

# MERCER



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**ACTUARIAL VALUATION REPORT  
AS OF  
JULY 1, 2008  
FOR THE  
RETIREMENT SYSTEM OF  
SHELBY COUNTY, TENNESSEE**

PREPARED BY:

MERCER

1000 Ridgeway Loop Road  
Memphis, TN 38120-4045

November 2008

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**HIGHLIGHTS**

**SHELBY COUNTY RETIREMENT SYSTEM  
JULY 1, 2008**

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	<b>Current Year</b>	<b>Prior Year</b>	<b>Increase</b>
Actuarial Valuation Report	July 1, 2008	July 1, 2007	
Applicable Fiscal Year	July 1, 2009 to June 30, 2010	July 1, 2008 to June 30, 2009	
County Contribution Requirement	\$17,430,216	\$15,261,041	\$2,169,175
Percent of Payroll	6.50%	5.91%	0.59%

## HIGHLIGHTS

# SHELBY COUNTY RETIREMENT SYSTEM

## JULY 1, 2008

### SOURCES OF CHANGE IN CONTRIBUTION

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- ◆ Asset Return for funding calculations was 6.9% compared with 8.25% assumption
  - Market Value Return was (5.2%)
  - Asset Return for funding smoothes market value returns over 10 years
  - Asset performance increased annual contribution \$1.6 million
  
- ◆ Salary Increases
  - Payroll increased 6.4% compared with 5.7%, which was expected for employees in the plan on July 1, 2007 and July 1, 2008
  - Total County payroll for active participants increased 4%
    - Includes impact of new hires who replace those who retire or leave
  - Salary experience decreased annual contribution \$0.7 million
    - Higher increases for younger employees with short service had minimal effect on cost.

## HIGHLIGHTS

# **SHELBY COUNTY RETIREMENT SYSTEM**

## **JULY 1, 2008**

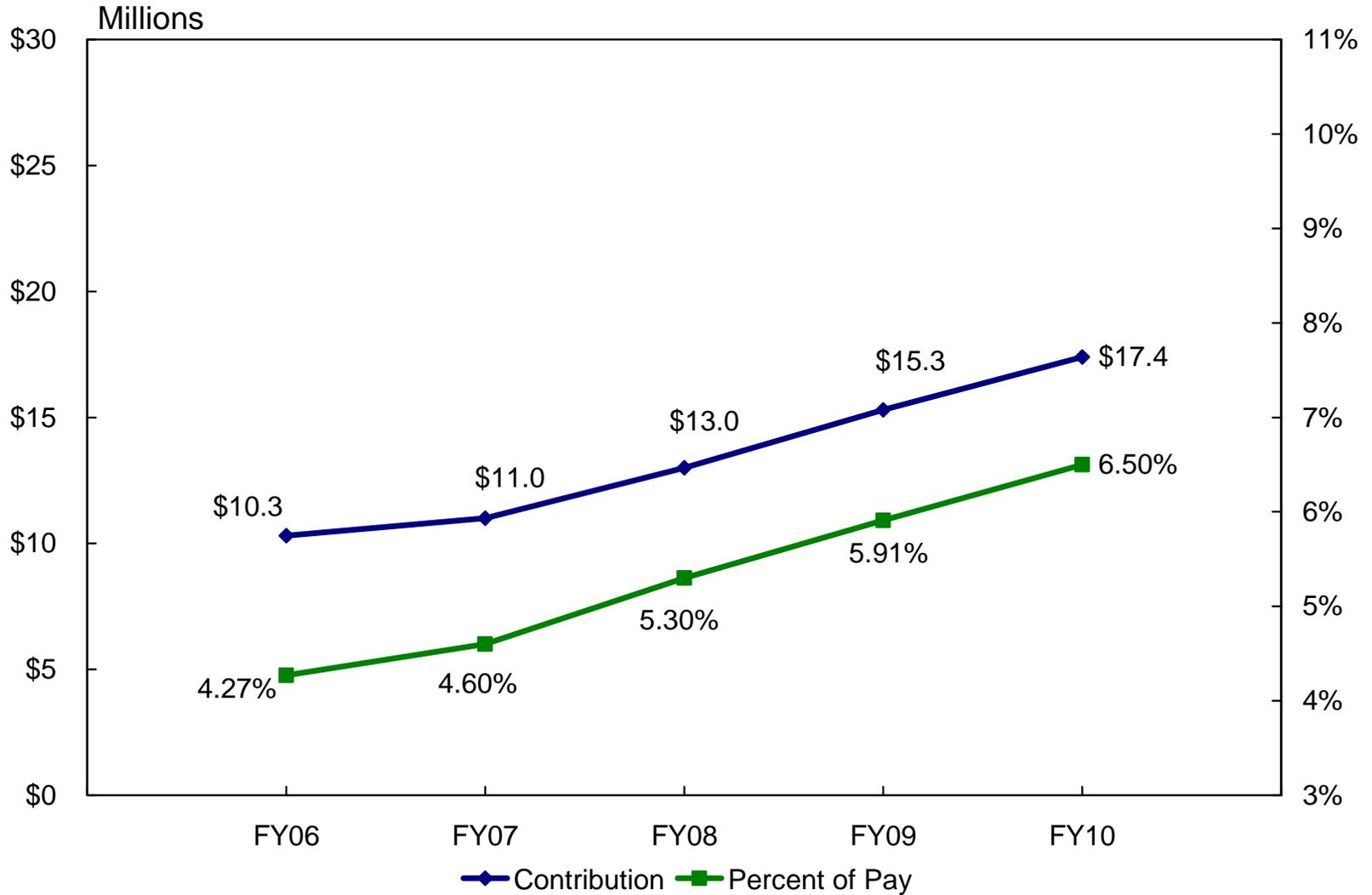
### **SOURCES OF CHANGE IN CONTRIBUTION (CONT'D)**

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- ◆ Demographic Experience
  - Number of active participants increased by 44 from prior year
  - There was less turnover and fewer retirements than expected
  - There were more deaths than expected
  - The Shelby County population is aging.
    - Average age increased from 45.6 to 46.0.
    - Average age of new hires is 39.
  - Increase in annual contribution due to demographic factors, such as aging, turnover, retirements, mortality, new hires and rehires was \$1.3 million

