May 2009

# Supplemental Retirement Pension Plan for Employees of the Jefferson County Public School District R-1

Actuarial Valuation Report as of September 1, 2008 for the Plan Year Ending August 31, 2008

MERCER

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# Contents



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# Section I: Report Highlights

This report has been prepared by Mercer for the Supplemental Retirement Pension Plan for Employees of the Jefferson County Public School District R-1 to:

- Present the results of a valuation of the Supplemental Retirement Pension Plan for Employees of the Jefferson County Public School District R-1 as of September 1, 2008;

- Review experience under the Plan for the year ended August 31, 2008;

- Provide reporting and disclosure information for auditor's reports, governmental agencies and other interested parties pursuant to GASB 25 and 27.

The main financial highlights are:

- The funded ratio of the Plan has increased since the prior valuation as indicated by the table below.

| GASB 25 Funded Status | September 1, 2008 | September 1, 2007 |
|---|---|---|
| Accrued Liability | $ 20,796,503 | $ 21,866,736 |
| Actuarial Value of Assets | 13,357,446 | 12,172,850 |
| Unfunded Accrued Liability | 7,439,057 | 9,693,886 |
| Funded Ratio | 64.2% | 55.7% |

- The total Annual Required Contribution (ARC) for the Plan decreased from $697,026, as of September 1, 2007, to $633,936, as of September 1, 2008.

| Contribution Summary | Fiscal Year Ending August 31, 2008 | Fiscal Year Ending August 31, 2007 |
|---|---|---|
| ARC | $ 633,936 | $ 697,026 |

This valuation was conducted using the assumptions outlined in the Summary of Actuarial Assumptions section.

During the year ending August 31, 2008, the School District made a contribution of $3,991,596, which included the remaining proceeds from the Certificates of Participation (COPs) issued in the prior year. The contribution and lump sum payouts made during the year caused a decrease in the Plan's liabilities, number of participants and ARC.

# Section II: Principal Valuation Results

A summary of principal valuation results from the current valuation and the prior valuation follows. Any changes in actuarial assumptions, methods or plan provisions between the two valuations are described in the section entitled Effects of Changes.

| | Actuarial Valuation as of | |
|---|---|---|
| | **September 1, 2008** | **September 1, 2007** |
| **Summary of Costs** | | |
| Annual Required Contribution | $ 633,936 | $ 697,026 |
| **GASB No. 25 Funded Status** | | |
| Actuarial Accrued Liability | $ 20,796,503 | $ 21,866,736 |
| Actuarial Value of Assets | $ 13,357,446 | $ 12,172,850 |
| Unfunded Actuarial Accrued Liability | $ 7,439,057 | $ 9,693,886 |
| **Market Value of Assets** | | |
| Market Value of Assets | $ 13,357,446 | $ 12,172,850 |
| Actuarial Present Value of Accumulated Plan Benefits (FAS No. 35) | $ 20,796,503 | $ 21,866,736 |
| **Summary of Data** | | |
| Number of Members in Valuation | | |
| Active Members | 3,160 | 3,342 |
| Members with Deferred Benefits | 35 | 46 |
| Retired Members | 455 | 435 |
| Beneficiaries Receiving Benefits | 12 | 10 |
| **Total** | 3,662 | 3,833 |
| **Active Member Statistics** | | |
| Average Age | 48.94 | 48.19 |
| Average Vesting Service | 15.24 | 14.31 |

# Section III: Effects of Changes

## Changes in Actuarial Assumptions

There were no changes in actuarial assumptions since the last actuarial valuation as of September 1, 2007.

## Plan Experience

During the plan year ending August 31, 2008 the plan did not experience any significant liability gains or losses. There were asset losses totaling $1,145,724, resulting from an actual rate of return of (2.65%), compared to an assumed rate of return of 6.50%.

## Changes in Actuarial Methods

There have been no changes in methods since the last valuation of the Plan.

## Changes in Plan Provisions

There were changes in plan provisions since the last actuarial valuation as of September 1, 2007, but these changes had no effect on plan liabilities or costs. See Summary of Plan Provisions for a description of the changes.

