

MERCER



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**ACTUARIAL VALUATION REPORT
AS OF
JULY 1, 2007
FOR THE
RETIREMENT SYSTEM OF
SHELBY COUNTY, TENNESSEE**

PREPARED BY:

MERCER

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November 2007

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HIGHLIGHTS

SHELBY COUNTY RETIREMENT SYSTEM JULY 1, 2007

| | | |
|---------------------------------|----------------------------------|----------------------------------|
| Actuarial Valuation Report | July 1, 2007 | July 1, 2006 |
| Applicable Fiscal Year | July 1, 2008 to June 30, 2009 | July 1, 2007 to June 30, 2008 |
| County Contribution Requirement | \$15,261,041 | \$12,956,023 |
| Percent of Payroll | 5.91% | 5.30% |

HIGHLIGHTS

SHELBY COUNTY RETIREMENT SYSTEM

JULY 1, 2007

SOURCES OF GAINS AND LOSSES

- ◆ Asset Return for funding calculations was 8.1% compared with 8.25% assumption
 - Market Value Return was 18.4%
 - Asset Return for funding smoothes market value returns over 10 years
 - Asset performance increased annual contribution \$0.2 million

- ◆ Salary Increases
 - Average 6.1% compared with 4.0% assumption
 - Total County payroll for active participants increased 3%
 - Salary experience increased annual contribution \$0.3 million

- ◆ Demographic Experience
 - Number of active participants decreased by 44 from prior year
 - Decrease in annual contribution due to demographic factors, such as aging, turnover, retirements, mortality, new hires and rehires was \$0.7 million