HIGHLIGHTS

# Shelby County Retirement System Contribution Requirement



HIGHLIGHTS

**SHELBY COUNTY RETIREMENT SYSTEM  
ACCOUNTING INFORMATION-FUNDING PROGRESS**

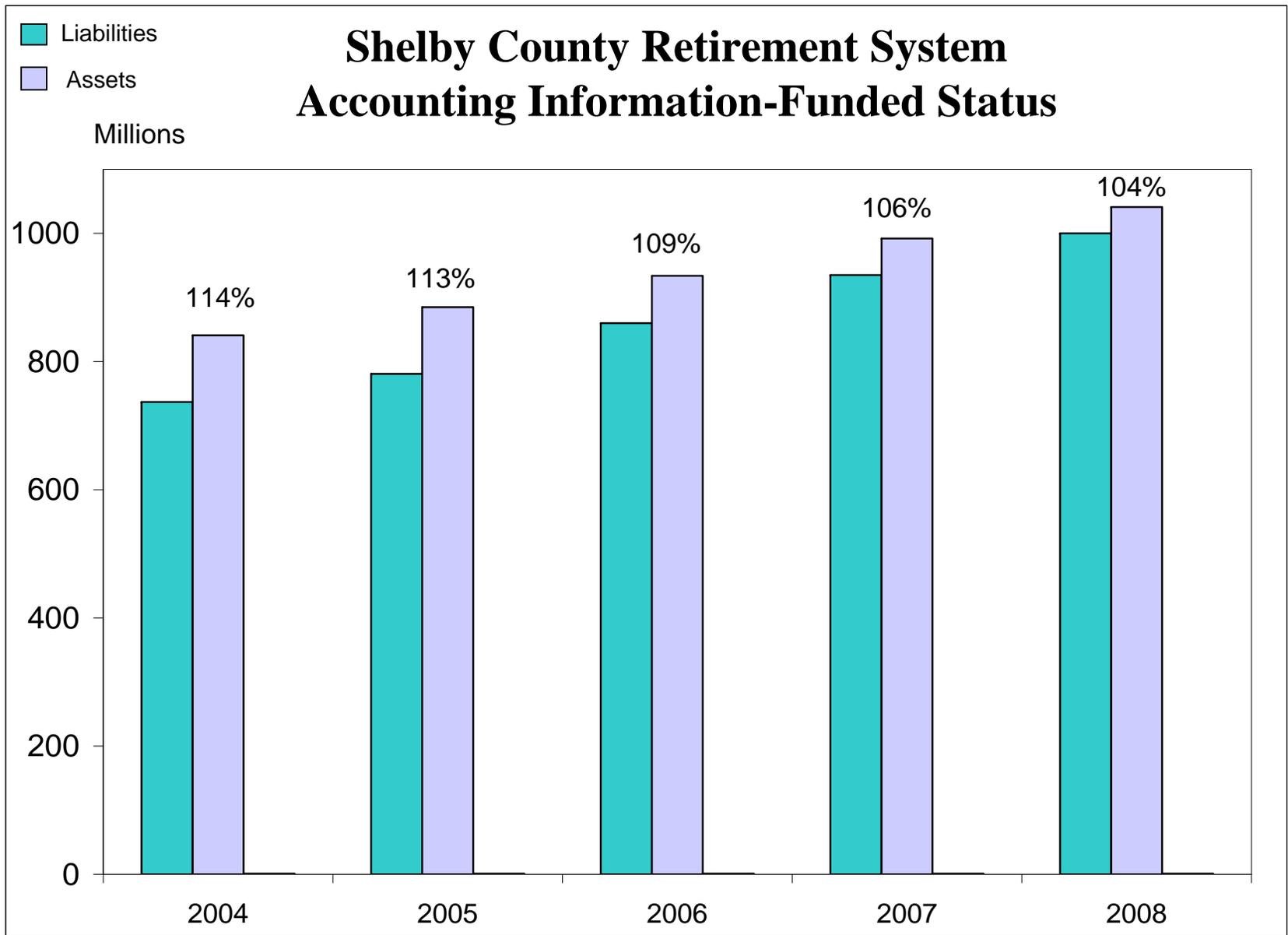
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	<u>Current Year</u>	<u>Prior Year</u>
	June 30, 2008	June 30, 2007
Assets*	\$1,040M	\$992M
Liabilities**	\$1,000M	\$935M
Funded Status	104%	106%

*\*Assets are based on asset smoothing method*

*\*\*Liabilities are estimated based on prior year employee data and prior year assumptions.*

**HIGHLIGHTS**



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## HIGHLIGHTS

This report has been prepared for the Shelby County Retirement Board to present the results of a valuation of the Retirement System of Shelby County, Tennessee as of July 1, 2008. The contents reflect generally accepted actuarial principles.

Section 1 of this report contains the results of the 2008 actuarial valuation. Plan B has been closed such that no employees will be permitted to enter the plan in the future and generally consists of the terms and provisions of the System as constituted on December 1, 1978. Plan A has been closed such that no employee will be permitted to enter the plan in the future and generally consists of the terms and provisions of the System as constituted on September 1, 2005.

The recommended contributions for Plan A, Plan B, and Plan C, together with the corresponding items from the immediately preceding valuation, are as follows:

<u>Plan</u>	<u>Contribution</u>			
	<u>July 1, 2008</u>		<u>July 1, 2007</u>	
	<u>Percent of Pay</u>	<u>Dollar Amount</u>	<u>Percent of Pay</u>	<u>Dollar Amount</u>
Shelby County Retirement System (Plan A, Plan B, and Plan C)	6.50%	\$17,430,216	5.91%	\$15,261,041

The County contribution strategy is to apply the results on a valuation date to the following fiscal year. The July 1, 2008 contribution amount of \$17,430,216 will be the annual requirement contribution (ARC) for the fiscal year July 1, 2009 to June 30, 2010.

The dollar amount is the County cost. The percent of pay is based on expected current year payroll. Employee contributions are made in addition to this amount.

There were no changes in asset method or funding method from the prior year report.

There have been no changes in actuarial assumptions since the last valuation.

The contributions listed above apply to service retirement benefits only. Medical benefits are studied separately and funded separately.

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### HIGHLIGHTS (Continued)

The County contribution requirement increased from the prior year. Listed below is a chart comparing the costs as a percentage of payroll as well as an explanation of some of the factors which affected the contribution requirement.

	July 1, 2008	July 1, 2007
a. Normal Cost for Benefits Earned During the Year	11.40%	10.86%
b. Amortization of Plan C Liability	1.33%	1.38%
c. Employee Contributions Expected	(3.46%)	(3.31%)
d. Interest on a. + b. + c.	<u>0.90%</u>	<u>0.86%</u>
e. Ongoing Cost of Plan (a. + b. + c. +d.)	<b>10.17%</b>	<b>9.79%</b>
f. Amortization of Surplus	(3.39%)	(3.58%)
g. Interest on f.	<u>(0.28%)</u>	<u>(0.30%)</u>
h. Total Suggested Minimum Contribution (e. + f. + g.)	<b>6.50%</b>	<b>5.91%</b>

### Demographic Experience

The number of active participants increased from 6,472 on July 1, 2007 to 6,516 on July 1, 2008. The total County payroll increased approximately 4%. Demographic factors such as aging, turnover, retirements, mortality, new hires, and rehires increased the annual contribution \$1.3 million.

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## **HIGHLIGHTS (Continued)**

### **Salary Increase Experience**

There was a gain due to salary experience. Overall salary increases were more than expected. Salary increases averaged 6.4% while the expected salary increase was 5.7%. This experience decreased the annual contribution approximately \$0.7 million due to the fact that younger, shorter service employees received higher salary increases which did not impact the liabilities significantly.

### **Asset Return Less Than Expected**

The return on assets was less than the assumption of 8.25%. On an actuarial asset value basis, the investment return was approximately 6.9%, net of expenses. On a market value basis, there was an investment loss of approximately 5.2%, net of expenses. The effect of asset performance was an increase in annual contribution of \$1.6 million.

### **Plan B COLA**

A resolution was adopted to grant one-time cost of living bonuses in November 2007 to certain Plan B retirees. The total amount of the bonuses did not exceed \$350,000. As a result, these payments decreased the asset value on June 30, 2008 and, therefore, lowered the surplus to amortize.

### **Accounting Information**

Section 2 contains the Schedule of Funding Progress and Schedule of Employer Contributions which were reported as of June 30, 2008 for the financial statement of the Plan. The Plan is funded at 104% compared with 106% for the prior year.

### **Basis of Actuarial Valuation**

Section 3 presents a summary of the plan provisions of Plan A, Plan B, and Plan C, as well as a description of the actuarial assumptions and the actuarial funding method.

### **Supportive Information**

Section 4 provides payout projections, a summary of valuation data, and a yearly comparison of valuation results.

In preparing this report, generally accepted actuarial methods and practices have been used. Reliance has been placed on participant information and financial information provided by the County.

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**HIGHLIGHTS (Continued)**

Please note that the undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion in this report, and are available to provide further information or answer any questions with respect to this report.