# Section IV: Certification

We have prepared an actuarial valuation of the Supplemental Retirement Pension Plan for Employees of the Jefferson County Public School District R-1 as of September 1, 2008, for the plan year ending August 31, 2008. The results of the valuation are set forth in this report, which reflects the provisions of the Plan effective on September 1, 2008.

Mercer is not responsible for consequences arising from the use of any elements of this report for any other than their intended purpose. Determinations for other purposes, such as judging benefit security on plan termination, may be significantly different from the results shown in this report.

## Data

We used and relied upon financial data submitted by the trustee without further audit. We have also used and relied upon participant data supplied by the plan sponsor; this data would customarily not be verified by a plan's actuary. We have reviewed the participant data for internal consistency and reasonableness and have no reason to doubt its substantial accuracy. Finally, we have also used and relied upon the plan documents supplied by the plan sponsor. The plan sponsor is solely responsible for the validity and completeness of this information.

## Liabilities

All costs, liabilities, and other factors under the plan were determined in accordance with generally accepted actuarial principles and procedures. In our opinion, the actuarial assumptions are reasonable and represent our best estimate of the anticipated experience under the plan. This report fully and fairly discloses the actuarial position of the plan on an ongoing basis.

## Professional Qualifications

We are available to answer any questions on the material contained in the report, or to provide explanations or further details as may be appropriate. The undersigned credentialed actuaries collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained in this report. We are not aware of any relationship, including investments or other services that could create a conflict-of-interest, that would impair our objectivity.

# Section IV: Certification *(continued)*

| | |
|---|---|
| Deborah K. Distler | May 1, 2009 |
| **Deborah K. Distler, FSA, EA, MAAA**<br>**Enrolled Actuary No. 08-3745** | **Date** |
| Paul E. Marrs | May 1, 2009 |
| **Paul E. Marrs, EA, MAAA**<br>**Enrolled Actuary No. 08-7382** | **Date** |

I have reviewed and found acceptable the actuarial assumptions, methods and procedures used in this valuation.

| | |
|---|---|
| Mark Ferrin | May 1, 2009 |
| **Mark Ferrin, FSA, EA, MAAA**<br>**Enrolled Actuary No. 08-04617** | **Date** |

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# Section V: Development of Costs

## Annual Required Contribution

The liabilities for the annual actuarial contribution have been determined using the Traditional Unit Credit Actuarial Cost Method.

| | | September 1, 2008 (for plan year ending August 31, 2008) | September 1, 2007 (for plan year ending August 31, 2007) |
|---|---|---|---|
| | Funding Rate | 6.50% | 6.50% |
| 1. | Actuarial Present Value of Accrued Benefits | | |
| | a. Active Members | $ 11,257,915 | $ 11,615,101 |
| | b. Members with Deferred Benefits | 705,948 | 1,057,188 |
| | c. Members Receiving Benefits | 8,832,640 | 9,194,447 |
| | d. Total (a. + b. + c.) | $ 20,796,503 | $ 21,866,736 |
| 2. | Actuarial Value of Assets | 13,357,446 | 12,172,850 |
| 3. | Unfunded Actuarial Accrued Liability | $ 7,439,057 | $ 9,693,886 |
| 4. | Normal Cost | 0 | 0 |
| **5.** | **Annual Required Contribution (20 year closed amortization of the unfunded actuarial accrued liability at the funding rate)**[1] | $ 633,936 | $ 697,026 |

[1] *The Annual Required Contribution for the plan year ending August 31, 2007 was amortized over a 30 year open schedule.*

# Section VI: Accounting Under GASB Nos. 25 and 27 Information

## Supplementary Schedules

Financial Reporting for Defined Benefit and Note Disclosures for Defined Contribution Plans (GASB Statement No. 25) is effective for periods beginning after June 15, 1996, and requires funding status to be measured based upon the actuarial funding method adopted by the Jefferson County Public Schools Board of Education. The method adopted is the Traditional Unit Credit Cost Method.

