# Public School Retirement System

# of the City of St. Louis


# Annual Report

*One U.S. Bank Plaza*
*505 North 7th Street, Suite 2510*
*St. Louis, MO 63101-1657*
*Phone: (314) 241-7763*
*Web Address: http://www.psrsstl.org*

## For the Calendar Year Ended December 31, 2002

## *Board of Trustees*

An eleven-member Board of Trustees is responsible for general administration of the Retirement System as well as investment of the System's assets. The Board of Education appoints four trustees; the Retirement System members elect seven. Terms of office are four years. Active Retirement System members elect five trustees – one administrator, two teachers, and two non-teachers. Retired members elect two trustees – one retired teacher and one retired non-teacher. At January 1, 2003, the following individuals served on the Board of Trustees.

***Appointed by the Board of Education***

Marlene Davis
John P. Mahoney
Paulette McKinney
William Purdy

***Elected by Retired Members***

Norbert Eisele
Lois Jean Turner

***Elected by Active Members***

Joseph Clark, Jr.
Amy S. Collins
Mary Franklin
Helen Lynch
John Miriani

## *Administrative Staff*

The Retirement System employs the administrative staff members listed below.

| | |
|---|---|
| Executive Director | Gail A. Lakin |
| Director of Technology | Lonnie R. Caldwell |
| Accounting Specialist | Marty Winters |
| Insurance Benefits Specialist | Carolyn M. Feuchtenbeiner |
| Communications/Data Specialist | James U. Hammond |
| Member Services Supervisor | Amy Williams |
| Member Services Specialist | JoAnne Couch |
| Member Services Specialist | Miasha Tate |
| Member Services Clerical Assistant | Michelle Taylor |

## *Professional Advisors*

The individuals and firms listed below provide professional services to the Retirement System, the Administrative Staff, and the Board of Trustees.

| | |
|---|---|
| Legal Counsel | Jeffrey E. Hartnett<br>Bartley, Goffstein, Bollato, and Lange |
| Investment Advisor | Doris Ewing<br>New England Pension Consultants |
| Independent Auditor | Thomas S. Helm<br>Huber, Ring, Helm & Co. |
| Actuary | James S. Rubie, Jr.<br>W. Alfred Hayes & Company |

**PUBLIC SCHOOL RETIREMENT SYSTEM**
**OF THE CITY OF ST. LOUIS**
**ONE U.S. BANK PLAZA, SUITE 2510**
**ST. LOUIS, MO 63101-1657**

OFFICE OF THE EXECUTIVE DIRECTOR

PHONE: (314) 241-7763
FAX: (314) 241-1806

April, 2003

On behalf of the Board of Trustees, I am pleased to present the Annual Report of the Public School Retirement System of the City of St. Louis for the fiscal year ended December 31, 2002. This report provides financial, investment, actuarial and statistical information about the Retirement System.

The Retirement System's management is responsible for the contents and presentation of material in this report. To the best of our knowledge, we believe the information in this report is accurate in all material respects. We also believe the information is presented in a manner that fairly represents the status of the Retirement System.

We hope you find the report informative and helpful.

## *The Year in Review*

During 2002, we processed 134 new retirements, 136 DROP Applications and 73 applications for Supplemental Pension Benefits under the Sick Leave Conversion Program sponsored by St. Louis Public Schools. In addition, we processed more than 450 distributions for members who left the System and we extended a hearty welcome to more than 1,185 new members.

