	Female	Male	Female	Male	Female
20	0.031%	0.017%	0.029%	0.030%	17.95%	57.96%
25	0.035	0.019	0.038	0.047	11.94	37.95
30	0.043	0.025	0.048	0.080	8.32	23.94
35	0.075	0.044	0.069	0.136	5.88	16.32
40	0.103	0.065	0.117	0.211	3.43	11.50
45	0.139	0.102	0.202	0.323	2.10	7.45
50	0.192	0.151	0.358	0.533	10.00	10.00
55	0.323	0.259	0.722	0.952	15.00	15.00
60	0.613	0.491	1.256	1.159	20.00	20.00
65	1.170	0.942	1.753	1.358	0.00	0.00
70	2.028	1.625	2.180	1.664	0.00	0.00

*75% of deaths and disabilities are assumed to be line-of-duty for deputy sheriffs. 10% of deaths and disabilities are assumed to be line-of-duty for general employees.

**Assume early retirements occur according to withdrawal rates; ultimate retirements at age 65 for General Employees and age 60 for Deputy Sheriffs.

Plan A

Age	Annual Rate of					
	Death*		Disability*		Withdrawal	Retirement
	Male	Female	Male	Female		
20	0.031%	0.017%	0.029%	0.030%	12.0%	0.0%
25	0.035	0.019	0.038	0.047	12.0	0.0
30	0.043	0.025	0.048	0.080	8.0	0.0
35	0.075	0.044	0.069	0.136	7.0	0.0
40	0.103	0.065	0.117	0.211	6.0	0.0
45	0.139	0.102	0.202	0.323	5.0	0.0
50	0.192	0.151	0.358	0.533	5.0	0.0
55	0.323	0.259	0.722	0.952	7.0	5.0
60	0.613	0.491	1.256	1.159	7.0	5.0
65	1.170	0.942	1.753	1.358	7.0	12.0
67	1.486	1.180	1.950	1.505	0.0	100.0

*90% of deaths and disabilities are assumed to be non-hazardous duty.



Plan C

Age	Annual Rate of							
	Death*		Disability*		Withdrawal	Retirement**		
	Male	Female	Male	Female		Before 25 years of service	After 25 years of service	
						Public Safety	Non-Public Safety	
20	0.031%	0.017%	0.029%	0.030%	12.0%			
25	0.035	0.019	0.038	0.047	12.0			
30	0.043	0.025	0.048	0.080	8.0			
35	0.075	0.044	0.069	0.136	7.0			
40	0.103	0.065	0.117	0.211	6.0		20.0%	10.0%
45	0.139	0.102	0.202	0.323	5.0		20.0	10.0
50	0.192	0.151	0.358	0.533	5.0		20.0	10.0
55	0.323	0.259	0.722	0.952	7.0	5.0%	40.0	10.0
60	0.613	0.491	1.256	1.159	7.0	5.0	100.0	20.0
65	1.170	0.942	1.753	1.358	7.0	12.0	100.0	25.0
67	1.486	1.180	1.950	1.505	0.0	100.0	100.0	100.0

*90% of deaths and disabilities are assumed to be non-hazardous duty.

**Assume that the retirement rate for employees with at least 25 years of service increases by 50% in the year following the Transition Period.

DEATHS AFTER RETIREMENT: The RP-2000 Mortality Table Projected to 2006 is used for the period after retirement and for dependent beneficiaries. Special rates are used for the period after disability retirement. Representative values of the assumed rates of death after service and disability retirement are as follows:

Age	Annual Rate of Death After			
	Service Retirement		Disability Retirement	
	Male	Female	Male	Female
50	0.192	0.151	4.537	3.363
55	0.323	0.259	5.690	3.701
60	0.613	0.491	6.922	4.122
65	1.170	0.942	8.219	4.527
70	2.028	1.625	9.299	5.063
75	3.477	2.678	11.203	6.349
80	6.060	4.399	11.360	8.472
85	10.619	7.470	15.253	11.480