### Schedules of Funding Progress

The GASB Statement No. 25 liabilities and assets resulting from this and prior years' actuarial valuations are as follows:

| Actuarial Valuation Date | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) Traditional Unit Credit (b) | Unfunded AAL (UAAL) (b-a) | Funded Ratio (a/b) | Covered Payroll (c) | UAAL as a Percentage of Covered Payroll ((b-a)/c) |
|---|---|---|---|---|---|---|
| 8/31/2000 | $ 8,504,814 | $ 52,762,095 | $ 44,257,278 | 16.1% | $255,243,098 | 17.3% |
| 8/31/2001 | 11,991,731 | 53,662,892 | 41,671,161 | 22.3% | 218,860,851 | 19.0% |
| 8/31/2002 | 15,335,657 | 55,989,288 | 40,653,631 | 27.4% | 213,890,768 | 19.0% |
| 8/31/2003 | 17,704,428 | 57,918,504 | 40,214,076 | 30.6% | 189,293,462 | 21.2% |
| 8/31/2004 | 18,333,937 | 58,094,029 | 39,760,092 | 31.6% | 158,996,444 | 25.0% |
| 8/31/2005 | 19,754,373 | 66,985,446 | 47,231,073 | 29.5% | 149,593,414 | 31.6% |
| 8/31/2006 | 17,567,821 | 60,976,202 | 43,408,381 | 28.8% | 143,149,193 | 30.3% |
| 8/31/2007 | 12,172,850 | 21,866,736 | 9,693,886 | 55.7% | 138,394,263 | 7.0% |
| 8/31/2008 | 13,357,446 | 20,796,503 | 7,439,057 | 64.2% | 101,810,221 | 7.3% |

### Schedule of Employer Contributions

The GASB Statement No. 25 required contributions and actual percentages contributed are as follows:

| Year Ended August 31 | Annual Required Contribution (Beginning of Year) | Actual Contribution | Percentage Contributed |
|---|---|---|---|
| 1999 | $ 15,645[2] | $ 3,943,486 | 252.1% |
| 2000 | 3,656,437 | 5,509,713 | 150.7% |
| 2001 | 3,642,344 | 5,749,862 | 157.9% |
| 2002 | 3,507,060 | 6,842,575 | 195.1% |
| 2003 | 3,359,774 | 4,290,423 | 127.7% |
| 2004 | 3,546,389 | 3,351,265 | 94.5% |
| 2005 | 3,577,818 | 3,856,788 | 107.8% |
| 2006 | 3,288,244 | 6,000,000 | 182.5% |
| 2007 | 697,026[3] | 697,026 | 100.0% |
| 2008 | 633,936[3] | 633,936 | 100.0% |

[2] *Prorated for short plan year.*

[3] *The School District contributed an additional $34,302,974 for the year ended August 31, 2007 and $3,357,660 for the year ended August 31, 2008 from a Certificate of Participation (COP) issuance to reduce the plan's unfunded actuarial accrued liability.*

# Section VI: Accounting Under GASB Nos. 25 and 27 Information

## Supplementary Schedules *(continued)*

### Trend Information under GASB No. 27

| Year Ended August 31 | Annual Pension Cost (APC) | Percentage of APC Contributed | Net Pension Obligation |
|---|---|---|---|
| **1999** | $ 15,645 | Over 100% | $ (3,927,841) |
| **2000** | 3,668,866 | Over 100% | (5,768,688) |
| **2001** | 3,660,598 | Over 100% | (7,857,953) |
| **2002** | 3,531,924 | Over 100% | (11,168,604) |
| **2003** | 3,395,114 | Over 100% | (12,063,913) |
| **2004** | 3,584,562 | 93.5% | (11,830,616) |
| **2005** | 3,438,824 | Over 100% | (12,248,581) |
| **2006** | 3,266,826 | Over 100% | (14,981,755) |
| **2007** | 613,184 | Over 100% | (49,368,571) |
| **2008** | 1,632,034 | Over 100% | (51,728,133) |