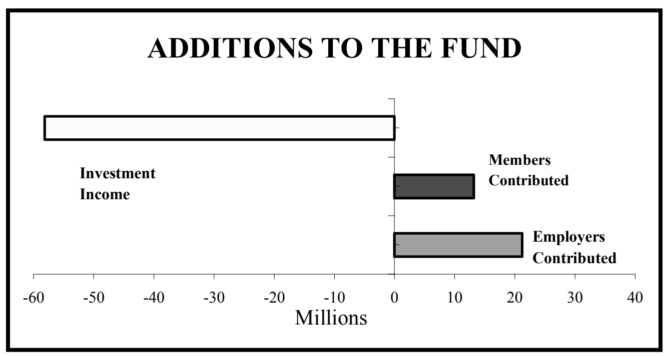
## *Financial Summary*

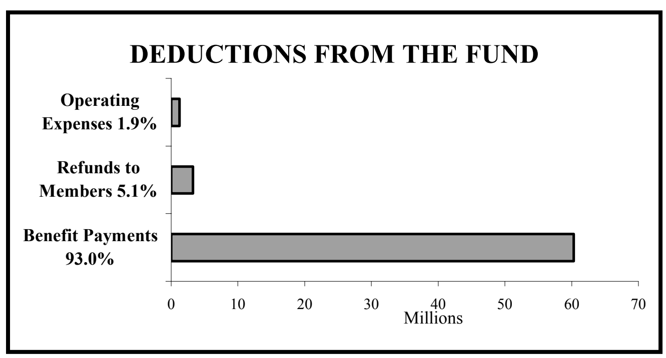
The Administrative Staff and the System's professional advisors are charged with the responsibility of maintaining appropriate internal accounting and procedural controls. These controls provide reasonable assurance that the System's assets are protected from loss due to unauthorized use or disposition, that financial transactions are executed in accordance with proper authorization, and that transactions are recorded accurately to facilitate the annual preparation of audited financial statements.

Huber, Ring, Helm & Co., an independent accounting firm, audited the Retirement System's financial statements for the year ended December 31, 2002. This Annual Report contains those audited financial statements in their entirety. Summary financial information is provided below.

| | |
|---|---|
| Net Assets as of 12-31-2001 | $ 942,246,250 |
| Additions | |
| Employer Contributions | 21,213,347 |
| Member Contributions | 13,171,337 |
| Net Investment Income (Loss) | (58,151,245) |
| Deductions | |
| Benefits Paid to Members | 60,324,043 |
| Refunds Paid to Members | 3,281,320 |
| Operating Expenses | 1,263,687 |
| Net Assets as of 12-31-2002 | $ 853,610,639 |

Additions and deductions from the fund are presented graphically below.



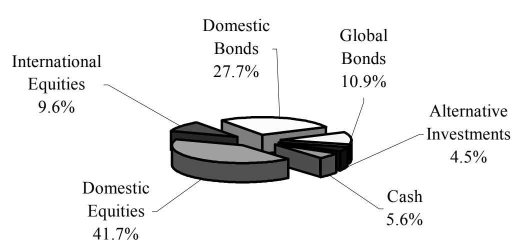
### *Investment Performance*

One of the most important decisions made by any board of trustees is how a retirement system's investments will be allocated and diversified among different asset classes. A fund's asset allocation is critical to mitigating volatility and improving long-term returns.

As of December 31, 2002, the Retirement System's assets were broadly diversified as follows.

| | | |
|---|---|---|
| Domestic Equities | 41.7% | |
| International Equities | 9.6% | |
| Domestic Fixed Income | 27.7% | |
| Global Bonds | 10.9% | |
| Cash | 5.6% | |
| Financial Composite | | 95.5% |
| Real Estate Investments | 1.7% | |
| Private Investments | 2.8% | |
| Alternative Investments | | 4.5% |
| Total Portfolio | | 100% |

ASSET ALLOCATION DECEMBER 31, 2002




For the third year in a row, the S&P 500 declined during calendar year 2002. Three consecutive down years is something that hasn't happened since the Great Depression. Investor confidence was shaken by economic and geopolitical uncertainty as well as corporate scandal and malfeasance. Unemployment was up; most industrialized countries were posting high budget deficits; and the consumer confidence index eroded month after month.

Searching for some brighter news, treasury bonds ended in positive territory; inflation remained under control; and the decline of the U.S. dollar, especially relative to the *euro*, increased the value of overseas investments.