HIGHLIGHTS

SHELBY COUNTY RETIREMENT SYSTEM

JULY 1, 2007

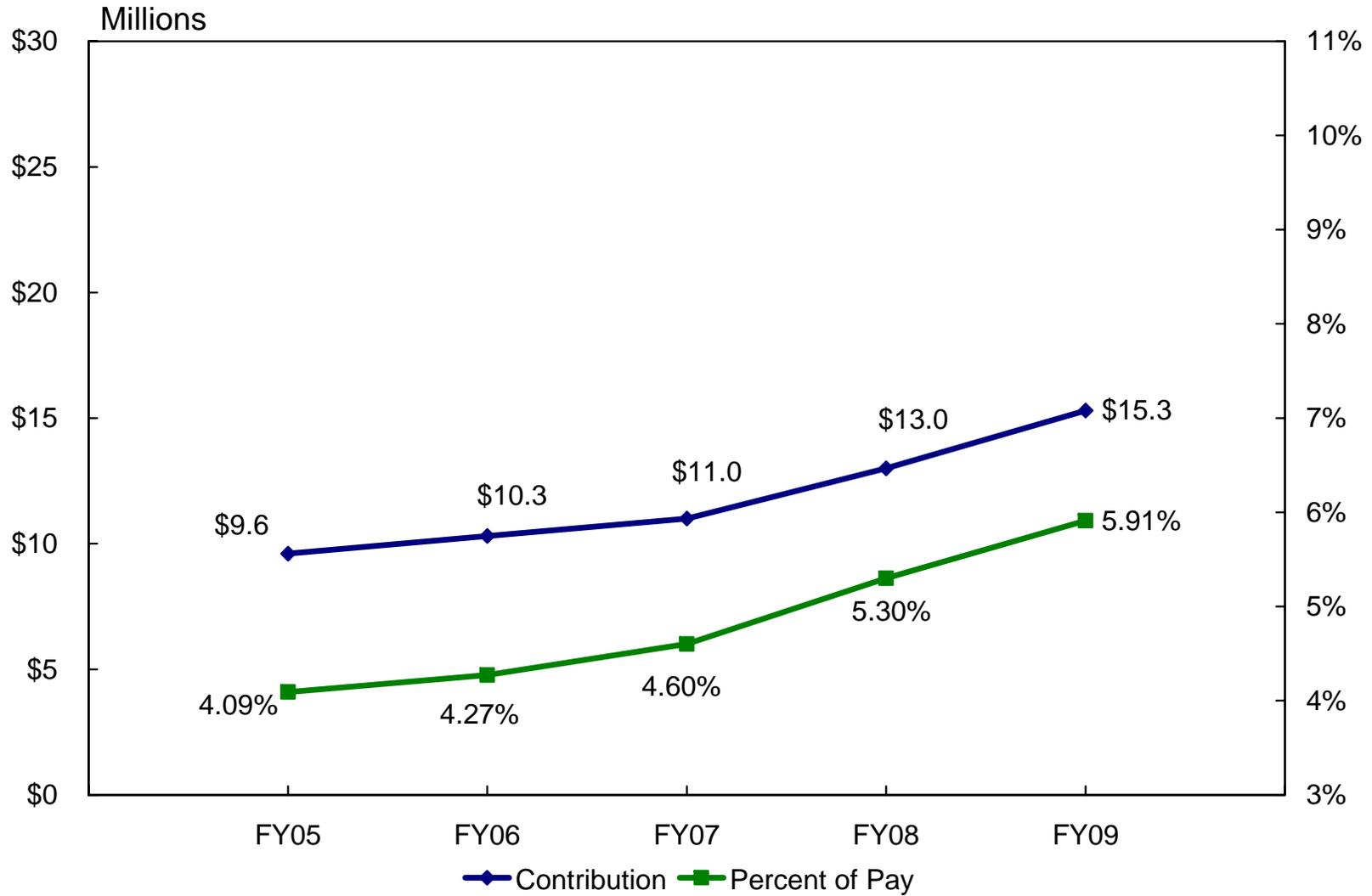
EFFECT OF ASSUMPTION CHANGES

◆ Assumption Changes

- Updated Salary Scale, Retirement, Withdrawal, Disability, and Disabled Mortality assumptions based on results of the Experience Study
- Increased Actuarial Accrued Liability by \$15 million (2% increase)
- Annual contribution requirement increased by \$2.5 million
- Most of the increase in cost is attributable to the change in the salary scale assumption, which now reflects an average annual salary increase of 5.2% from age 35 (average hire age) to age 65 (normal retirement age), versus the prior 4.0% assumption.