### Annual Pension Cost for year ending August 31, 2008

| | Amount |
|---|---|
| Annual Required Contribution (Beginning of Year) | $ 633,936 |
| Interest on Net Pension Obligation | (3,208,957) |
| Adjustment to Annual Required Contribution | 4,207,055 |
| Annual Pension Cost | $ 1,632,034 |

### Actuarial Assumptions, Method and Additional Information

| | |
|---|---|
| Valuation Date | August 31, 2008 |
| Actuarial Cost Method | Traditional Unit Credit |
| Amortization Method | 20 year closed period (30 year open period for fiscal year 2007; 40 year open period prior to fiscal year 2007) |
| Asset Valuation Method | Market Value |
| Actuarial Assumptions: | |
| Investment Rate of Return | 6.50% for August 31, 2007 and later, 7.75% before August 31, 2007, 8.75% before August 31, 2005 |
| Projected Salary Increases | None |
| Cost of Living Adjustments | None |
| Inflation (included in rate of return) | 2.8% (4.5% before August 31, 2005) |

# Section VII: Plan Assets

## Summary of Assets

| Asset Category | | Market Value as of August 31, 2008 | Market Value as of August 31, 2007 |
|---|---|---|---|
| **1.** | **Cash and short-term investments** | $ 1,207,221 | $ 10,041,658 |
| **2.** | **Investments** | | |
| a. | Equities | $ 5,001,667 | $ 3,635,479 |
| b. | Convertible Securities | 1,628,040 | 1,123,898 |
| c. | Fixed Income | 6,322,309 | 5,726,475 |
| d. | Total | $ 12,952,016 | $ 10,485,852 |
| **3.** | **Receivables** | | |
| a. | Employer Contributions | $ 0 | $ 0 |
| b. | Dividends and Interest | 0 | 0 |
| c. | Other Income | 2,506 | 46,713 |
| d. | Total | $ 2,506 | $ 46,713 |
| **4.** | **Total Assets (1. + 2d.+ 3d.)** | $ 14,161,743 | $ 20,574,223 |
| **5.** | **Liabilities** | | |
| a. | Lump Sums Payable | 804,297 | 8,401,373 |
| b. | Accounts Payable | 0 | 0 |
| c. | Total | 804,297 | 8,401,373 |
| **6.** | **Net Assets for Pension Benefits (4. – 5c.)** | $ 13,357,446 | $ 12,172,850 |

# Section VII: Plan Assets

## Reconciliation of Funding Assets

| Transactions | | August 31, 2007 to August 31, 2008 | August 31, 2006 to August 31, 2007 |
|---|---|---|---|
| **Income** | | | |
| 1. Contributions | | | |
| ▪ Employer | $ | 3,991,596 | 35,000,000 |
| 2. Investment earnings | | | |
| ▪ Realized gain/loss | | 102,766 | 4,126,904 |
| ▪ Unrealized investment gain/loss | | (629,639) | (2,079,530) |
| 3. Other income | | 184,709 | 989,209 |
| **4. Total income** | **$** | **3,649,432** | **38,036,583** |
| **Disbursements** | | | |
| 5. Benefit payments | | | |
| ▪ To participants or beneficiaries | $ | 1,660,539 | 35,030,181 |
| ▪ Lump sums payable October 1 | $ | 804,297 | 8,401,373 |
| **6. Total disbursements** | **$** | **2,464,836** | **43,431,554** |
| **7. Net income** *(4. – 6.)* | **$** | **1,184,596** | **(5,394,971)** |
| 8. Net assets at beginning of year | | 12,172,850 | 17,567,821 |
| **9. Net assets at end of year** *(7. + 8.)* | **$** | **13,357,446** | **12,172,850** |