During this challenging period, we have remained true to our investment policies assuring that our portfolio remained well-balanced and adequately diversified. We believe that long-term investment success begins with a prudently constructed strategy and the conviction to stay true to that strategy. We are pleased to report that, despite investment losses on an absolute basis, our strategy and commitment have been successful, especially as compared with other public retirement systems. During 2002, we lost 5.9%, but ranked in the top 26% of public employee retirement systems; and for the five-year period ending December 31, 2002, we earned 4.1%, ranking in the top 33%.

Additional investment information is provided in the Investment Information Section of this report.

### *Actuarial and Funding Summary*

Each year, the Retirement System has an independent actuarial valuation conducted. The valuation has two primary purposes:

- to measure the relative financial condition of the System, and
- to determine the level of the annual contribution that should be made to the Retirement System during the upcoming year so that sufficient assets are available for benefit payments in the future.

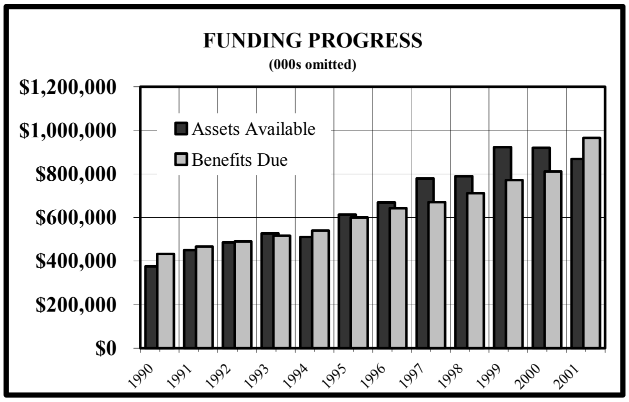
With respect to its funding status, the annual valuation indicated that the Retirement System was 89.3% funded on an actuarial basis; and 90.0% funded on a market value basis. Additional detail about the System's funding status is provided in the Actuarial Section of this report.

In summary, the System's benefit obligations and the assets available to satisfy those obligations are set forth as follows:

| | |
|---|---|
| *Projected Benefit Obligations* | $964,833,027 |
| *Net Assets Available for Benefits* | |
| Actuarial Value of Assets | $861,128,076 |
| Market Value of Assets | $868,714,978 |
| *Funding Ratio (Assets ÷ Obligations)* | |
| Actuarial Value Funding Ratio | 89.3% |
| Market Value Funding Ratio | 90.0% |

It is the opinion of the independent actuary that if future contributions are made as recommended the Retirement System will continue to be funded on a sound actuarial basis.

Detailed actuarial information is provided in the Actuarial Section of this report.




## *Acknowledgments*

The compilation of this report reflects the combined efforts of the Retirement System's administrative staff and professional advisors. This report is intended to provide comprehensive and reliable information as a basis for making management decisions, evaluating statutory compliance, and determining appropriate stewardship for the System's assets.

I want to express my gratitude to the Board of Trustees for their support, their dedication, and the many hours of personal time they devoted to the System during the past year. I also want to recognize the outstanding quality of the services provided by the System's professional advisors. In addition, I want to thank the administrative staff for their enthusiastic assistance, expertise and hard work. The recent successes of the Retirement System have been made possible only through the efforts of these and many other individuals.

Sincerely,

Gail A. Lakin
Executive Director

**PUBLIC SCHOOL RETIREMENT SYSTEM**
**OF THE CITY OF ST. LOUIS**

**FINANCIAL STATEMENTS**

**DECEMBER 31, 2002 AND 2001**

## INDEX TO FINANCIAL STATEMENTS

## INDEPENDENT AUDITOR'S REPORT

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**Independent Auditor's Report**

The Board of Trustees
Public School Retirement System
of the City of St. Louis
St. Louis, Missouri

We have audited the accompanying statements of plan net assets of the Public School Retirement System of the City of St. Louis (the "System") as of December 31, 2002 and 2001 and the related statements of changes in plan net assets for the years then ended. These financial statements are the responsibility of the System's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

As discussed in Note 2, investments in partnerships amounting to $33,668,151 and $41,304,911 (4% in 2002 and 4% in 2001 of plan net assets) as of December 31, 2002 and 2001, respectively, have been valued at cost. Accounting principles generally accepted in the United States of America require these investments to be recorded at fair value, however, a reasonable estimate of fair value could not be made without incurring excessive costs. Therefore, these investments are recorded at cost. The affect on the financial statements of not applying adequate procedures to determine the fair value of these investments is not determinable.