SCHEDULE E

**SUMMARY OF MAIN SYSTEM PROVISIONS
AS INTERPRETED FOR VALUATION PURPOSES**

PLAN B

Eligibility	All salaried employees hired prior to December 1, 1978 were eligible at date of employment and had to apply for membership as a condition of such employment. "Employee" means any person employed on a regular full-time basis, excluding officials or employees of the Board of Education of Shelby County. Entry in the System was optional for individuals employed on a per diem basis. Employees not able to complete the required number of years of service prior to mandatory retirement age could not join the plan.
Final Average Earnings	<p>If a participant had 10 years of credited service on October 1, 1977, the greater of:</p> <ol style="list-style-type: none">1) Average monthly earnings for the five consecutive years of County Service during which earnings was the highest or,2) Average monthly earnings for the 12 months preceding the date of retirement. <p>If the participant did not have 10 years of service on October 1, 1977, the average monthly earnings for the 36 consecutive months during which the employee received his highest earnings.</p>
Normal Retirement Benefit	
Eligibility	25 years of credited service or age 60 (age 55 if Deputy Sheriff) and 10 years of credited service.
Benefit	2.7% of final average earnings multiplied by years of credited service not in excess of 25 plus 1% of final average earnings multiplied by years of credited service greater than 25 but less than 35. The maximum benefit is 77.5% of final average earnings. The minimum monthly benefit is \$300 (\$150 monthly if jointly employed by the City and County).
Disability Retirement	
Eligibility	After January 1, 2007, only participants who are disabled in the line-of-duty are eligible to receive a disability pension.
Benefit	<p>The greater of:</p> <ol style="list-style-type: none">1) The Normal Retirement Benefit (if participant is then eligible for a Normal Retirement Benefit) or,2) 50% of Final Average Earnings.



PLAN B

Termination of Employment

If employment is terminated prior to the completion of 10 years of credited service, a refund of the participant's contributions, without interest, is payable.

If employment is terminated after completion of 10 years of credited service, a deferred vested benefit equal to the participant's accrued benefit at date of termination is paid commencing at age 60. Benefits are payable to the surviving spouse after age 60 of the participant. The participant may elect to withdraw his contributions, without interest, instead of receiving the deferred monthly benefit at age 60.

Death Benefit

If a participant dies before completing 10 years of credited service and does not die in line-of-duty, his beneficiary will receive a refund of the participant's contributions, without interest.

If a participant dies after completing 10 years of credited service or after retirement the member's eligible spouse will receive the participant's accrued benefit until death.

If death occurs in line-of-duty, a benefit of 50% of the participant's final average earnings will be paid to the spouse until death.

Contributions

Each year the County contributes an amount determined actuarially to sustain the plan on an actuarially determined funding basis. Employees contribute 8% of earnings to the retirement plan for the first 35 years. After 35 years, employees contribute 8% of any increases in pay.

Cost of Living Adjustment

Cost-of-living-adjustments are granted on an ad-hoc basis as determined annually by the Board of Commissioners.



PLAN A

Eligibility All employees hired after December 1, 1978 and prior to March 1, 2005 including all full-time, part-time and elected employees, and members of Plan B electing to transfer to Plan A and employees of all joint City/County agencies administered by Shelby County participate. CETA employees, Board of Education employees, employees electing Social Security coverage, and Joint City/County agencies not administered by Shelby County cannot participate.

Public Safety Employees Public Safety Employees, hired prior to March 1, 2005, who did not elect to transfer to Plan C, effective September 1, 2005, are no longer eligible to retire under the 25 year-and-out program and no longer contribute to Plan A.

Final Average Earnings The average over the three highest consecutive years of earnings.

Normal Retirement Benefit

Eligibility Age 65 regardless of amount of credited service.

Benefit Final average earnings multiplied by a percentage from Table A, which is included in the appendix to the plan. Listed below is a summary of Table A:

Years of Service	Benefit Accrual Per Year
1 – 7	1.5%
8 – 13	2.0
14 – 20	2.5
21 – 25	3.0
26 – 30	3.0
31 – 35	2.5
36 – 38	2.5
39 and above	0.0

Early Retirement Benefit

Eligibility Age 55 and completion of 7.5 years of credited service.

Benefit The Normal Retirement Benefit reduced 2.5% for each year less than age 65.



PLAN A

Disability Retirement

Eligibility

After January 1, 2002, no disability benefits are provided by the Plan. Upon reaching age 65, a disabled participant will have any disability benefit recomputed as a normal retirement benefit payable by the Plan.

Benefit

The Normal Retirement Benefit calculated with credited service including time while disabled.

Termination of Employment

If employment is terminated prior to the completion of 7.5 years of credited service, no benefit is payable.

If employment is terminated after completion of 7.5 years of credited service, a deferred vested benefit equal to the participant's accrued benefit at date of termination is paid commencing at age 65. Alternatively, the participant may elect a vested early benefit payable beginning at age 55 which is actuarially equivalent.

Death Benefit

If a participant dies, the participant's eligible spouse shall receive 45% of final average earnings for two years after the participant's death.