# Section VIII: Member Data

## Member Data Reconciliation

| | | Inactive Members/Beneficiaries | | | |
|---|---|---|---|---|---|
| | **Active Participants** | **With Deferred Benefits** | **Retired Members** | **Receiving Beneficiaries** | **Total** |
| As of September 1, 2007 | 3,342 | 46 | 435 | 10 | 3,833 |
| Age Retirements | (5) | (17) | 20 | 2 | 0 |
| Deaths without Beneficiary | 0 | 0 | 0 | 0 | 0 |
| Deaths with Beneficiary | 0 | 0 | (3) | 0 | (3) |
| New Beneficiary Receiving | 0 | 0 | 0 | 3 | 3 |
| Nonvested Terminations | (128) | 0 | 0 | 0 | (128) |
| Vested Terminations | (9) | 9 | 0 | 0 | 0 |
| Lump Sums | (41) | (1) | 0 | 0 | (42) |
| Rehires | 4 | 0 | 0 | 0 | 4 |
| QDRO | 0 | 0 | 0 | 0 | 0 |
| Data Corrections* | (3) | (2) | 0 | 0 | (5) |
| Net Change | (182) | (11) | 17 | 5 | (171) |
| As of September 1, 2008 | 3,160 | 35 | 452 | 15 | 3,662 |

*Due to continued data cleanup efforts by the client.

# Section VIII: Member Data

## Distribution of Active Members

| | Years of Vesting Service | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Age** | 0-4 | 5-9 | 10-14 | 15-19 | 20-24 | 25-29 | 30-34 | 35-39 | 40+ | **Total** |
| Under 25 | | | | | | | | | | **0** |
| 25 - 29 | | 2 | | | | | | | | **2** |
| 30 – 34 | | 68 | 71 | 1 | | | | | | **140** |
| 35 - 39 | | 73 | 273 | 39 | 3 | | | | | **388** |
| 40 - 44 | | 50 | 235 | 165 | 31 | 2 | | | 1 | **484** |
| 45 - 49 | | 65 | 244 | 134 | 147 | 42 | 3 | | | **635** |
| 50 - 54 | | 63 | 274 | 157 | 110 | 112 | 26 | 1 | | **743** |
| 55 - 59 | | 47 | 202 | 182 | 38 | 21 | 18 | 1 | | **509** |
| 60 – 64 | | 24 | 91 | 62 | 17 | 3 | 2 | 1 | 1 | **201** |
| 65 - 69 | | 9 | 18 | 17 | 2 | | | | | **46** |
| 70+ | | 4 | 5 | 2 | 1 | | | | | **12** |
| **Total** | **0** | **405** | **1,413** | **759** | **349** | **180** | **49** | **3** | **2** | **3,160** |

Notes: Based on age at valuation date.
Vesting service at valuation date from date of full-time hire.

# Section VIII: Member Data

## Inactive Members – Monthly Benefits

| Age as of September 1, 2008 | Members With Deferred Benefits | | Retired Members | | Beneficiaries | |
|---|---|---|---|---|---|---|
| | **No.** | **Benefit** | **No.** | **Benefit** | **No.** | **Benefit** |
| Less Than 50 | 12 | $ 2,034 | 0 | $ 0 | 0 | $ 0 |
| 50-54 | 14 | 2,331 | 13 | 2,117 | 2 | 210 |
| 55-59 | 4 | 597 | 125 | 35,116 | 3 | 527 |
| 60-64 | 4 | 647 | 196 | 63,268 | 3 | 735 |
| 65-69 | 1 | 195 | 91 | 28,955 | 3 | 596 |
| 70-74 | 0 | 0 | 27 | 7,497 | 1 | 342 |
| 75-79 | 0 | 0 | 2 | 611 | 0 | 0 |
| 80-84 | 0 | 0 | 1 | 217 | 0 | 0 |
| 85 and Over | 0 | 0 | 0 | 0 | 0 | 0 |
| **Total** | **35** | **$ 5,804** | **455** | **$137,781** | **12** | **$2,410** |

# Section IX: Actuarial Basis

## Actuarial Cost Method

Liabilities and contributions shown in this report are computed using the Traditional Unit Credit method of funding.