In our opinion, except for the affects of the procedures used to determine the valuation of investments in partnerships at December 31, 2002 and 2001 as described in the preceding paragraph, the financial statements referred to above present fairly, in all material respects, the plan net assets of the Public School Retirement System of the City of St. Louis as of December 31, 2002 and 2001 and changes in plan net assets for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Huber, Ring, Helm + Co., P.C.

St. Louis, Missouri
January 31, 2003

## STATEMENTS OF PLAN NET ASSETS
## DECEMBER 31, 2002 AND 2001

**ASSETS**

| | 2002 | 2001 |
|---|---|---|
| **CASH** | $ 5,911,009 | $ 5,906,738 |
| **RECEIVABLES** | | |
| Accrued interest and dividends | 3,623,858 | 3,538,555 |
| Contributions | 191,337 | 239,188 |
| | 3,815,195 | 3,777,743 |
| **INVESTMENTS**, at fair value | | |
| Cash equivalents | 46,506,484 | 44,945,181 |
| Bonds | | |
| U.S. Government and agency issues | 98,092,066 | 104,712,936 |
| Corporate | 135,775,862 | 147,404,245 |
| Common and preferred stocks | 282,364,602 | 380,796,183 |
| Mutual funds | 247,014,623 | 213,058,724 |
| Real estate partnerships - insurance contracts | 1,087,389 | 1,020,690 |
| | 810,841,026 | 891,937,959 |
| **INVESTMENTS**, at estimated fair value | | |
| Real estate loans, first mortgages | 129,852 | 172,166 |
| **INVESTMENTS**, at cost | | |
| Limited partnerships | 7,764,356 | 9,413,737 |
| Real estate partnerships - other | 8,282,058 | 8,494,405 |
| Venture capital partnerships | 17,621,737 | 23,396,769 |
| | 33,668,151 | 41,304,911 |
| Total investments | 844,639,029 | 933,415,036 |
| Total assets | 854,365,233 | 943,099,517 |

**LIABILITIES**

| | 2002 | 2001 |
|---|---|---|
| **ACCOUNTS PAYABLE AND ACCRUED EXPENSES** | 754,594 | 853,267 |
| **NET ASSETS HELD IN TRUST FOR PENSION BENEFITS** | | |
| (A schedule of funding progress is presented on page 15.) | $ 853,610,639 | $ 942,246,250 |

The accompanying notes are an integral part of these financial statements.

## STATEMENTS OF CHANGES IN PLAN NET ASSETS
## YEARS ENDED DECEMBER 31, 2002 AND 2001

| ADDITIONS | 2002 | 2001 |
|---|---|---|
| Employer Contributions | $21,213,347 | $18,213,595 |
| Member Contributions | 13,171,337 | 12,327,077 |
| | 34,384,684 | 30,540,672 |
| Net appreciation (depreciation) in fair value of investments | | |
| Cash equivalents | 918,558 | 1,754,363 |
| Bonds | | |
| U.S. Government and agency issues | 11,514,701 | 10,370,515 |
| Corporate | 6,001,678 | 11,707,864 |
| Common and preferred stock | (63,741,563) | (26,143,522) |
| Mutual funds | (8,964,765) | (18,443,476) |
| Real estate loans | 19,297 | 26,580 |
| Limited partnerships | 433,493 | (2,404,814) |
| Real estate partnerships | 85,869 | 732,780 |
| Venture capital partnerships | (942,050) | (2,366,229) |
| | (54,674,782) | (24,765,939) |
| Less investment expense | 3,476,463 | 3,911,551 |
| Net investment income (loss) | (58,151,245) | (28,677,490) |
| Total additions | (23,766,561) | 1,863,182 |
| **DEDUCTIONS** | | |
| Benefits paid | | |
| Retirement and death benefits | 57,876,776 | 52,296,714 |
| Health care subsidies and supplemental payments | 2,447,267 | 3,672,183 |
| | 60,324,043 | 55,968,897 |
| Operating expenses | 1,263,687 | 1,286,239 |
| Contribution refunds due to death or resignation | 3,281,320 | 2,436,665 |
| Total deductions | 64,869,050 | 59,691,801 |
| **NET INCREASE** | (88,635,611) | (57,828,619) |
| **NET ASSETS HELD IN TRUST FOR PENSION BENEFITS** | | |
| **BEGINNING OF YEAR AS REPORTED** | **942,246,250** | **1,000,074,869** |
| **END OF YEAR** | **$ 853,610,639** | **$ 942,246,250** |