November 19, 2008

Date signed

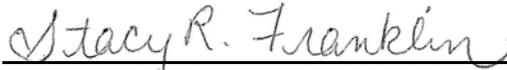


Karen W. Buckner, A.S.A., M.A.A.A.

Enrolled Actuary No. 08-3742

November 19, 2008

Date signed



Stacy R. Franklin, A.S.A., M.A.A.A.

Enrolled Actuary No. 08-7095

**The information contained in this document (including any attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.**

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## **SECTION 1**

### **SUMMARY OF VALUATION RESULTS**

This section sets forth the results of the actuarial valuation.

SECTION 1.1 shows the transactions of the plan's fund during the year, the composition of the fund and the development of the Actuarial Asset Value.

SECTION 1.2 shows the development of the County Contribution Requirement.

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## SECTION 1.1

### The Assets at June 30, 2008

#### Allocation of Assets by Type

Based upon information furnished by the County, the value of assets is summarized as follows:

#### Investments

▪ Domestic Equity	\$ 415,698,225
▪ Fixed Income	167,715,980
▪ International Equity	159,350,930
▪ Hedge Funds	158,897,578
▪ Limited Partnership Interests	25,936,287
▪ Private Real Estate and Infrastructure	11,297,944
	<hr/>
	\$ 938,896,744

#### Cash and Cash Equivalents

25,894,195

#### Receivables

▪ Accrued interest and dividends	2,562,810
▪ Investments sold	8,112,187

#### Liabilities

▪ Accounts payable and accrual expense	(1,110,671)
▪ Investments purchased	(1,853,101)
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#### Market Value of Assets

\$ 972,502,164

#### Actuarial Asset Value

\$ 1,040,514,476

#### Actuarial Asset Value/Market Value

107.0%

### Development of Actuarial Asset Value on July 1, 2008

The actuarial asset value was determined, as described in Section 3.4(F), using a 10-year smoothing method as follows:

#### **Plan Year Ending June 30, 2008**

1. Prior year market value of assets	\$	1,045,216,961
2. Benefit payments		46,786,031
3. Contributions		27,674,311
4. Expected return (at 8.25%)		85,376,344
5. Expected market value of assets (1. – 2. + 3. + 4.)		1,111,481,585
6. Actual market value of assets	\$	972,502,164
7. Gain/(Loss) (6. – 5.)	\$	(138,979,421)

#### **Schedule of Investment Gains/(Losses)**

<b>6-30</b>	<b>Expected Market Value at 8.25%</b>	<b>Actual Market Value</b>	<b>Actual Return</b>	<b>Asset Gain or (Loss)</b>	<b>Gain or (Loss) Percent</b>	<b>Deferred Amount</b>
2008	\$ 1,111,481,585	\$ 972,502,164	(5.2%)	\$(138,979,421)	90%	\$ (125,081,479)
2007	955,359,554	1,045,216,961	18.4%	89,857,407	80%	71,885,926
2006	886,784,856	898,444,049	9.7%	11,659,193	70%	8,161,435
2005	843,547,225	835,341,291	7.2%	(8,205,934)	60%	(4,923,561)
2004	754,669,143	798,594,200	14.5%	43,925,057	50%	21,962,529
2003	730,140,073	714,167,666	5.9%	(15,972,407)	40%	(6,388,963)
2002	789,211,191	697,587,106	(4.2%)	(91,624,085)	30%	(27,487,226)
2001	758,546,652	746,918,030	6.6%	(11,628,622)	20%	(2,325,724)
2000	750,047,425	711,894,934	2.8%	(38,152,491)	10%	(3,815,249)
TOTAL			5.9% (average)	(159,121,303)		\$ (68,012,312)

<b>Current Market Value (A)</b>	<b>Total Deferral of Gains/(Losses) (B)</b>	<b>Actuarial Asset Value (A) – (B)</b>
\$972,502,164	\$(68,012,312)	<b>\$1,040,514,476</b>

## Summary of Fund Operations

	<u>Market Value</u>	<u>Actuarial Asset Value</u>
<b>Fund as of June 30, 2007</b>	\$ 1,045,216,961	\$ 992,145,401
<b>Contributions</b>		
County	18,744,136	
Employee	8,930,175	
Total	<u>27,674,311</u>	27,674,311
<b>Benefit Payments</b>		
Refunds and Cashouts	(3,109,929)	
Retirement	<u>(43,676,102)</u>	
Total	(46,786,102)	(46,786,102)
<b>Administration Expenses</b>	(1,485,232)	(1,485,232)
<b>Investment Return</b> (Net of investment management expenses)	(52,117,845)	68,996,027
<b>Fund as of June 30, 2008</b>	<u>\$ 972,502,164</u>	<u>\$ 1,040,514,476</u>
<b>Estimated Rate of Return</b> (Net of Expenses)	(5.18%)	6.87%

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## SECTION 1.2

### Development of County Contribution Requirement at July 1, 2008

1.	Actuarial Accrued Liability (AAL)	
	a. Plan B Actives and Transfers	\$ 23,205,611
	b. Plan B Retireds, Beneficiaries, Disableds and Deferreds	<u>233,906,331</u>
	c. Total Plan B = (a.) + (b.)	\$257,111,942
2.	Actuarial Accrued Liability (AAL)	
	a. Plan A Actives and Transfers	\$220,566,394
	b. Plan A Retireds, Beneficiaries, Disableds and Deferreds	<u>189,643,882</u>
	c. Total Plan A= (a.) + (b.)	\$410,210,276
3.	Actuarial Accrued Liability (AAL)	
	a. Plan C Actives and Transfers	\$308,968,217
	b. Plan C Retireds, Beneficiaries, Disableds and Deferreds	<u>16,731,486</u>
	c. Total Plan C = (a.) + (b.)	\$325,699,703
4.	Total AAL (1.) + (2.) + (3.)	\$993,021,921
5.	Funding Target = 100% x AAL	\$993,021,921
6.	Actuarial Asset Value	\$1,040,514,476
7.	(Surplus) or Obligation	
	a. Remaining Obligation due to Plan C	\$ 35,515,609
	b. Remaining (Surplus) or Obligation	<u>(83,008,164)</u>
	c. Net (Surplus) or Obligation = (5.) – (6.)	\$(47,492,555)
8.	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 Remaining (Surplus) over 15 years from July 1, 2008	<u>(9,095,931)</u>
	c. Total = (a.) + (b.)	\$ (5,534,217)

9.	Normal Cost	
	a. Plan B	\$ 403,635
	b. Plan A	11,283,137
	c. Plan C	<u>18,904,325</u>
	d. Total = (a.) + (b.) + (c.)	\$30,591,097
10.	Expected Employee Contributions	
	a. Plan C Participants	\$(9,043,955)
	b. Plan B Participants	<u>(235,238)</u>
	c. Total (a.)+(b.)	\$(9,279,193)
11.	Interest at 8.25% on (8.) + (9.) + (10.)	\$ 1,652,529
12.	Total County Contribution (8.) + (9.) + (10.) + (11.)	\$17,430,216
13.	Expected FY09 Active Payroll (under expected retirement age)	
	a. Plan B	\$ 2,940,472
	b. Plan A	114,587,786
	c. Plan C	<u>150,732,586</u>
	d. Total	\$268,260,844
14.	County Contribution Rate	
	a. Normal Cost	11.40%
	b. Amortization of Plan C	1.33
	c. Employee Contributions	(3.46)
	d. Interest on (a.), (b.), and (c.)	<u>.90</u>
	e. Ongoing Cost = (a.) + (b.) + (c.) + (d.)	10.17
	f. Amortization of Surplus	(3.39)
	g. Interest on (f.)	<u>(.28)</u>
	h. Total = (e.) + (f.) + (g.)	6.50%

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**SECTION 2****ACCOUNTING INFORMATION****Schedule of Funding Progress**

<u>Year Ended June 30</u>	<u>Actuarial Value of Assets</u>	<u>Actuarial Accrued Liability</u>	<u>Funded Ratio</u>
2008	\$1,040,514,476	\$1,000,475,305 *	104%
2007	992,145,395	934,829,366 *	106%
2006	933,730,481	860,178,582	109%
2005	885,049,492	780,800,809 *	113%
2004	841,335,004	737,329,388 *	114%

Actuarial Accrued Liability is based on the Projected Unit Credit Service Pro-Rate Funding Method. The liability is as of June 30 each year prior to changes in assumptions, methods and plan provisions which may be effective July 1.