Sometimes called “funding method”, this is a particular technique used by actuaries for establishing the amount and incidence of the annual actuarial cost of pension plan benefits, or normal cost, and the related unfunded actuarial accrued liability. Ordinarily the annual contribution to the plan is comprised of (1) the normal cost and (2) an amortization payment on the unfunded actuarial accrued liability.

The objective under this method is to fund each participant’s benefits under the plan as they would accrue. 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.

A detailed 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 on 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 multiple decrements 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. Because the plan is frozen, each participant’s normal cost is zero.

- 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.

### Changes Since Prior Valuation

There have been no changes in cost method since the last valuation of the Plan.

### Actuarial Value of Assets

Market value of assets, increased by receivable contributions and reduced by lump sums payable.

# Section IX: Actuarial Basis

## Valuation Procedures

No actuarial liability is included for participants who terminated nonvested prior to the valuation date.

Accrued benefits are frozen based on pay and credited service as of August 31, 1999 and reflect the dollar limitation required by the Internal Revenue Code Section 415 and the Internal Revenue Code Section 401(a)(17) compensation limit, as applicable to governmental pension plans.

# Section IX: Actuarial Basis

## Summary of Actuarial Assumptions

The following assumptions were used in valuing the liabilities and benefits under the plan.

*Interest*

6.50% per annum, compounded annually, net of investment expenses.

*Pre-Retirement and Post-Retirement Mortality*

RP2000 Generational Mortality Table (Healthy, Combined, No Collar). Sample rates, along with the assumed rates from the prior valuation, are as follows:

| Attained Age | Male* (2008) | Male** (2007) | Female* (2008) | Female** (2007) |
|---|---|---|---|---|
| | Per 100 Members | | | |
| 20 | 0.03 | 0.03 | 0.02 | 0.02 |
| 25 | 0.03 | 0.04 | 0.02 | 0.02 |
| 30 | 0.04 | 0.04 | 0.02 | 0.02 |
| 35 | 0.07 | 0.07 | 0.04 | 0.04 |
| 40 | 0.10 | 0.10 | 0.06 | 0.06 |
| 45 | 0.14 | 0.14 | 0.10 | 0.10 |
| 50 | 0.18 | 0.19 | 0.15 | 0.15 |
| 55 | 0.31 | 0.32 | 0.25 | 0.26 |
| 60 | 0.59 | 0.60 | 0.49 | 0.49 |
| 65 | 1.14 | 1.15 | 0.93 | 0.94 |

*Post-Disability Mortality*

RP2000 Generational Mortality Table (Healthy, Combined, No Collar). Sample rates, along with the assumed rates from the prior valuation, are as follows:

| Attained Age | Male* (2008) | Male** (2007) | Female* (2008) | Female** (2007) |
|---|---|---|---|---|
| | Per 100 Members | | | |
| 20 | 0.03 | 0.03 | 0.02 | 0.02 |
| 25 | 0.03 | 0.04 | 0.02 | 0.02 |
| 30 | 0.04 | 0.04 | 0.02 | 0.02 |
| 35 | 0.07 | 0.07 | 0.04 | 0.04 |
| 40 | 0.10 | 0.10 | 0.06 | 0.06 |
| 45 | 0.14 | 0.14 | 0.10 | 0.10 |
| 50 | 0.18 | 0.19 | 0.15 | 0.15 |
| 55 | 0.31 | 0.32 | 0.25 | 0.26 |
| 60 | 0.59 | 0.60 | 0.49 | 0.49 |
| 65 | 1.14 | 1.15 | 0.93 | 0.94 |

* *Rates are shown for attained age in 2008.*
** *Rates are shown for attained age in 2007.*

# Section IX: Actuarial Basis

## Summary of Actuarial Assumptions *(continued)*

*Lump Sum Conversions*

8.75% and 1994 GAM (70% female, 30% male)

*Withdrawal*

Sample rates are as follows:

| | Per 100 Members | |
|---|---|---|
| Age | Male | Female |
| 20 | 6.2 | 6.4 |
| 25 | 5.9 | 6.4 |
| 30 | 4.6 | 6.1 |
| 35 | 3.0 | 4.5 |
| 40 | 2.5 | 3.4 |
| 45 | 2.4 | 3.0 |
| 50 | 2.4 | 2.8 |
| 55 | 2.4 | 2.8 |
| 60 | 2.4 | 2.8 |
| 65 | 2.4 | 2.8 |