The accompanying notes are an integral part of these financial statements.

# NOTES TO FINANCIAL STATEMENTS

## NOTE 1 – DESCRIPTION OF SYSTEM

### *General*

The Public School Retirement System of the City of St. Louis is a funding agency existing under provisions of the Revised Statutes of the State of Missouri (the "Statutes") to provide retirement benefits for employees of the Board of Education of the City of St. Louis, for employees of the Charter Schools located within the St. Louis School District, for employees of the Public School Retirement System of the City of St. Louis, and for certain employees of Harris Stowe State College of St. Louis. The System is a multi-employer defined benefit pension plan.

Operations and management of the System are generally prescribed in the Statutes and are supervised by the Board of Trustees.

### *Membership*

All persons employed on a full-time regular basis are members of the System as a condition of employment. Membership statistics, as of the latest actuarial valuations, are as follows:

| | January 1, 2002 | January 1, 2001 |
|---|---|---|
| Active members | 6,589 | 6,190 |
| Inactive members | 118 | 429 |
| Total members not retired | 6,707 | 6,619 |
| Retired members | | |
| Service and survivors | 3,340 | 3,279 |
| Disability | 250 | 250 |
| | 3,590 | 3,529 |

### *Benefits*

Upon retirement at age 65 (or at any age if age plus years of credited service add up to 85 or more), members receive monthly payments for life of yearly benefits equal to years of credited service multiplied by 2% of average final compensation, but not to exceed 60% of average final compensation.

Members are eligible, after accumulation of five years of credited service, for disability benefits. Survivors' benefits are available for beneficiaries of members who die after at least 18 months of active membership.

The System pays a portion of health insurance premiums for retirees under Section 169.476 of the Statutes, as an expense of the System.

# NOTES TO FINANCIAL STATEMENTS

## NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

### *Estimates*

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of plan assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and reported amounts of additions and deductions to plan net assets during the reporting period. Actual results could differ from those estimates.

### *Basis of Accounting*

Plan member contributions of 5.0%, effective July 1, 1999, are mandatory and are recognized in the period in which contributions are due. Employer contributions to the plan are also mandatory and are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with the terms of the plan.

### *Tax Status*

The System has been determined to be exempt from federal income taxes under Section 115 of the Internal Revenue Code.

### *Contribution Receivable*

Contributions receivable consists of amounts due from members and employers for contributions which were due, according to terms of the plan, by December 31, 2002 and 2001, offset by certain contributions received prior to the due date of January 31, 2003.

### *Method Used to Value Investments*

Unless otherwise noted, investments are reported at fair value. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the latest reported sales price at current exchange rates.

The real estate loans have effective interest rates ranging from 8.75% to 17.5% with varying maturities up to 30 years and are stated at the outstanding principal balance, which approximates estimated fair value.

For other investments for which there are no quoted market prices, a reasonable estimate of fair value could not be made without incurring excessive costs, therefore, these investments are generally reported at cost.

Real estate partnerships – insurance contracts

The System has entered into contracts with several insurance companies. The accounts are credited with actual earnings on the underlying investments and charged for plan withdrawals and administration expenses charged by the insurance companies. These investments are stated at fair value as determined by the insurance companies.