If death occurs in line-of-duty, or, if not line-of-duty, the participant before death was age 55 and completed 15 years of credited service, the participant's eligible spouse shall receive 75% of the participant's pension calculated as if the participant had retired immediately before death. This benefit shall be payable when the spouse reaches age 65. The participant's final average earnings is adjusted by the COLA from the participant's death until the spouse reaches age 65.

Contributions

Employees do not make contributions to the Plan.

Cost of Living Adjustment

A maximum of 4% annual adjustment based on CPI changes applies to the following benefits:

- 1) Retired participants after age 65
- 2) Disabled participants
- 3) Survivor benefits for dependent children
- 4) Survivor benefits for spouses under age 65 receiving the two year temporary benefit
- 5) Survivor benefits for spouses age 65 and over.

In no event, however, will the Plan A benefits exceed 100% of final average pay except as follows for an employee who retires with 40 or more years of service:

Monthly Retirement Benefit	Maximum Benefit
Less than \$1,200	124%
\$1,200 to \$2,800	115%
More than \$2,800	106%



PLAN C

Eligibility	All employees participate who are hired on or after March 1, 2005, including all full-time, part-time and elected employees, and employees of all joint City/County agencies administered by Shelby County, and members of Plan A electing to transfer to Plan C. CETA employees, Board of Education employees, employees electing Social Security coverage, and Joint City/County agencies not administered by Shelby County cannot participate.
Final Average Earnings	The average over the three highest consecutive years of earnings.
Alternate Benefit Accrual Account	Participants contribute 6% of earnings to fund the Plan. Participants are always fully vested in these contributions. The employer matches 50% of each contribution the participant makes to the plan. The participant becomes fully vested in the employer contributions upon reaching 7.5 years of credited service. The total of these two contribution amounts will comprise the participant's Alternate Benefit Accrual Account. The investment return on these contributions and match is 5% per annum.
Normal Retirement Benefit	
Eligibility	Age 65 or upon completion of 25 years of credited service.
Benefit	The greater of: 1) 2.35% of final average earnings multiplied by credited service (up to 35 years) or, 2) The life annuity equivalent of the participant's Alternate Benefit Accrual Account.
Early Retirement Benefit	
Eligibility	Age 55 and completion of 7.5 years of credited service.
Benefit	The greater of: 1) Final average earnings multiplied by credited service (up to 35 years) and a percentage from Table ERP, which is included as part of the plan, or 2) The life annuity equivalent of the participant's Alternate Benefit Accrual Account.
Disability Retirement	
Eligibility	No disability benefits are provided by the Plan except for transfers. Upon reaching age 65, a disabled participant will have any disability benefit recomputed as a normal retirement benefit payable by the Plan.
Benefit	The Normal Retirement Benefit calculated with credited service including time while disabled.



PLAN C

Termination of Employment

If employment is terminated prior to the completion of 7.5 years of credited service, the participant is entitled to receive the vested portion of the participant's alternate benefit accrual account as a lump sum payment.

If employment is terminated after completion of 7.5 years of credited service, a deferred vested benefit equal to the participant's accrued benefit at date of termination is paid commencing at age 65. Alternatively, the participant may elect a vested early benefit payable beginning at age 55 which is actuarially equivalent.

Death Benefit

If a participant dies before completion of 15 years of credited service and the death occurs in line-of-duty, or, if not line of duty, the participant had completed 7.5 years of credited service before death, the participant's eligible beneficiary shall receive the vested portion of the participant's alternate benefit accrual account as a lump sum payment.

If a participant dies after completion of 15 years of credited service the participant's eligible spouse shall receive 75% of the participant's pension calculated as if the participant had retired immediately before death. This benefit shall be payable when the spouse reaches age 65. The participant's final average earnings is adjusted by the COLA from the participant's death until the spouse reaches age 65.

Contributions

See Alternate Benefit Accrual Account.

Cost of Living Adjustment

A maximum of 4% annual adjustment based on CPI changes applies to the following benefits:

- 1) Retired participants after age 65
- 2) Disabled participants
- 3) Survivor benefits for dependent children
- 4) Survivor benefits for spouses age 65 and over.

In no event, however, will the Plan C benefits exceed 100% of final average pay.