**Schedule of Employer Contributions**

<u>Year Ended June 30</u>	<u>Annual Required Contribution</u>	<u>Percent Contributed</u>
2008	\$ 12,956,023	145%
2007	\$ 11,037,956	170%
2006	\$ 10,322,629	182%
2005	\$ 9,645,830	195%
2004	\$ 17,836,157	100%

*\*The Actuarial Accrued Liability in these years is projected from the prior July 1, based on the employee data in effect on that date.*

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## **SECTION 3**

### **BASIS OF ACTUARIAL VALUATION**

In this section, the basis of the actuarial valuation is presented and described. This information -- the provisions of the plans and census of participants -- is the foundation of the valuation, since these are the present facts upon which benefit payments will depend.

The valuation is based upon the premise that the plan will continue in existence, so that future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the fund, the number of participants who will remain to retirement, their ages at retirement and expected benefits.

The actuarial assumptions and the actuarial cost method, or funding method, which has been adopted to guide the sponsor in funding the plan in a reasonable and acceptable manner, are described in this section.

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## **SECTION 3.1**

### **Summary of Plan B Provisions**

#### **Plan**

Plan B of Retirement System of Shelby County, Tennessee.

#### **Effective Date**

September 1, 1949, closed effective December 1, 1978.

#### **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.

#### **Normal Retirement**

Employees may retire under any of the following sets of criteria as applicable:

- (a) Completion of 25 years of service;
- (b) Completion of 10 years of service and attainment of age 60;
- (c) If the employee is a deputy sheriff, as that term may apply, completion of 10 years of credited service and attainment of age 55;
- (d) Completion of 15 years of service if participant's job is abolished or participant is not re-elected or re-appointed at the time of appointment or election.

The normal retirement benefit, 1/12 of which is payable monthly for life, is determined as 2.7% of average compensation multiplied by years of credited service not in excess of 25 plus 1% of average compensation multiplied by years of service greater than 25 but less than 35, with a maximum benefit of 77.5% of average compensation. The minimum pension is \$300.00 per month unless the employee is jointly employed by the City and County in which case the minimum is \$150 per month. Benefits continue to the surviving spouse upon the death of the participant.

"Compensation" means base salary exclusive of overtime pay or other final benefits.

Listed below is a summary of the benefits for different years of service:

<u>Years of Service</u>	<u>Benefit Accrual Per Year</u>	<u>Cumulative Percent of Final Average Pay</u>
1-7	2.7%	18.9%
8-13	2.7	35.1
14-20	2.7	54.0
21-25	2.7	67.5
26-30	1.0	72.5
31-35	1.0	77.5
35 and above	0.0	77.5

If a participant had 10 years of service on 10/1/77, "average" means the greater of the average monthly Compensation for the five consecutive years of County Service during which compensation was the highest or average monthly compensation for the twelve (12) months preceding the date of retirement. If the participant did not have 10 years of service on 10/1/77, "average" would mean the average rate for the 36 consecutive months during which the employee received his highest compensation.

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

### **Disability Retirement**

If a participant becomes totally and permanently disabled prior to January 1, 2007, as defined in the plan, after 5 years of service, if not in line-of-duty, or after becoming employed, if in line-of-duty, a disability benefit will be paid.

If disability does not occur in line-of-duty, the benefit will be determined as for normal retirement provided that the benefit will not be greater than 57.5% of final average compensation or 90% of the service retirement allowance which would have been received at the minimum age of service retirement. If disability occurs in line-of-duty, the benefit will be 50% of final average compensation.

No participant shall be eligible for a disability pension on or after January 1, 2007, except for line-of-duty disability.

## **Death Benefit**

If a participant dies before completing 10 years of service and does not die in line-of-duty, his beneficiary will receive a refund of the participant's contributions, without interest; if death occurs after 10 years of service or after retirement the member's eligible spouse, as defined in the plan, will receive the participant's accrued benefit until remarriage, unless such remarriage occurs after age 65, or death. If the member's spouse does not survive him or if the spouse dies or remarries prior to age 65, the benefit will be paid to the child or divided among the children of the participant until they reach age 18. If the child is handicapped, payments continue for the lifetime of the child.

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 or remarriage or to minor children under 18, if no spouse is living, or to the father and/or mother who was supported by the deceased member at the time of his death.

## **Optional Retirement Benefits**

No optional forms of benefit are permitted by the plan.

## **Termination of Employment**

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

If employment is terminated after 10 years of service, a vested deferred 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.

## **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.

## **Changes in Plan Provisions Since Last Valuation**

None.

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## SECTION 3.2

### Summary of Plan A Provisions

#### Plan

Plan A of Retirement System of Shelby County, Tennessee.

#### Effective Date

December 1, 1978

#### 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.

Once a person becomes a participant, he will continue to be a participant for as long as he is an employee.

#### Normal Retirement

Employees may retire after attainment of age 65 regardless of their length of credited service. The benefit is payable for the lifetime of the participant. The benefit amount is equal to a percentage from Table A, which is included in the Appendix to the plan, multiplied by final average earnings. Final average earnings is the average over three highest consecutive years of compensation. Earnings means total cash compensation exclusive of overtime and all other extra compensation paid or provided by Shelby County to the employee.

Listed below is a summary of Table A with retirement benefits for different years of service:

<u>Years of Service</u>	<u>Benefit Accrual Per Year</u>	<u>Cumulative Percent of Final Average Pay</u>
1 - 7	1.5%	10.5%
8 - 13	2.0	22.5
14 - 20	2.5	40.0
21 - 25	3.0	55.0
26 - 30	3.0	70.0
31 - 35	2.5	82.5
36 - 38	2.5	90.0
39 and above	0.0	90.0

## **Early Retirement**

If an employee retires after attainment of age 55 and completion of 7.5 years of credited service, then the employee will be eligible for an early retirement benefit. The employee may elect an immediate benefit equal to the benefit rate from Table B, included as part of the plan, multiplied by final average earnings as of the date of retirement. Alternatively, an employee may elect a deferred benefit beginning at age 65 equal to the benefit rates from Table A, based on past service to date of retirement, multiplied by final average earnings at date of retirement.

The reduction for an immediate benefit beginning on or after age 55 is 2.5% for each year less than age 65. At age 55, the reduction is 25% of the Table A benefit to determine the Table B benefit.

## **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.

## **Disability Retirement**

- (a) For employees hired prior to December 1, 1988 unless coverage elected as described in (b) below and who became disabled prior to January 1, 2002:

If a participant becomes totally and permanently disabled, as defined in the plan, after five years of service a disability benefit will be paid. If an employee becomes disabled while engaging in hazardous duty, which must require an employee to experience great danger as a duty of his job, then an employee will receive disability benefits regardless of length of service.