### *Net Appreciation (Depreciation) in Fair Value of Investments*

Net appreciation (depreciation) in fair value of investments includes: realized gains (losses), unrealized appreciation (depreciation), dividends, interest, and other investment income. However, Limited, Real Estate and Venture Capital Partnerships are recorded at cost, which excludes unrealized appreciation (depreciation) because these amounts cannot be determined without incurring excessive costs.

### *Furniture and Equipment*

Acquisitions of furniture and equipment are charged to operating expense. The value of furniture and equipment owned by the System is deemed immaterial in relation to the total assets of the System.

### *Reclassifications*

Certain reclassifications have been made to prior year amounts to make them consistent with the 2002 presentation.

## NOTES TO FINANCIAL STATEMENTS

### NOTE 3 – INVESTMENTS

At December 31, 2002 and 2001, investments consisted of the following:

| | 2002 | |
|---|---|---|
| | Market Value | Cost |
| Cash equivalents | $ 46,506,484 | $ 46,506,484 |
| Bonds | | |
| U.S. Government and agency issues | 98,092,066 | 95,407,269 |
| Corporate | 135,775,862 | 137,087,713 |
| Common and preferred stocks | 282,364,602 | 314,120,852 |
| Mutual funds | 247,014,623 | 239,500,732 |
| Real estate partnerships - insurance contracts | 1,087,389 | 1,036,466 |
| | 810,841,026 | 833,659,516 |
| Real estate loans, first mortgages | 129,852 | 129,852 |
| Limited partnerships | 7,764,356 | 7,764,356 |
| Real estate partnerships - other | 8,282,058 | 8,282,058 |
| Venture capital partnerships | 17,621,737 | 17,621,737 |
| | 33,668,151 | 33,668,151 |
| | $ 844,639,029 | $ 867,457,519 |

| | 2001 | |
|---|---|---|
| | Market Value | Cost |
| Cash equivalents | $ 44,945,181 | $ 44,945,181 |
| Bonds | | |
| U.S. Government and agency issues | 104,712,936 | 103,968,586 |
| Corporate | 147,404,245 | 152,994,028 |
| Common and preferred stocks | 380,796,183 | 360,194,908 |
| Mutual funds | 213,058,724 | 195,244,141 |
| Real estate partnerships - insurance contracts | 1,020,690 | 2,370,362 |
| | 891,937,959 | 859,717,206 |
| Real estate loans, first mortgages | 172,166 | 172,166 |
| Limited partnerships | 9,413,737 | 9,413,737 |
| Real estate partnerships - other | 8,494,405 | 8,494,405 |
| Venture capital partnerships | 23,396,769 | 23,396,769 |
| | 41,304,911 | 41,304,911 |
| | $ 933,415,036 | $ 901,194,283 |

## NOTES TO FINANCIAL STATEMENTS
### NOTE 4 – FUTURE MINIMUM LEASE PAYMENTS

The System leases office space under an operating lease expiring in August 2004. Rent expense for the years ended December 31, 2002 and 2001 was $73,718 and $71,439, respectively. Approximate future minimum lease payments for the remaining term of the lease are as follows:

| Year | Minimum Lease Payments |
|---|---|
| 2003 | $ 72,204 |
| 2004 | 48,620 |
| | $ 120,824 |

### NOTE 5 – CONCENTRATION OF CREDIT AND MARKET RISK

Financial instruments that potentially subject the System to concentrations of credit and market risk consist principally of cash and investments. The System places its temporary cash investments with major financial institutions. At December 31, 2002 and 2001 the System had approximately $52,400,000 and $51,000,000 in cash and cash equivalents at US Bank. These balances were insured by the Federal Deposit Insurance Corporation ("FDIC") for $100,000. The remaining balances are neither insured nor collateralized. A significant portion of the System's net assets are held by US Bank of St. Louis, N.A.

The System has significant amounts of investments that are subject to market risk. Market risk is the possibility that future changes in market price may make a financial instrument less valuable. The other investments are also subject to risk. This risk is the possibility that, upon disposition, the value received may be less than the amount invested.