SCHEDULE F

TABLE 1

RECONCILIATION OF DATA

	<u>Actives</u>	<u>Retirees</u>	<u>Disabled</u>	<u>Beneficiaries</u>	<u>Vested Terms</u>	<u>Total</u>
1. Headcounts as of June 30, 2009	6,332	2,099	134	516	342	9,423
2. Change in status during the year:						
a. Death	(13)	(76)	(8)	(22)	(10)	(129)
c. Disabled						
d. Retired	(98)	133	(6)		(29)	
e. Terminated Vested	(66)				66	
f. Terminated Not Vested	(306)					(306)
g. Benefits Expired/Refund				(9)	(30)	(39)
3. New member due to:						
a. New Hires	333					333
b. Rehires	15	(3)			(12)	
c. Death of Participant				57		57
d. Adjustments		33	1		11	45
4. Headcounts as of June 30, 2010	6,197	2,186	121	542	338	9,384



TABLE 2
PLAN B
SCHEDULE OF ACTIVE MEMBERS BY AGE AND SERVICE
AS OF JUNE 30, 2010

Attained Age	Completed 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		
Under 25 Avg. Pay												
25 to 29 Avg. Pay												
30 to 34 Avg. Pay												
35 to 39 Avg. Pay												
40 to 44 Avg. Pay												
45 to 49 Avg. Pay												
50 to 54 Avg. Pay								2 61,755	1 93,015			3 72,175
55 to 59 Avg. Pay								7 71,920	5 66,780			12 69,778
60 to 64 Avg. Pay								5 54,523	7 73,568	1 36,679		13 63,405
65 to 69 Avg. Pay								4 30,089		2 89,592		6 49,923
70 & up Avg. Pay								4 86,190	1 64,464	3 41,998		8 66,902
Total Avg. Pay								22 62,031	14 71,883	6 56,976		42 64,593

Average Age 63.3

Average Service 36.0



TABLE 3
PLAN A
SCHEDULE OF ACTIVE MEMBERS BY AGE AND SERVICE
AS OF JUNE 30, 2010

Attained Age	Completed 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		
Under 25 Avg. Pay												
25 to 29 Avg. Pay			8 26,361									8 26,361
30 to 34 Avg. Pay			83 35,331	19 41,087								102 36,403
35 to 39 Avg. Pay			180 37,075	121 42,637	15 50,969							316 39,864
40 to 44 Avg. Pay			147 37,592	125 43,643	87 45,683	21 48,661	1 53,574					381 42,077
45 to 49 Avg. Pay			183 35,682	109 40,980	75 45,907	62 44,884	11 47,895					440 40,339
50 to 54 Avg. Pay			146 37,292	118 42,814	66 44,188	66 46,065	27 43,778	18 40,652				441 41,649
55 to 59 Avg. Pay			116 36,258	80 40,890	76 44,738	62 43,303	42 54,457	37 47,439	6 37,412			419 42,551
60 to 64 Avg. Pay			73 38,789	40 43,127	48 46,863	69 48,545	25 58,559	30 46,186	6 67,979	3 32,732		294 45,957
65 to 69 Avg. Pay			24 41,173	13 44,027	14 56,525	34 45,403	8 58,931	13 55,922		1 28,566		107 47,874
70 & up Avg. Pay			7 34,884	7 47,418	9 62,953	11 40,870	6 46,311	2 38,255		1 80,073		43 47,133
Total Avg. Pay			967 36,801	632 42,428	390 46,425	325 45,762	120 52,191	100 46,760	12 52,696	5 41,367		2,551 42,006

Average Age 49.9

Average Service

14.2



TABLE 4

PLAN C

SCHEDULE OF ACTIVE MEMBERS BY AGE AND SERVICE
AS OF JUNE 30, 2010

Attained Age	Completed 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	
Under 25	20	16									36
Avg. Pay	28,332	29,107									28,677
25 to 29	70	165	17	1							253
Avg. Pay	33,583	34,112	32,667	44,399							33,909
30 to 34	59	189	78	31							357
Avg. Pay	34,932	36,710	41,936	45,635							38,333
35 to 39	58	185	109	125	15	2					494
Avg. Pay	32,493	39,313	42,896	44,632	47,872	43,961					40,927
40 to 44	40	149	92	119	120	63					583
Avg. Pay	33,109	38,012	42,865	45,850	45,916	47,545					42,698
45 to 49	42	125	59	85	130	188	41	1			671
Avg. Pay	37,006	35,881	36,000	45,263	47,742	48,945	49,149	83,030			43,989
50 to 54	23	112	26	34	50	157	83	55			540
Avg. Pay	38,363	39,678	37,838	42,568	49,312	49,855	48,499	54,747			46,457
55 to 59	9	89	47	32	27	74	67	75			420
Avg. Pay	32,774	42,252	51,949	45,457	53,178	49,426	56,941	51,061			49,261
60 to 64	11	37	24	31	26	20	29	22			200
Avg. Pay	41,152	42,647	51,060	50,593	55,898	47,904	58,177	66,920			51,976
65 to 69	1	12	4	10	8	2	1				38
Avg. Pay	31,282	50,780	84,067	45,657	49,612	32,840	49,543				51,200
70 & up		3	2	4	1	2					12
Avg. Pay		49,707	44,756	65,021	71,483	38,337					53,906
Total	333	1082	458	472	377	508	221	153			3,604
Avg. Pay	34,243	37,888	42,896	45,611	48,429	48,957	52,454	54,875			43,476