The benefit amount will be equal to 60% of the participant's final average earnings plus 10% of final average earnings if dependent children exist. The benefit will continue to age 65 (or for five years, but not beyond age 70, if disability occurs after age 60) and is then recomputed as a normal retirement benefit with credited service including time while disabled.

- (b) For all employees hired on or after December 1, 1988 and for those employees hired prior to December 1, 1988 who elect such coverage and became disabled prior to January 1, 2002:

If a participant becomes totally and permanently disabled, as defined in the plan, a disability benefit will be paid. If an employee becomes disabled while engaging in hazardous duty, or in line-of-duty, which must require an employee to experience great danger as a duty of his job, then an employee will receive disability benefits regardless of length of service.

The ordinary disability amount will be equal to a percent based on years of service of the participant's final average earnings plus 10% of final average earnings if dependent children exist. The benefit will continue to age 65 (or for five years, but not beyond age 70,

if disability occurs after age 60) and is then recomputed as a normal retirement benefit with credited service including time while disabled.

<u>Years of Service</u>	<u>Percent of Final Average Earnings</u>
5 - 9 years	30%
10 - 14 years	35%
15 - 19 years	40%
20 - 24 years	45%
25 or more years	50%

The hazardous duty or line-of-duty benefit amount will be equal to 60% of the participant's final average earnings plus 10% of final average earnings if dependent children exist. The benefit will continue to age 65 (or for five years, but not beyond age 70, if disability occurs after age 60) and is then recomputed as a normal retirement benefit with credited service including time while disabled.

For (a) and (b) above, the hazardous duty and line-of-duty benefits will continue to be provided for disabilities within one month after date of employment.

#### **Death Benefit**

(a) Upon death of a participant before termination, after engaging in hazardous duty or line-of-duty (if hired on or after December 1, 1988), or after completing 7.5 years of credited service, or if death occurs while participant is receiving a disability pension.

(i) For dependent children,

52.5% of participant's final average earnings payable for as long as there are dependent children.

If the employee was hired on or after December 1, 1988 or if the employee was hired prior to December 1, 1988 but elected such coverage and is receiving a disability benefit at his death, dependent children get all of the disability benefit paid to the employee (less the 10% additional benefit).

(ii) For spouse under age 65

85% of dependent children benefit after no longer dependent children, or 45% of participant's final average earnings if never any dependent children. Benefit is payable for 24 months, but not beyond spouse's age 65 or remarriage. The spouse is entitled to a permanent survivor pension payable at the spouse's age 65 equal to 75% of participant's pension computed as if he had retired or terminated immediately before death. The participant's final average earnings is adjusted by the COLA from the participant's death to the spouse's 65th birthday. If the participant was not receiving a disability pension and the death did not occur after engaging in hazardous duty or in the line of duty, the participant must have attained age 55 or completed 15 years of credited service for the spouse to receive such permanent pension.

If the employee was hired on or after December 1, 1988 or if the employee was hired prior to December 1, 1988 but elected such coverage and is receiving a disability benefit at his death, when no dependent children, spouse gets 75% of the amount paid to the employee for up to 24 months.

(b) Death of participant after termination with vested pension

- (i) If participant was entitled to receive a deferred vested pension at time of death, survivor benefit to spouse is 75% of participant's monthly benefit commencing at spouse's age 65. A reduced immediate benefit is available.
- (ii) Benefits are for dependent children only as in (a)(i) above.

(c) Survivor benefit for spouse who is over age 65

- (i) If participant was receiving a normal, early or vested pension at time of death, survivor benefit to spouse over age 65 is 75% of participant's pension. A reduced immediate benefit is available.
- (ii) If participant was still an employee at time of death, survivor benefit to spouse over age 65 is 75% of participant's pension computed as if he had retired immediately before death. A reduced immediate benefit is available.
- (iii) If participant was receiving a disability pension at time of death, survivor benefit to spouse over age 65 is computed as 75% of the benefit participant would have received upon retirement at age 65. Credited service includes time while participant is disabled. A reduced immediate benefit is available.

### **Termination of Employment**

If employment is terminated prior to completion of 7.5 years of credited service, no benefit is payable. If the employee terminates employment after completion of 7.5 years of service, a benefit will be payable at age 65 equal to the benefit rate from Table C multiplied by final average earnings on the date of termination. Alternatively, the participant may elect a vested early benefit payable at age 55 which is actuarially equivalent to the amount payable in accordance with the above calculation.

## Optional Retirement Benefits

An actuarially equivalent optional benefit may be elected in lieu of the pension payable to the participant, other than for disability and survivor benefits to a spouse after attaining age 65. Options include:

Joint and Survivor Option

Modified Joint and Survivor Option

Special Form Option

Lump Sum Option up to \$30,000 is the automatic form of payment. If the lump sum value is greater than \$30,000 but no more than \$50,000, the lump sum option may be chosen. The interest rate for these calculations on or after April 15, 2002 is 7.5%, which is the funding rate for the plan year less 75 basis points. The mortality table assumption is the 1983 Group Annuity Mortality Table blended 50/50 for male/female life expectancy.

## Cost-of-Living Adjustments in Benefits

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

- (a) Retired participants after age 65
- (b) Disabled participants
- (c) Survivor benefits for dependent children
- (d) Survivor benefits for spouses under and over age 65

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:

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

## Special Provisions

Employees who elected to transfer from Plan B to Plan A are assured of a minimum benefit equal to the actuarially equivalent monthly benefit of the lump sum value of employee contributions transferred to Plan A.

Plan B Med employees mandated to Social Security were given the option of transferring to Plan A without a refund of employee contributions. If the option was elected, an additional benefit may be provided from Plan A equal to the difference between what the participant would have received from Plan B and what he actually receives from Plan B (frozen at July 1, 1985) and Plan A (earned after July 1, 1985).

### **Changes in Plan Provisions Since Last Valuation**

The mandatory cash-out amount was increased from \$20,000 to \$30,000, and the optional cash-out amount was increased from \$35,000 to \$50,000.

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## **SECTION 3.3**

### **Summary of Plan C Provisions**

#### **Plan**

Plan C of Retirement System of Shelby County, Tennessee.

#### **Effective Date**

September 1, 2005

#### **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.

Once a person becomes a participant, he will continue to be a participant for as long as he is an employee.

#### **Alternate Benefit Accrual Account**

All participants in this plan are required to contribute 6% of their earnings to fund the plan. Participants are always fully vested in these contributions. The employer will match 50% of each contribution the participant makes to the plan. The participant becomes fully vested in the employer contributions once he has reached 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 five percent (5%) per annum.

#### **Normal Retirement**

Employees may retire and begin receiving a pension benefit after attainment of age 65 or after completing 25 years of credited service. The benefit is payable for the lifetime of the participant. The benefit amount is equal to the greater of 2.35% of final average earnings multiplied by credited service (up to 35 years) and the life annuity equivalent of the participant's Alternate Benefit Accrual Account. Final average earnings is the average over the highest consecutive 36 month period of compensation. Earnings means total cash compensation exclusive of overtime and all other extra compensation paid or provided by Shelby County to the employee.

## **Early Retirement**

If an employee retires after attainment of age 55 and completion of 7.5 years of credited service, then the employee will be eligible for an early retirement benefit. The employee will be given a choice of the following two benefit options:

- (i) The employee may elect an immediate benefit equal to the benefit rate from Table ERP, included as part of the plan, multiplied by final average earnings as of the date of retirement and credited service (up to 35 years).
- (ii) Alternatively, an employee may elect a deferred benefit beginning at age 65 equal to the benefit rates from Table DVRP, based on past service to date of retirement, multiplied by final average earnings at date of retirement and credited service up to 35 years.

The participant will receive the life annuity equivalent of his alternate benefit accrual account if it is greater than the benefits listed in (i) and (ii), above.