HIGHLIGHTS

Shelby County Retirement System Contribution Requirement



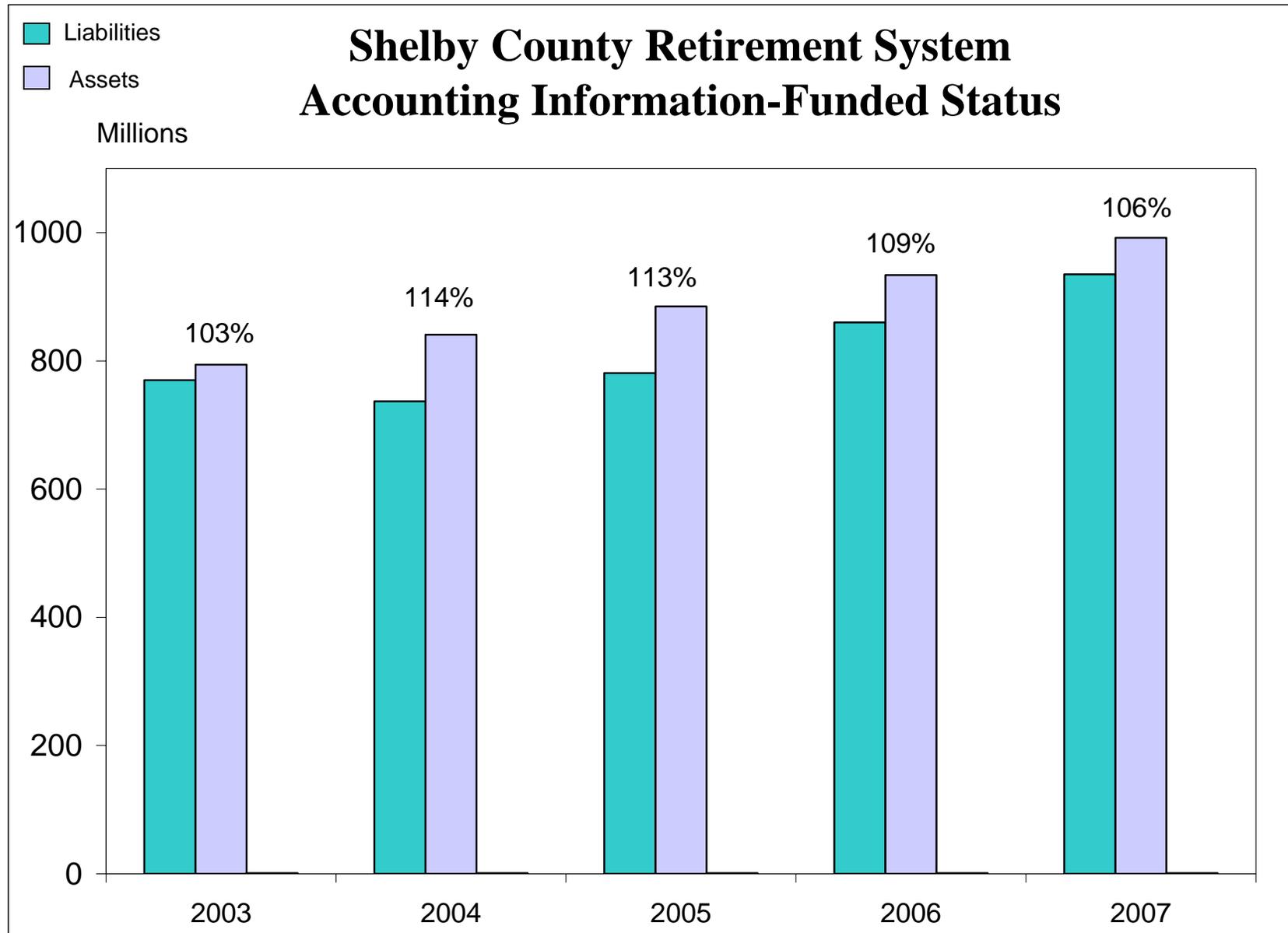
HIGHLIGHTS

SHELBY COUNTY RETIREMENT SYSTEM ACCOUNTING INFORMATION-FUNDING PROGRESS

| | <u>Current Year</u> | <u>Prior Year</u> |
|---------------|---------------------|-------------------|
| | June 30, 2007 | June 30, 2006 |
| Assets | \$992M | \$934M |
| Liabilities* | \$935M | \$860M |
| Funded Status | 106% | 109% |

**Liabilities on June 30 do not reflect changes in actuarial assumptions effective the following July 1.*

HIGHLIGHTS



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, 2007. The contents reflect generally accepted actuarial principles.

Section 1 of this report contains the results of the 2007 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, 2007</u> | | <u>July 1, 2006</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) | 5.91% | \$15,261,041 | 5.30% | \$12,956,023 |

The County contribution strategy is to apply the results on a valuation date to the following fiscal year. The July 1, 2007 contribution amount of \$15,261,041 will be the minimum suggested County contribution for the fiscal year July 1, 2008 to June 30, 2009.

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 were several plan changes, but they were immaterial to the results in this report.

There have been changes in actuarial assumptions since the last valuation. The assumptions are explained in more detail in Section 3.4 of the report.

- The salary increase assumption was changed for all plans from 4% per year to a graded scale by age.
- The withdrawal (or turnover) assumption was changed for Plan A and Plan C.
- The retirement assumption was changed for Plan A participants and for Plan C participants with fewer than 25 years of service.
- The disability assumption was changed for all plans from a plan specific assumption to the 1985 Pension Disability Study Class 1 Table.
- The mortality assumption for disabled participants was changed for all plans from a plan specific assumption to the 1985 Disabled Mortality Table.

HIGHLIGHTS (Continued)

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

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, 2007 | July 1, 2006 |
|--|----------------|----------------|
| a. Normal Cost for Benefits Earned During the Year | 10.86% | 10.23% |
| b. Amortization of Plan C Liability | 1.38% | 1.46% |
| c. Employee Contributions Expected | (3.31%) | (3.09%) |
| d. Interest on a. + b. + c. | <u>0.86%</u> | <u>0.83%</u> |
| e. Ongoing Cost of Plan (a. + b. + c. + d.) | 9.79% | 9.43% |
| f. Amortization of Surplus | (3.58%) | (3.82%) |
| g. Interest on f. | <u>(0.30%)</u> | <u>(0.31%)</u> |
| h. Total Suggested Minimum Contribution (e. + f. + g.) | 5.91% | 5.30% |

Demographic Experience

The number of active participants decreased from 6,516 on July 1, 2006 to 6,472 on July 1, 2007. The total County payroll increased approximately 3%. Demographic factors such as aging, turnover, retirements, mortality, new hires, and rehires decreased the annual contribution \$0.7 million.