Average Age 44.7

Average Service

11.5



TABLE 5

PLAN B

SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES
AS OF JUNE 30, 2010

<u>Attained Age</u>	<u>Number of Members</u>	<u>Total Annual Benefits</u>	<u>Average Annual Benefit</u>
Under 50	3	\$ 50,486	\$ 16,829
50 – 54	30	814,035	27,135
55 – 59	81	2,379,183	29,373
60 – 64	172	4,664,840	27,121
65 – 69	183	4,786,037	26,153
70 – 74	170	3,607,210	21,219
75 – 79	172	3,142,478	18,270
80 & Over	<u>419</u>	<u>5,432,410</u>	<u>12,965</u>
Total	1,230	\$ 24,876,679	\$ 20,225

In addition, there are 5 participants entitled to deferred annual benefits totaling \$55,326.



TABLE 6
PLAN A
SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES
AS OF JUNE 30, 2010

<u>Attained Age</u>	<u>Number of Members</u>	<u>Total Annual Benefits</u>	<u>Average Annual Benefit</u>
Under 50	62	\$ 980,298	\$ 15,811
50 – 54	33	598,899	18,148
55 – 59	163	2,222,465	13,635
60 – 64	288	4,135,426	14,359
65 – 69	326	4,534,351	13,909
70 – 74	279	3,790,272	13,585
75 – 79	174	2,243,711	12,895
80 & Over	<u>146</u>	<u>1,536,462</u>	<u>10,524</u>
Total	1,471	\$ 20,041,884	\$ 13,625

In addition, there are 277 participants entitled to deferred annual benefits totaling \$4,335,221.



TABLE 7
PLAN C
SCHEDULE OF RETIRED MEMBERS AND BENEFICIARIES
AS OF JUNE 30, 2010

<u>Attained Age</u>	<u>Number of Members</u>	<u>Total Annual Benefits</u>	<u>Average Annual Benefit</u>
Under 50	15	\$ 382,881	\$ 25,525
50 – 54	26	632,197	24,315
55 – 59	53	1,311,576	24,747
60 – 64	41	994,610	24,259
65 – 69	9	167,271	18,586
70 – 74	3	49,698	16,566
75 – 79	1	25,832	25,832
80 & Over	<u>0</u>	<u>0</u>	<u>0</u>
Total	148	\$ 3,564,065	\$ 24,082

In addition, there are 56 participants entitled to deferred annual benefits totaling \$1,540,649.



SCHEDULE G

ANALYSIS OF FINANCIAL EXPERIENCE

**Gains & Losses in Accrued Liabilities
Resulting from Difference Between
Assumed Experience & Actual Experience
(\$ Thousands)**

Type of Activity	\$ Gain (or Loss) For Year Ending 6/30/2010
Age & Service Retirements. If members retire at older ages, there is a gain. If younger ages, a loss.	\$ 1,640.5
Disability Retirements. If disability claims are less than assumed, there is a gain. If more claims, a loss.	943.7
Death-in-Service Benefits. If survivor claims are less than assumed, there is a gain. If more claims, there is a loss.	(1,037.9)
Withdrawal From Employment. If more liabilities are released by withdrawals than assumed, there is a gain. If smaller releases, a loss.	(3,841.8)
Pay Increases. If there are smaller pay increases than assumed, there is a gain. If greater increases, a loss.	13,092.1
New Members. Additional unfunded accrued liability will produce a loss.	(764.4)
Investment Income. If there is a greater investment income than assumed, there is a gain. If less income, a loss.	(48,043.4)
Death After Retirement. If retirants live longer than assumed, there is a loss. If not as long, a gain.	(9,978.7)
Other. Miscellaneous gains and losses resulting from changes in valuation software, data adjustments, timing of financial transactions, etc.	<u>(9,522.4)</u>
Gain (or Loss) During Year From Financial Experience	\$ <u>(57,512.3)</u>
Non-Recurring Items. Adjustments for plan amendments, assumption changes, or method changes.	<u>0.0</u>
Composite Gain (or Loss) During Year	\$ <u>(57,512.3)</u>