## **Disability Retirement**

No disability pension shall be paid under the current plan except for the following two reasons:

- (i) If the participant is a County to City transfer who is entitled to a pension from the City plan, then he is also entitled to a disability pension from this plan. His disability pension shall be the excess of his 'Ordinary Disability Pension' (as defined in Plan A using Total Credited Service) in excess of his disability pension from the City. The ordinary disability pension payable from this plan shall not exceed 60% of the participant's average monthly compensation (as defined in the City Plan).
- (ii) If the participant is a County to City transfer who incurs a 'line of duty disability' (as defined in the City Plan) he is entitled to receive the vested portion of his Alternate Benefit Accrual Account within 60 days after a formal notification by the City of the determination of such 'line of duty disability.'

## **Death Benefit**

- (i) Upon death of a participant before termination, after engaging in hazardous duty or line-of-duty, or after completing 7.5 years of credited service, or if death occurs while participant is receiving a disability pension.
  - (a) For dependent children,  
  
50% of participant's final average earnings payable for as long as there are dependent children. A disabled participant's final average earnings shall be adjusted by the COLA from date of termination until date of death.

(b) For spouse under age 65

If the participant has less than 15 years of credited service then the spouse will receive the vested portion of the participant's alternate benefit accrual account. If the employee had completed 15 years of service, the spouse is entitled to a monthly pension equal to the greater of 75% of participant's pension computed as if he had retired or terminated immediately before death and the participant's alternate benefit accrual account, payable monthly for the Spouse's life. The participant's final average earnings shall be adjusted by the COLA from the participant's date of death to the spouse's 65th birthday.

(ii) Death of participant after termination with vested pension

(a) If the participant was entitled to receive a deferred vested pension at time of death, then the survivor benefit described above in (i)(b) will apply. A reduced immediate benefit is available.

(b) Benefits are for dependent children only as in (i) (a) above.

(iii) Survivor benefit for spouse who is over age 65

(a) If the participant was receiving a normal, early or deferred vested retirement pension at time of death, survivor benefit to spouse over age 65 is 75% of participant's pension, unless participant elected to receive an Optional Pension or retirement pension was the life annuity equivalent of the Alternative Benefit Accrual Account.

(b) If the participant was still an employee at time of death, survivor benefit to spouse over age 65 is 75% of participant's pension computed as if he had retired immediately before death.

(c) If the participant was receiving the life annuity equivalent of his alternate benefit accrual account at time of death, survivor benefit to spouse over age 65 is 75% of the participant's pension.

### **Termination of Employment**

If employment is terminated prior to completion of 7.5 years of credited service, no monthly benefit is payable. However, the participant is entitled to an immediate lump sum payment of the vested portion of his alternate benefit accrual account.

If the employee terminates employment after completion of 7.5 years of service, a benefit will be payable at age 65 equal to 2.35% of final average earnings on the date of termination multiplied by credited service (up to 35 years). Alternatively, the participant may elect a vested early benefit payable at age 55 which is actuarially equivalent to the amount payable in accordance with the above calculation.

The participant will receive the life annuity equivalent of his alternate benefit accrual account if he has completed 7.5 years of service and the life annuity equivalent is greater than the benefit amounts listed above.

See Alternate Benefit Accrual Account for benefits to employees who terminate employment with fewer than 7.5 years of service.

### **Optional Pensions**

An actuarially equivalent optional pension benefit may be elected in lieu of the pension payable to the participant, other than for disability and survivor benefits to a spouse after attaining age 65. Options include:

Joint and Survivor Option

Life Only Annuity

Life Only with a 10-year certain payment

Special Form Option

Lump Sum Option up to \$30,000 is the automatic form of payment. If the lump sum value is greater than \$30,000 an Optional Cash Distribution (in an amount that is a multiple of \$10,000) up to \$50,000 may be chosen. Such election will reduce the normal, early, deferred, or survivor retirement pension by the life annuity equivalent of the Optional Cash Distribution. The interest rate for these calculations is 7.5%, which is the funding rate for the plan year less 75 basis points. The mortality table assumption is the 1994 GAR Mortality Table projected to 2002 blended 50/50 for male/female life expectancy.

### **Transition Period Pensions**

The Retirement Pension, for participants who elected to transfer from Plan A to Plan C, who are otherwise eligible for a Retirement Pension but whose termination occurs within this Transition Period, shall be calculated and paid as if the participant had remained in Plan A.

Transition Period begins on the Effective Date and ends upon completion of 60 months of Credited Service under this Plan. Each month of Credited Service earned as a Public Safety Employee under Plan A for which employee contributions were made, shall be treated as a month of Credited Service for purposes of the Transition Period.

### **Cost-of-Living Adjustments in Benefits**

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

- (i) Retired participants after age 65
- (ii) Disabled participants
- (iii) Survivor benefits for spouses under and over age 65

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

### **Contributions**

See Alternate Benefit Accrual Account.

**Changes in Plan Provisions Since Last Valuation**

The mandatory cash-out amount was increased from \$20,000 to \$30,000.

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## SECTION 3.4

### Actuarial Basis

#### A. Basis of Valuation

An actuarial valuation is a mathematical device for measuring the liabilities under a pension plan and for determining a schedule of contributions to finance the plan. The actual cost of a pension plan cannot be determined until its entire experience is complete; however, actuarial techniques determine a pattern of contributions which will finance the liabilities in an orderly fashion. Assumptions are made regarding future experience in regard to the rate of investment return on invested funds, the probability of death, disability and other termination from employment, the rate of future salary increases, etc. The set of actuarial assumptions and the valuation method become the basis for making a valuation of the pension plan. The degree of conservatism to be reflected in the actuarial assumptions is a matter of judgment of the Retirement Board, who is charged with the responsibility of selecting assumptions.

An actuarial valuation does not determine ultimate pension plan costs; only the actual experience in regard to the many variables involved will establish the true cost of the plan. An actuarial valuation, however, reveals the year to year incidence of contributions necessary to soundly fund pension benefits. The incidence of contributions, or "funding schedule," may be increasing, level or decreasing from year to year as a percent of payroll, depending on the actuarial funding method utilized. Annual actuarial valuations are made to adjust contributions gradually as actual experience emerges. Changes in the assumptions may be required if the experience consistently departs from the valuation assumptions.

#### B. Description of Valuation Method

Liabilities and contributions shown in this report are computed using the Projected Unit Credit funding method prorated over total service. The current accrued benefit is a minimum accrued liability.

The objective under this method is to fund each participant's benefits under the Plan as they would accrue, taking into consideration future salary increases. Thus, the total pension, to which each participant is expected to become entitled, is broken down into units, each associated with a year of past or future credited service. When this method is introduced, there will be an initial liability for benefits credited for service prior to that date, and to the extent that the liability is not covered by assets of the Plan, there is an unfunded liability to be funded over a chosen period in accordance with an amortization schedule.

The valuation method for the County is based on a funded status target of 100%. If the funded status is more than or less than 100%, the surplus or deficit is amortized over a twenty-year period beginning July 1, 2003. The change in surplus or deficit of the funded status from a plan change will be amortized over a 20-year period beginning with the valuation date coincident with or following the plan change.

A description of the calculation follows:

An individual's **accrued benefit** for valuation purposes related to a particular separation date is the accrued benefit described under the Plan projected to the expected separation date, multiplied by the ratio of credited service as of the valuation date over credited service as of the expected separation date.

The **benefit** deemed to accrue for an individual during a plan year is the excess of the accrued benefit for valuation purposes at the end of the plan year over the accrued benefit for valuation purposes at the beginning of the plan year. Both accrued benefits are calculated from the same projections to the various anticipated separation dates.