*Disability*

Disability rates follow the 1985 Pension Disability Table Class I. Sample rates are as follows:

| | Per 100 Members | |
|---|---|---|
| Age | Male | Female |
| 20 | 0.03 | 0.03 |
| 25 | 0.04 | 0.05 |
| 30 | 0.05 | 0.08 |
| 35 | 0.07 | 0.14 |
| 40 | 0.12 | 0.21 |
| 45 | 0.20 | 0.32 |
| 50 | 0.36 | 0.53 |
| 55 | 0.72 | 0.95 |
| 60 | 1.26 | 1.16 |
| 65 | 1.75 | 1.36 |

*Retirement Rates*

According to the following table. Withdrawal rates are used for ages before retirement eligibility.

| | Annual Rates of Retirement Per 100 Eligible Members | |
|---|---|---|
| Attained Age | Male | Female |
| 50-54 | 23.20 | 23.20 |
| 55-59 | 29.00 | 23.20 |
| 60-64 | 26.10 | 26.10 |
| 65-69 | 36.25 | 36.25 |
| 70+ | 100.00 | 100.00 |

# Section IX: Actuarial Basis

## Summary of Actuarial Assumptions *(continued)*

| | |
|---|---|
| *Provision for Administrative Expenses* | None. Administrative expenses are assumed to be paid by the School District. |
| *Age of Commencement of Deferred Vested Benefits* | Age 50. |
| *Form of Payment* | 80% of participants are assumed to elect the lump sum option and 20% are assumed to elect the 10 Year Certain Only option. |
| *Changes Since Prior Valuation* | None. |

# Section IX: Actuarial Basis

## Summary of Plan Provisions

| | |
|---|---|
| *Plan* | Supplemental Retirement Pension Plan for Employees of the Jefferson County Public School District R-1 |
| *Effective Date and Plan Year* | Plan initially effective August 31, 1999, and amended and restated effective September 1, 2008. |
| *Type of Plan* | Frozen defined benefit pension plan, qualified under IRC§401(a). |
| *Accrued Benefit* | The benefit payable at normal retirement is determined by multiplying Credited Service x Compensation x .257%. (Note: Credited Service is frozen effective August 31, 1999 for purposes of calculating the accrued benefit.) |
| *Actuarial Equivalence* | Actuarial equivalence for all forms of payments, including lump sums, is calculated on the basis of mortality assumptions (1994 GA, 70% female and 30% male) and an interest rate assumption of 8.75% as defined by the plan. |
| *Employees Included* | All administration, certified and classified employees actively employed by the District on the Effective Date are eligible to participate. “Actively employed” means those employees who are performing service on a full-time basis each work day or those who are in a pay status as a result of earned vacation or sick leave. Employees who are on a paid leave on the effective date are deemed to be actively employed. Employees hired after the effective date are not eligible. |
| *Employee Contributions* | None required nor permitted. |
| *Jefferson County Public Schools Contributions* | The funding of the plan is subject to and contingent upon funds being budgeted and appropriated for such purposes prior to the beginning of each applicable fiscal year of the District. |
| *Credited Service* | All service earned while actively employed by the District up to a maximum of 20 years shall be considered for benefit eligibility. Only Credited Service earned prior to September 1, 1999 will be used to calculate benefits. |
| *COLAs* | None. |
| *Compensation Considered* | Basic scheduled, bid or contracted salary, including variable pay, but excluding bonuses, extra performance and overtime payments as of August 31, 1999. Compensation earned after August 31, 1999 is not included for plan purposes. |
| *Normal Retirement Date* | The first day of the month coinciding with or next following the attainment of age 55 or 20 years of service, if later. |
| *Late Retirement Date* | The first day of the month coinciding with or next following actual retirement beyond Normal Retirement Date. |
| *Late Retirement Benefit* | The accrued benefit without actuarial adjustment for late retirement. |