HIGHLIGHTS (Continued)

Salary Increase Experience

There was a loss due to salary experience. Overall salary increases were more than expected. Salary increases averaged 6.1% while the expected salary increase was 4.0%. This experience increased the annual contribution approximately \$0.3 million.

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 8.1%, net of expenses. On a market value basis, the investment return was approximately 18.4%, net of expenses. The effect of asset performance was an increase in annual contribution of \$0.2 million.

Assumption Changes

The changes in the salary scale, withdrawal, retirement, disability, and disabled mortality assumptions increased the annual contribution significantly. This change increased the liabilities by only 2% but increased the annual contribution \$2.5 million.

Plan B COLA

A resolution was adopted to grant one-time cost of living bonuses in November 2006 to certain Plan B retirees. The total amount of the bonuses did not exceed \$250,000. As a result, these payments decreased the asset value on June 30, 2007 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, 2007 for the financial statement of the Plan. The Plan is funded at 106% compared with 109% for the prior year. The impact of the new assumptions will not be reflected until June 30, 2008 since the changes are effective July 1, 2007. The impact of the new mortality table effective July 1, 2006 is first reflected on June 30, 2007.

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.

HIGHLIGHTS (Continued)

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. The updated actuarial assumptions used in this report were approved by the Retirement Board on September 4, 2007 retroactive to July 1, 2007.

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 27, 2007

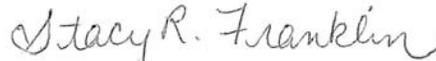
Date signed



Karen W. Buckner, A.S.A., M.A.A.A.
Enrolled Actuary No. 05-3742

November 27, 2007

Date signed



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

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.

SECTION 1.1**The Assets at June 30, 2007****Allocation of Assets by Type**

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

| <u>Item</u> | <u>Market Value</u> |
|---------------------------------------|---------------------|
| Investments | \$1,013,904,699 |
| Cash and Equivalents | 30,514,253 |
| Accrued Investment Income | 3,903,457 |
| Investment Sales | 1,841,103 |
| Other Assets | 0 |
| Accounts Payable and Accrued Expenses | (1,524,539) |
| Investment Purchases Payable | <u>(3,422,012)</u> |
| Total | \$ 1,045,216,961 |
| Actuarial Asset Value | \$ 992,145,401 |

Development of Actuarial Asset Value on July 1, 2007

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, 2007

| | |
|---|------------------|
| 1. Prior year market value of assets | \$ 898,444,049 |
| 2. Benefit payments | 43,420,168 |
| 3. Contributions | 26,950,047 |
| 4. Expected return (at 8.25%) | 73,385,626 |
| 5. Expected market value of assets (1. - 2. + 3. + 4.) | 955,359,554 |
| 6. Actual market value of assets | \$ 1,045,216,961 |
| 7. Gain/(Loss) (6. - 5.) | \$ 89,857,407 |

Schedule of Investment Gains/(Losses)

| 6-30 | Expected Market Value at 8.25% | Actual Market Value | Actual Return | Asset Gain or (Loss) | Gain or (Loss) Percent | Deferred Amount |
|-------------|---|------------------------------------|--------------------------|---------------------------------|-----------------------------------|----------------------------|
| 2007 | \$ 955,359,554 | \$1,045,216,961 | 18.4% | \$ 89,857,407 | 90% | \$ 80,871,666 |
| 2006 | 886,784,856 | 898,444,049 | 9.7% | 11,659,193 | 80% | 9,327,354 |
| 2005 | 843,547,225 | 835,341,291 | 7.2% | (8,205,934) | 70% | (5,744,154) |
| 2004 | 754,669,143 | 798,594,200 | 14.5% | 43,925,057 | 60% | 26,355,034 |
| 2003 | 730,140,073 | 714,167,666 | 5.9% | (15,972,407) | 50% | (7,986,204) |
| 2002 | 789,211,191 | 697,587,106 | (4.2%) | (91,624,085) | 40% | (36,649,634) |
| 2001 | 758,546,652 | 746,918,030 | 6.6% | (11,628,622) | 30% | (3,488,587) |
| 2000 | 750,047,425 | 711,894,934 | 2.8% | (38,152,491) | 20% | (7,630,498) |
| 1999 | 726,115,501 | 706,281,320 | 5.3% | (19,834,181) | 10% | (1,983,417) |
| TOTAL | | | 7.2% (average) | (39,796,063) | | \$ 53,071,560 |

| Current Market Value (A) | Total Deferral of Gains/(Losses) (B) | Actuarial Asset Value (A) - (B) |
|-------------------------------------|---|--|
| \$1,045,216,961 | \$53,071,560 | \$992,145,401 |