At December 31, 2002 the System had the following concentrations, defined as investments (other than those issued or guaranteed by the U.S. government) in any one organization that represents five percent or more of net assets held in trust for pension benefits:

| Mutual Funds | Fair Value |
|---|---|
| Putnam Investments - Putnam International Trust | $ 81,600,613 |
| Delaware Pooled Trust - Global Fixed Income Portfolio | $ 92,441,284 |

## NOTES TO FINANCIAL STATEMENTS

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**Independent Auditor's Report On Supplemental Information**

The Board of Trustees
Public School Retirement System
of the City of St. Louis
St. Louis, Missouri

Our report on our audits of the basic financial statements of the Public School Retirement System of the City of St. Louis for 2002 and 2001 appears on pages 1 and 2. Those audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedules of funding progress and employer contributions are presented for the purpose of additional analysis and are a required part of the basic financial statements. The supplemental schedules of operating expenses are presented for the purpose of additional analysis and are not a required part of the basic financial statements. These supplemental schedules are the responsibility of the System's management. The supplemental information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

Huber, Ring, Helm & Co., P.C.

St. Louis, Missouri
January 31, 2003

## SCHEDULE OF FUNDING PROGRESS (in millions)

### DECEMBER 31, 2002

| Actuarial Valuation Date January 1, | Actuarial Value of Assets (a) | Actuarial Accrued Liability (AAL) - Frozen Entry Age (b) | Unfunded AAL (UAAL) (b-a) |
|---|---|---|---|
| 1990 | 373.3 | 460.7 | 87.4 |
| 1991 | 395.7 | 472.5 | 76.8 |
| 1992 | 427.7 | 502.0 | 74.3 |
| 1993 | 458.3 | 530.8 | 72.5 |
| 1994 | 487.4 | 557.9 | 70.5 |
| 1995 | 519.1 | 588.2 | 69.1 |
| 1996 | 562.2 | 664.8 | 102.6 |
| 1997 | 598.6 | 716.7 | 118.1 |
| 1998 | 644.4 | 759.7 | 115.3 |
| 1999 | 694.3 | 846.9 | 152.6 |
| 2000 | 770.1 | 937.7 | 167.6 |
| 2001 | 828.1 | 1,022.0 | 193.9 |
| 2002 | 861.1 | 1,069.8 | 208.7 |

| Actuarial Valuation Date January 1, | Funded Ratio (a/b) | Annual Covered Payroll (c) | UAAL as a % of Covered Payroll ((b-a)/c) |
|---|---|---|---|
| 1990 | 81.0 | 194.6 | 44.9 |
| 1991 | 83.7 | 198.5 | 38.7 |
| 1992 | 85.2 | 194.2 | 38.3 |
| 1993 | 86.3 | 194.6 | 37.3 |
| 1994 | 87.4 | 202.4 | 34.9 |
| 1995 | 88.3 | 207.1 | 33.3 |
| 1996 | 84.6 | 206.9 | 49.6 |
| 1997 | 83.5 | 210.2 | 56.2 |
| 1998 | 84.8 | 210.8 | 54.7 |
| 1999 | 82.0 | 215.6 | 70.8 |
| 2000 | 82.1 | 216.7 | 77.3 |
| 2001 | 81.0 | 235.1 | 82.5 |
| 2002 | 80.5 | 243.9 | 85.6 |

See independent auditor's report on supplemental information.

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

**DECEMBER 31, 2002**

**Employer Contributions**

| Year Ended December 31, | Annual Required Contribution | Percent Contributed |
|---|---|---|
| 1990 | $ 13,147,093 | 94.0% |
| 1991 | 14,020,492 | 94.9% |
| 1992 | 14,970,746 | 97.2% |
| 1993 | 14,098,562 | 98.4% |
| 1994 | 15,441,488 | 99.2% |
| 1995 | 15,087,519 | 99.6% |
| 1996 | 16,619,187 | 100.1% |
| 1997 | 16,876,759 | 100.2% |
| 1998 | 15,328,067 | 111.1% |
| 1999 | 13,906,270 | 124.5% |
| 2000 | 15,543,984 | 111.9% |
| 2001 | 18,168,580 | 100.2% |
| 2002 | 19,517,288 | * |

* To be determined at the end of the year.