# Section IX: Actuarial Basis

## Summary of Plan Provisions *(continued)*

| | |
|---|---|
| *Early Retirement Benefit* | A member is eligible for an early retirement benefit after retiring with at least 20 Years of Service on or after age 50 but before age 55.<br>The amount of the benefit is equal to the Accrued Benefit, reduced by .005% for each month (6% per year) by which the benefit commencement date precedes the member's Normal Retirement Date. |
| *Pre-retirement Death Benefit* | If a member terminates with at least 20 years of service before age 55, elects to defer receipt of his/her pension and dies after age 50 but before the pension starts, the surviving spouse or beneficiary will be eligible to receive a death benefit equal to the lump sum actuarial value of the pension the employee could have received on the earliest date payment of the member's benefit would have began, reduced and payable in the form of a 100% joint and survivor annuity.<br>This same death benefit is provided to the spouse of an active member who has applied for retirement by the annual deadline and who dies after December 1 and prior to termination. |
| *Vesting* | A member who has completed 20 Years of Service may elect to receive benefits beginning on the September 1 after the close of the Plan Year in which the member has retired, reached age 50 and received the Retirement Committee's approval of his written application to receive his benefit. The benefit amount is the same as for early retirement (if benefits commence between age 50 and age 55) or as for normal retirement (if benefits commence at age 55), or as for late retirement (if benefits commence after age 55). |
| *Optional Payments* | In lieu of the normal payment form of a monthly annuity payable for life, a member can elect to receive an actuarially equivalent benefit under one of the following optional forms:<br>**<u>Option 1</u>**<br>100% Joint and Survivor Annuity – a reduced benefit payable for the lifetime of the member and after the member's death, the same benefit amount will continue to be paid to the member's surviving beneficiary for the beneficiary's lifetime. This option is only available to members who terminate prior to September 1, 2007.<br>**<u>Option 2</u>**<br>50% Joint and Survivor Annuity – a reduced benefit payable for the lifetime of the member and after the member's death, 50% of the amount the member was receiving will be paid to the member's surviving beneficiary for the beneficiary's lifetime. This option is only available to members who terminate prior to September 1, 2007. |

# Section IX: Actuarial Basis

## Summary of Plan Provisions *(continued)*

| | |
|---|---|
| | **Option 3**<br>10-Year Certain Only – an increased benefit will be payable to the member for 120 monthly payments certain only. If the member dies before 120 payments have been paid, the remaining payments shall be paid to the employee's beneficiary or estate. Payments end after 120 payments have been made to the member and beneficiary combined.<br>**Option 4**<br>Lump Sum – A single, lump sum payment of equivalent actuarial value. The lump sum payment is available to members and beneficiaries who are eligible for payment due to the member's termination of employment or death provided such member or beneficiary elects the lump sum payment when first available to such member or beneficiary, in accordance with Section 5.03(c) of the Plan Document. This option is only available to members who terminate on or after September 1, 2005. |
| *One-Time In-Service Lump-Sum Option* | A member who attains Normal Retirement Age by August 31, 2007 may voluntarily elect to receive a one-time, in-service, lump-sum payment of the actuarially equivalent value of his vested plan benefits as of September 1, 2007. |
| *Benefits Not Included in the Valuation* | Pre-retirement death benefits are deemed insignificant and are not included in the valuation. |

### Effective Dates for Optional Payments

The optional forms listed above are available to the member or beneficiary, depending on the member's termination date as follows:

| Member's Termination Date | Available Options |
|---|---|
| On or before August 31, 2005 | Options 1, 2, and 3 |
| On or after September 1, 2005 through August 31, 2007 | Options 1, 2, 3 and 4 |
| On or after September 1, 2007 | Options 3 and 4 |

### Changes in Plan Provisions Since the Preceding Valuation

The plan was amended and restated as of September 1, 2007 to adopt the following changes:

- Pension Protection Act of 2006
- HEART
- Final 415 regulations

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