Summary of Fund Operations

| | <u>Market Value</u> | <u>Actuarial Asset Value</u> |
|---|----------------------------|---|
| Fund as of June 30, 2006 | \$ 898,444,049 | \$ 933,730,481 |
| Contributions | | |
| County | \$ 18,758,647 | |
| Employee | <u>8,191,400</u> | |
| Total | \$ 26,950,047 | \$ 26,950,047 |
| Benefit Payments | | |
| Refunds and Cashouts | \$ (1,878,662) | |
| Retirement | <u>(41,541,506)</u> | |
| Total | \$ (43,420,168) | \$ (43,420,168) |
| Administration Expenses | \$ (1,288,871) | \$ (1,288,871) |
| Investment Return (Net of investment management expenses) | \$ 164,531,904 | \$ 76,173,912 |
| Fund as of June 30, 2007 | <u>\$1,045,216,961</u> | <u>\$ 992,145,401</u> |
| Estimated Rate of Return (Net of Expenses) | 18.35% | 8.10% |

SECTION 1.2

Development of County Contribution Requirement at July 1, 2007

| | | |
|----|---|---------------------|
| 1. | Actuarial Accrued Liability (AAL) | |
| a. | Plan B Actives and Transfers | \$ 26,318,907 |
| b. | Plan B Retireds, Beneficiaries, Disableds and Deferreds | <u>240,708,204</u> |
| c. | Total Plan B = (a.) + (b.) | \$ 267,027,111 |
| 2. | Actuarial Accrued Liability (AAL) | |
| a. | Plan A Actives and Transfers | \$ 213,787,004 |
| b. | Plan A Retireds, Beneficiaries, Disableds and Deferreds | <u>173,560,952</u> |
| c. | Total Plan A= (a.) + (b.) | \$ 387,347,956 |
| 3. | Actuarial Accrued Liability (AAL) | |
| a. | Plan C Actives and Transfers | \$ 270,758,569 |
| b. | Plan C Retireds, Beneficiaries, Disableds and Deferreds | <u>16,212,575</u> |
| c. | Total Plan C = (a.) + (b.) | \$ 286,971,144 |
| 4. | Total AAL (1.) + (2.) + (3.) | \$ 941,346,211 |
| 5. | Funding Target = 100% x AAL | \$ 941,346,211 |
| 6. | Actuarial Asset Value | \$ 992,145,401 |
| 7. | (Surplus) or Obligation | |
| a. | Change in (Surplus) or Obligation due to Plan C | \$ 36,370,591 |
| b. | Remaining (Surplus) or Obligation | <u>(87,169,781)</u> |
| c. | Total Surplus = (5.) – (6.) | \$ (50,799,190) |
| 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 16 years from July 1, 2007 | <u>(9,243,533)</u> |
| c. | Total = (a.) + (b.) | \$ (5,681,819) |

| | | |
|-----|--|--------------------|
| 9. | Normal Cost | |
| | a. Plan B | \$ 530,849 |
| | b. Plan A | 11,043,998 |
| | c. Plan C | <u>16,457,313</u> |
| | d. Total = (a.) + (b.) + (c.) | \$ 28,032,160 |
| 10. | Expected Employee Contributions | |
| | a. Plan C Participants | \$ (8,269,905) |
| | b. Plan B Participants | <u>(281,172)</u> |
| | c. Total (a.)+(b.) | \$ (8,551,077) |
| 11. | Interest at 8.25% on (8.) + (9.) + (10.) | \$ 1,461,777 |
| 12. | Total County Contribution (8.) + (9.) + (10.) + (11.) | \$ 15,261,041 |
| 13. | Expected FY08 Active Payroll (under expected retirement age) | |
| | a. Plan B | \$ 3,514,647 |
| | b. Plan A | 116,901,944 |
| | c. Plan C | <u>137,831,749</u> |
| | d. Total | \$ 258,248,340 |
| 14. | County Contribution Rate | |
| | a. Normal Cost | 10.86% |
| | b. Amortization of Plan C | 1.38% |
| | c. Employee Contributions | (3.31) |
| | d. Interest on (a.), (b.), and (c.) | <u>0.86</u> |
| | e. Ongoing Cost = (a.) + (b.) + (c.) + (d.) | 9.79% |
| | f. Amortization of Surplus | (3.58) |
| | g. Interest on (f.) | <u>(0.30)</u> |
| | h. Total = (e.) + (f.) + (g.) | 5.91% |