An individual's **accrued liability** is the present value of the accrued benefit for valuation purposes at the beginning of the plan year, and the **normal cost** is the present value of the benefit deemed to accrue in the plan year. If multidecrements are used, the accrued liability and the normal cost for an individual are the sum of the component accrued liabilities and normal costs associated with the various anticipated separation dates. Such accrued liabilities and normal costs reflect the accrued benefits as modified to obtain the benefits payable on those dates and the probability of the individual separating on those dates.

The Plan's **normal cost** is the sum of the individual normal costs, and the Plan's **accrued liability** is the sum of the accrued liabilities for all participants under the Plan.

#### **Change in Method Since Last Valuation**

None

**C. Actuarial Assumptions for Valuation of Liabilities of Plan B**

**1. Assumptions Concerning Future Events**

	Age:	<u>Sample Rates</u>			
		<u>20</u>	<u>35</u>	<u>50</u>	<u>60</u>
<b>Mortality Rate</b>					
Before and after retirement: RP-2000 Mortality Table Projected to 2006	<b>Male:</b>	0.307	0.750	1.917	6.125
	<b>Female:</b>	0.173	0.444	1.512	4.905

<b>Disability Rate</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	0.290	0.690	3.580	12.560
	<b>Female:</b>	0.300	1.360	5.330	11.590

<b>Withdrawal Rate</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	179.500	58.800	100.00	200.00
	<b>Female:</b>	579.600	163.200	100.00	200.00

<b>Rate of Death Among Disabled Lives</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	20.540	21.350	15.370	69.220
	<b>Female:</b>	17.090	21.690	33.630	41.220

<u>Age</u>	<u>Assumption</u>
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

**Rate of Retirement**

Assume early retirements occur according to withdrawal rate table; others at ultimate retirement age.

**Interest Rate**

8.25% per annum

**Funding**

Commences at date of eligibility

**Expenses**

Funding is for net costs only

**Ultimate Retirement Age**

Age 65 for General Employees, Age 60 for Deputy Sheriffs

**New Entrants**

None funded for

**Probability of Rehire for Terminated or Laidoff**

Not funded for

**Type of Death and Disability**

Seventy-five percent of deaths and disabilities are assumed to be line-of-duty for employees classified as deputy sheriffs. Ten percent of deaths and disabilities are assumed to be line-of-duty for all employees not classified as deputy sheriffs.

**Incidence of Involuntary Retirement**

Five percent of retirements are assumed to be involuntary.

## **2. Assumptions Made with Respect to Employee Data**

### **Spouse Frequency and Ages**

Actual married status, actual age of spouse for inactive group when provided. For active group, 65% married and three years average age difference between employee and spouse.

### **Salary Used in Valuation**

Pay during fiscal year provided by the County.

## **3. Changes in Assumptions Since Last Valuation**

None

**D. Actuarial Assumptions for Valuation of Liabilities of Plan A**

**1. Assumptions Concerning Future Events**

	Age:	<u>Sample Rates</u> (Rates are per 1,000 lives)			
		<u>20</u>	<u>35</u>	<u>50</u>	<u>60</u>
<b>Mortality Rate</b>					
Before and after retirement: RP-2000 Mortality Table Projected to 2006	<b>Male:</b>	0.307	0.750	1.917	6.125
	<b>Female:</b>	0.173	0.444	1.512	4.905
<b>Disability Rate</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	.290	.690	3.580	12.560
	<b>Female:</b>	.300	1.360	5.330	11.590
<b>Withdrawal Rate</b>					
Table of Values consistent with the scale at right	<b>All:</b>	120.0	70.0	50.0	70.0
<b>Rate of Death Among Disabled Lives</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	20.540	21.350	45.370	69.220
	<b>Female:</b>	17.090	21.690	33.630	41.220

**Salary Scale**

<u>Age</u>	<u>Assumption</u>
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

**Rate of Retirement**

<u>Age</u>	<u>Rate of Retirement</u>
55 - 60	5%
61 - 62	8
63 - 65	12
66	25
67	100

**Interest Rate**

8.25% per annum

**Funding**

Commences at date of eligibility for plan participation

**Cost-of-Living Adjustment**

2.50% per annum, compounded

**Expenses**

Funding is for net costs only

**New Entrants**

None funded for

**Probability of Rehire for Terminated or Laidoff**

Not funded for

**Type of Death and Disability**

Ninety percent of deaths and disabilities are assumed to be non-hazardous duty.

**Form of Payment**

All vested participants are assumed to elect the normal form of payment as a life annuity.

**2. Assumptions Made with Respect to Employee Data**

### **Spouse Frequency and Ages, Percent with Children**

Actual married status, actual age of spouse for inactive participants. For active group, 65% married, three years average age difference between employee and spouse. For active group, 60% of participants have children.

### **Salary Used in Valuation**

Pay during fiscal year provided by the County. For employees hired within one year of the valuation date, annualized pay based on actual pay provided by the County.

### **3. Changes in Assumptions Since Last Valuation**

None

**E. Actuarial Assumptions for Valuation of Liabilities of Plan C**

**1. Assumptions Concerning Future Events**

		<u>Sample Rates</u>			
	<u>Age:</u>	<u>(Rates are per 1,000 lives)</u>			
		<u>20</u>	<u>35</u>	<u>50</u>	<u>60</u>
<b>Mortality Rate</b>					
Before and after retirement: RP-2000 Mortality Table Projected to 2006	<b>Male:</b>	0.307	0.750	1.917	6.125
	<b>Female:</b>	0.173	0.444	1.512	4.905
<b>Disability Rate</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	.290	.690	3.580	12.560
	<b>Female:</b>	.300	1.360	5.330	11.590
<b>Withdrawal Rate</b>					
Table of Values consistent with the scale at right	<b>All:</b>	120.0	70.0	50.0	70.0
<b>Rate of Death Among Disabled Lives</b>					
Table of Values consistent with the scale at right	<b>Male:</b>	20.540	21.350	45.370	69.220
	<b>Female:</b>	17.090	21.690	33.630	41.220

**Salary Scale**

<u>Age</u>	<u>Assumption</u>
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

**Rate of Retirement**

**Rate of Retirement for Employees with fewer than 25 Years of Service**

<u>Age</u>	<u>Rate</u>
55 - 60	5%
61 - 62	8
63 - 65	12
66	25
67	100

**Rate of Retirement for Employees with at least 25 Years of Service**

<u>Age</u>	<u>Public Safety Employees</u>	<u>Non-Public Safety Employees</u>
less than 55	20%	10%
55 - 59	40	10
60 - 63	100	20
64 - 66	100	25
67	100	100

**Note:** In addition to the above assumptions we have assumed that the retirement rate for employees with at least 25 years of service, increases by 50% in the year following the Transition Period.

**Interest Rate**

8.25% per annum

**Funding**

Commences at date of eligibility for plan participation

**Cost-of-Living Adjustment**

2.50% per annum, compounded

**Expenses**

Funding is for net costs only

**New Entrants**

None funded for

**Probability of Rehire for Terminated or Laid-off**

Not funded

**Type of Death and Disability**

Ninety percent of deaths and disabilities are assumed to be non-hazardous duty.

**Form of Payment**

All vested participants are assumed to elect the normal form of payment as a life annuity.

**2. Assumptions Made with Respect to Employee Data**

**Spouse Frequency and Ages, Percent with Children**

Actual married status, actual age of spouse for inactive participants. For active group, 65% married, three years average age difference between employee and spouse. For active group, 60% of participants have children.

**Salary Used in Valuation**

Pay during prior fiscal year provided by the County. For employees hired within one year of the valuation date, annualized pay based on actual pay reported by the County.