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> |
|--------------------------------------|---|---|--------------------------------|
| 2007 | \$ 992,145,401 | \$ 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% |
| 2003 | \$ 794,201,990 | \$ 769,753,615 | 103% |

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> |
|--------------------------------------|--|---------------------------------------|
| 2007 | \$ 11,037,956 | 170% |
| 2006 | \$ 10,322,629 | 182% |
| 2005 | \$ 9,645,830 | 195% |
| 2004 | \$ 17,836,157 | 100% |
| 2003 | \$ 12,313,480 | 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.*

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.

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, 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.

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

A resolution was adopted to grant one-time cost of living bonuses in November 2006 to certain Plan B retirees.

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. If the employee had completed 15 years of service, the spouse is entitled to a permanent survivor pension equal to 75% of participant's pension computed as if he had retired or terminated immediately before death.

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 \$20,000 is the automatic form of payment. If the lump sum value is greater than \$20,000 but less than \$35,000, 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% |

Rehabilitation Allowances

A disabled participant or surviving spouse may receive a tuition reimbursement for training and rehabilitation up to \$1,000 for no more than two years.

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

None.

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.

(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 \$20,000 is the automatic form of payment. If the lump sum value is greater than \$20,000 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.

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

| | | <u>Sample Rates</u> (Rates are per 1,000 lives) | | | |
|---|----------------|--|-----------|-----------|-----------|
| | | <u>20</u> | <u>35</u> | <u>50</u> | <u>60</u> |
| | | <u>Age:</u> | | | |
| Mortality Rate | | | | | |
| Before and after retirement: | Male: | 0.307 | 0.750 | 1.917 | 6.125 |
| RP-2000 Mortality Table | Female: | 0.173 | 0.444 | 1.512 | 4.905 |
| Projected to 2006 | | | | | |
| Disability Rate | | | | | |
| Table of Values consistent | Male: | 0.290 | 0.690 | 3.580 | 12.560 |
| with the scale at right | Female: | 0.300 | 1.360 | 5.330 | 11.590 |
| Withdrawal Rate | | | | | |
| Table of Values consistent | Male: | 179.500 | 58.800 | 100.00 | 200.00 |
| with the scale at right | Female: | 579.600 | 163.200 | 100.00 | 200.00 |
| Rate of Death Among Disabled Lives | | | | | |
| Table of Values consistent | Male: | 20.540 | 21.350 | 15.370 | 69.220 |
| with the scale at right | Female: | 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

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

- The salary scale was changed from 4% to a graded salary scale assumption
- The disability table was changed from a plan specific assumption to the 1985 Pension Disability – Class 1 Table
- The mortality assumption for disabled participants changed from a plan specific assumption to the 1985 Pension Disability Table

D. Actuarial Assumptions for Valuation of Liabilities of Plan A

1. Assumptions Concerning Future Events

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

2. Assumptions Made with Respect to Employee Data

Spouse Frequency and Ages

Actual married status, actual age of spouse for inactive participants. 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. 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

- The salary scale was changed from 4% to a graded salary scale assumption
- The disability table was changed from a plan specific assumption to the 1985 Pension Disability – Class 1 Table
- The mortality assumption for disabled participants changed from a plan specific assumption to the 1985 Pension Disability Table
- The withdrawal and retirement assumptions were updated to better reflect anticipated plan experience

E. Actuarial Assumptions for Valuation of Liabilities of Plan C

1. Assumptions Concerning Future Events

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

2. Assumptions Made with Respect to Employee Data

Spouse Frequency and Ages

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

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

- The salary scale was changed from 4% to a graded salary scale assumption
- The disability table was changed from a plan specific assumption to the 1985 Pension Disability – Class 1 Table
- The mortality assumption for disabled participants changed from a plan specific assumption to the 1985 Pension Disability Table
- The withdrawal and retirement assumptions were updated to better reflect anticipated plan experience

However, there was no change in the retirement assumption for participants with at least 25 years of service.