**3. Changes in Assumptions Since Last Valuation**

None

**F. Actuarial Funding Method for Valuation of Assets**

Assets are carried for valuation purposes at an Actuarial Asset Value which uses a method that smoothes the market value of assets over a ten-year period.

In each plan year, a gain or loss is determined by calculating the difference between the expected value of the assets for the year and the market value of assets at the valuation date. The expected value of assets for the year is the prior year's market value of assets brought forward with interest to the current valuation date, plus actual contributions minus benefit payments, all adjusted for interest to the current valuation date. If the expected value is less than market value, the difference is a gain. Conversely, if the expected value exceeds market value, the difference is a loss.

These gains or losses are recognized at a rate of 10% per year. The unrecognized portion of each year's gain or loss is subtracted from the current year value to obtain the actuarial value of assets.

**Change in Method Since Last Valuation**

None.

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**SECTION 4****SUPPORTIVE INFORMATION****SECTION 4.1****Payout Projections****RETIREMENT PLAN A, PLAN B, AND PLAN C**

<u>Year</u>	<u>Total Actives</u>	<u>Total Inactives</u>	<u>Total</u>
2008-09	\$ 6,078,058	\$ 43,766,664	\$ 49,844,722
2009-10	8,918,397	43,407,010	52,325,407
2010-11	13,605,241	43,025,332	56,630,573
2011-12	17,974,879	42,551,808	60,526,687
2012-13	22,920,002	42,029,473	64,949,475
2013-14	28,375,486	41,508,719	69,884,205
2014-15	34,431,572	40,943,337	75,374,909
2015-16	40,441,150	40,369,329	80,810,479
2016-17	47,376,421	39,757,041	87,133,462
2017-18	54,315,049	39,103,247	93,418,296
2018-19	61,168,715	38,421,481	99,590,196
2019-20	68,136,811	37,636,679	105,773,490
2020-21	75,258,632	36,803,502	112,062,134
2021-22	82,544,792	35,922,996	118,467,788

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## SECTION 4.2

### Summary of Valuation Data

	<u>Plan B</u>	<u>Plan A</u>	<u>Plan C</u>	<u>Total</u>
<b><u>ACTIVE PARTICIPANTS</u></b>				
Number	69	3,004	3,443	6,516
Number Vested	69	1,840	1,864	3,773
Number Transferred to City	0	182	1	183
Total Annual Payroll FY08				
County Payroll	\$ 4,136,581	\$ 112,498,234	\$ 143,473,336	\$260,108,151
<i>Avg. Salary</i>	\$ 59,950	\$ 39,865	\$ 41,683	\$ 41,072
City Payroll	N/A	\$ 9,890,888	\$ 36,735	\$ 9,927,623
<i>Avg. Salary</i>	N/A	\$ 54,346	\$ 36,735	\$ 54,249
Avg. Age	62.5	48.4	43.5	46.0
Avg. Service	34.2	12.1	10.9	11.7
Avg. Remaining Service	5.3	10.5	10.5	10.4
Number of Public Safety Employees	12	576	1,346	1,934
PSE Payroll	\$ 712,623	\$ 24,117,014	\$ 59,537,236	\$ 84,366,873
Avg. Pay	59,385	\$ 41,870	\$ 44,233	\$ 43,623
Avg. Age	57.8	45.0	41.6	42.4
Avg. Service	34.0	11.1	11.8	11.5

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**SECTION 4.2****Summary of Valuation Data (continued)**

	<u>Plan B</u>	<u>Plan A</u>	<u>Plan C</u>	<u>Total</u>
<b><u>INACTIVE PARTICIPANTS</u></b>				
<b>Participants Receiving Benefits</b>				
RETIREED				
Number	992	956	52	2,000
Total Monthly Benefits	\$ 1,760,137	\$ 1,016,623	\$ 104,670	\$ 2,881,430
Avg. Monthly Benefits	\$ 1,774	\$ 1,063	\$ 2,013	\$ 1,441
DISABLED				
Number	45	122	0	167
Total Monthly Benefits	\$ 45,471	\$ 206,494	\$ 0	\$ 251,965
Avg. Monthly Benefits	\$ 1,010	\$ 1,693	\$ 0	\$ 1,509
BENEFICIARIES				
Number	305	190	2	497
Total Monthly Benefits	\$ 362,485	\$ 160,031	\$ 2,810	\$ 525,326
Avg. Monthly Benefits	\$ 1,188	\$ 842	\$ 1,405	\$ 1,057
TOTAL				
Number	1,342	1,268	54	2,664
Total Monthly Benefits	\$ 2,168,093	\$ 1,383,149	\$ 107,479	\$ 3,658,721
Avg. Monthly Benefits	\$ 1,616	\$ 1,091	\$ 1,990	\$ 1,373
<b>Participants with Deferred Benefits</b>				
VESTED TERMINATED				
Number	6	243	6	255
Total Monthly Benefits	\$ 5,612	\$ 185,228	\$ 12,685	\$ 203,525
Avg. Monthly Benefits	\$ 935	\$ 762	\$ 2,114	\$ 798
DISABLED				
Number	0	116	16	132
Total Monthly Benefits	\$ 0	\$ 156,169	\$ 22,570	\$ 178,739
Avg. Monthly Benefits	\$ 0	\$ 1,346	\$ 1,411	\$ 1,354
BENEFICIARIES				
Number	0	4	1	5
Total Monthly Benefits	\$ 0	\$ 4,392	\$ 1,118	\$ 5,509
Avg. Monthly Benefits	\$ 0	\$ 1,098	\$ 1,118	\$ 1,102
TOTAL				
Number	6	363	23	392
Total Monthly Benefits	\$ 5,612	\$ 323,339	\$ 36,372	\$ 365,323
Avg. Monthly Benefits	\$ 935	\$ 891	\$ 1,581	\$ 932
<b><u>TOTAL ACTIVE AND INACTIVE PARTICIPANTS</u></b>				
Number	1,417	4,635	3,520	9,572

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**SECTION 4.3****Yearly Comparisons - Plan B, Plan A, and Plan C**

	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>
Number of active participants	6,657	6,453	6,516	6,472	6,516
Total County payroll for active participants	\$ 243,299,833	\$ 241,509,438	\$ 241,403,735	\$ 249,838,652	\$ 260,108,151
Average County salary	\$ 37,738	\$ 38,617	\$ 38,118	\$ 39,714	\$ 41,072
Number of retired and disabled participants and beneficiaries	2,433	2,520	2,575	2,602	2,664
Annual pensions being paid	\$ 36,654,024	\$ 38,558,916	\$ 40,271,040	\$ 41,847,168	\$ 43,904,652
Number of deferred vested participants	318	413	454	432	392
Annual pensions payable	\$ 3,404,856	\$ 4,128,228	\$ 4,655,052	\$ 4,824,612	\$ 4,383,876
Actuarial Accrued Liability	\$ 741,745,691	\$ 790,879,920	\$ 880,487,979	\$ 941,346,211	\$ 1,000,475,305
Assets of trust fund (market value)	\$ 798,594,200	\$ 835,341,291	\$ 898,444,049	\$1,045,216,961	\$ 972,502,164
(actuarial asset value)	\$ 841,335,004	\$ 885,049,492	\$ 933,730,481	\$ 992,145,401	\$ 1,040,514,476
County minimum suggested contribution rate	4.27%	4.60%	5.30%*	5.91%*	6.50%
County minimum suggested contribution	\$ 10,322,692	\$ 11,037,956	\$ 12,956,023	\$ 15,261,041	\$ 17,430,216

\* *changed funding method and/or assumptions*

# MERCER



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