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.

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> |
|-------------|--------------------------|----------------------------|---------------|
| 2007-08 | \$ 5,306,761 | \$ 41,673,692 | \$ 46,980,453 |
| 2008-09 | 7,622,801 | 41,439,300 | 49,062,101 |
| 2009-10 | 10,185,878 | 41,146,511 | 51,332,389 |
| 2010-11 | 14,653,175 | 40,817,640 | 55,470,815 |
| 2011-12 | 18,994,932 | 40,434,050 | 59,428,982 |
| 2012-13 | 23,797,555 | 39,985,502 | 63,783,057 |
| 2013-14 | 28,960,812 | 39,512,807 | 68,473,619 |
| 2014-15 | 34,875,209 | 39,035,052 | 73,910,261 |
| 2015-16 | 41,372,557 | 38,564,700 | 79,937,257 |
| 2016-17 | 48,695,074 | 38,051,813 | 86,746,887 |
| 2017-18 | 55,953,965 | 37,460,777 | 93,414,742 |
| 2018-19 | 63,146,833 | 36,869,079 | 100,015,912 |
| 2019-20 | 70,548,304 | 36,228,539 | 106,776,843 |
| 2020-21 | 78,072,917 | 35,545,682 | 113,618,599 |

SECTION 4.2

Summary of Valuation Data

| | <u>Plan B</u> | <u>Plan A</u> | <u>Plan C</u> | <u>Total</u> |
|-----------------------------------|---------------|----------------|----------------|---------------|
| <u>ACTIVE PARTICIPANTS</u> | | | | |
| Number | 82 | 3,177 | 3,213 | 6,472 |
| Number Vested | 82 | 1,748 | 1,844 | 3,674 |
| Number Transferred to City | 0 | 181 | 0 | 181 |
| Total Annual Payroll FY07 | | | | |
| County Payroll | \$ 4,510,262 | \$ 114,648,863 | \$ 130,679,527 | \$249,838,652 |
| Avg. Salary | \$ 55,003 | \$ 38,267 | \$ 40,672 | \$ 39,714 |
| City Payroll | N/A | \$ 9,443,681 | N/A | \$ 9,443,681 |
| Avg. Salary | N/A | \$ 52,175 | N/A | \$ 52,175 |
| Avg. Age | 61.2 | 47.6 | 43.2 | 45.6 |
| Avg. Service | 33.5 | 11.4 | 11.3 | 11.6 |
| Avg. Remaining Service | 5.7 | 10.8 | 10.7 | 10.7 |
| Number of Public Safety Employees | N/A | 523 | 778 | 1,301 |
| PSE Payroll | N/A | \$ 20,364,931 | \$ 30,344,347 | \$ 50,709,278 |
| Avg. Pay | N/A | \$ 38,939 | \$ 39,003 | \$ 38,977 |
| Avg. Age | N/A | 43.6 | 41.4 | 42.3 |
| Avg. Service | N/A | 9.9 | 11.1 | 10.6 |

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

| | <u>Plan B</u> | <u>Plan A</u> | <u>Plan C</u> | <u>Total</u> |
|--|---------------|---------------|---------------|--------------|
| <u>INACTIVE PARTICIPANTS</u> | | | | |
| Participants Receiving Benefits | | | | |
| RETIRED | | | | |
| Number | 1,021 | 865 | 51 | 1,937 |
| Total Monthly Benefits | \$ 1,778,189 | \$ 844,914 | \$ 102,744 | \$ 2,725,847 |
| Avg. Monthly Benefits | \$ 1,742 | \$ 977 | \$ 2,015 | \$ 1,407 |
| DISABLED | | | | |
| Number | 45 | 128 | 0 | 173 |
| Total Monthly Benefits | \$ 44,391 | \$ 209,864 | \$ 0 | \$ 254,255 |
| Avg. Monthly Benefits | \$ 986 | \$ 1,640 | \$ 0 | \$ 1,470 |
| BENEFICIARIES | | | | |
| Number | 319 | 172 | 1 | 492 |
| Total Monthly Benefits | \$ 361,225 | \$ 144,738 | \$ 1,199 | \$ 507,162 |
| Avg. Monthly Benefits | \$ 1,132 | \$ 841 | \$ 1,199 | \$ 1,031 |
| TOTAL | | | | |
| Number | 1,385 | 1,165 | 52 | 2,602 |
| Total Monthly Benefits | \$ 2,183,805 | \$ 1,199,515 | \$ 103,943 | \$ 3,487,264 |
| Avg. Monthly Benefits | \$ 1,577 | \$ 1,030 | \$ 1,999 | \$ 1,340 |
| Participants with Deferred Benefits | | | | |
| VESTED TERMINATED | | | | |
| Number | 6 | 248 | 20 | 274 |
| Total Monthly Benefits | \$ 5,612 | \$ 177,286 | \$ 22,169 | \$ 205,067 |
| Avg. Monthly Benefits | \$ 935 | \$ 715 | \$ 1,108 | \$ 748 |
| DISABLED | | | | |
| Number | 0 | 120 | 32 | 152 |
| Total Monthly Benefits | \$ 0 | \$ 140,489 | \$ 49,813 | \$ 190,302 |
| Avg. Monthly Benefits | \$ 0 | \$ 1,171 | \$ 1,557 | \$ 1,252 |
| BENEFICIARIES | | | | |
| Number | 0 | 5 | 1 | 6 |
| Total Monthly Benefits | \$ 0 | \$ 5,564 | \$ 1,118 | \$ 6,682 |
| Avg. Monthly Benefits | \$ 0 | \$ 1,113 | \$ 1,118 | \$ 1,114 |
| TOTAL | | | | |
| Number | 6 | 373 | 53 | 432 |
| Total Monthly Benefits | \$ 5,612 | \$ 323,339 | \$ 73,100 | \$ 402,051 |
| Avg. Monthly Benefits | \$ 935 | \$ 867 | \$ 1,379 | \$ 931 |
| <u>TOTAL ACTIVE AND INACTIVE PARTICIPANTS</u> | | | | |
| Number | 1,473 | 4,715 | 3,318 | 9,506 |

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

| | <u>2003</u> | <u>2004</u> | <u>2005</u> | <u>2006</u> | <u>2007</u> |
|---|----------------|----------------|----------------|----------------|-----------------|
| Number of active participants | 6,516 | 6,657 | 6,453 | 6,516 | 6,472 |
| Total County payroll for active participants | \$ 237,197,193 | \$ 243,299,833 | \$ 241,509,438 | \$ 241,403,735 | \$ 249,838,652 |
| Average County salary | \$ 37,579 | \$ 37,738 | \$ 38,617 | \$ 38,118 | \$ 39,714 |
| Number of retired and disabled participants and beneficiaries | 2,421 | 2,433 | 2,520 | 2,575 | 2,602 |
| Annual pensions being paid | \$ 35,706,972 | \$ 36,654,024 | \$ 38,558,916 | \$ 40,271,040 | \$ 41,847,168 |
| Number of deferred vested participants | 350 | 318 | 413 | 454 | 432 |
| Annual pensions payable | \$ 2,784,936 | \$ 3,404,856 | \$ 4,128,228 | \$ 4,655,052 | \$ 4,824,612 |
| Actuarial Accrued Liability | \$ 700,702,075 | \$ 741,745,691 | \$ 790,879,920 | \$ 880,487,979 | \$ 941,346,211 |
| Assets of trust fund (market value) | \$ 714,167,666 | \$ 798,594,200 | \$ 835,341,291 | \$ 898,444,049 | \$1,045,216,961 |
| (actuarial asset value) | \$ 799,673,732 | \$ 841,335,004 | \$ 885,049,492 | \$ 933,730,481 | \$ 992,145,401 |
| County minimum suggested contribution rate | 4.09%* | 4.27% | 4.60% | 5.30%* | 5.91%* |
| County minimum suggested contribution | \$ 9,645,830 | \$ 10,322,692 | \$ 11,037,956 | \$ 12,956,023 | \$ 15,261,041 |

* *changed funding method and/or assumptions*

MERCER



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