The information presented in the required supplemental schedules was determined as part of the actuarial valuation prepared by W. Alfred Hayes and Company at January 1, 2002. Additional information related to the above actuarial valuation follows:

| | |
|---|---|
| Actuarial cost method: | Frozen entry age. |
| Rate of investment return: | 8% for 2002 and 2001, net of expenses. |
| Turnover or withdrawal rates: | Various by age and year of membership based on actual experience of the System. |
| Mortality or death rates: | 1983 Group Annuity Mortality Tables for males and females is used for active and retired members and for beneficiaries. |
| Disability rates: | Various by age of active members based on actual experience of the System. |
| Rates of retirement between ages of 55 and 70: | Various based on actual experience of the System. |
| Rate of salary increases: | Based on actual experience of System, at rate of 4.5% per year. |
| Asset valuation method: | The assumed yield method of valuing assets, less the expense and contingency reserve. |

The unfunded actuarial accrued liability as of January 1, 1981 is amortized over the period ending October 13, 2011, while subsequent "supplements" are amortized over a period of 50 years from the year in which created.

See independent auditor's report on supplemental information.

## SCHEDULES OF OPERATING EXPENSES
## YEARS ENDED DECEMBER 31, 2002 AND 2001

| | 2002 | 2001 |
|---|---|---|
| Actuarial services | $ 253,215 | $ 192,420 |
| Accounting and auditing fees | 27,617 | 37,733 |
| Computer programming and consultation | 51,838 | 162,710 |
| Convention, conferences, seminars | | |
| Executive Director | 3,704 | 5,219 |
| Trustees | 31,893 | 31,065 |
| Dues and subscriptions | 3,319 | 3,972 |
| Employee benefits | 16,286 | |
| Furniture and equipment | 10,046 | 22,749 |
| Insurance - group hospitalization | 51,062 | 43,234 |
| Insurance - casualty and bonding | 41,490 | 42,340 |
| Legal fees and expense | 35,856 | 60,152 |
| Medical fees | 1,586 | 2,429 |
| Office repairs and maintenance | 7,112 | 9,200 |
| Office supplies and expense | 13,054 | 14,018 |
| Postage | 59,832 | 48,321 |
| Pension contribution | 31,359 | 19,465 |
| Printing and stationery | 25,609 | 20,722 |
| Rent | 73,718 | 72,589 |
| Salaries - administrative and clerical | 453,292 | 418,521 |
| Payroll taxes | 34,467 | 32,176 |
| Telephone | 9,143 | 21,553 |
| Miscellaneous expense | 28,189 | 25,651 |
| Total | $ 1,263,687 | $ 1,286,239 |

### *Trustees Expenses*

The Trustees attended conferences and business meetings in connection with business of the System. The Trustees received no salaries but were allowed expenses relating to their attendance at such events as follows:

| | 2002 | 2001 |
|---|---|---|
| Transportation and registration | $ 18,204 | $ 12,654 |
| Lodging, meals, and miscellaneous | 13,689 | 17,011 |
| Other | | 1,400 |
| Total | $ 31,893 | $ 31,065 |

See independent auditor's report on supplemental information.

## THE CAPITAL MARKET ENVIRONMENT

### *Domestic Stocks*

Amid market and geopolitical uncertainty, the S&P Index lost 22.1% during calendar year 2002, with value stocks (down only 15.5%) outperforming growth stocks, which were down almost 29%.

### *Domestic Bonds*

For the third consecutive year, bond markets outperformed stock indices in 2002. The Lehman Aggregate Index was up 10.3% for the year. In fact, the only domestic fixed income asset class to show a loss was high-yield bonds – down 1.4%.

### *International Markets*

The international equity markets performed poorly during calendar year 2002, losing value for the third year in a row. The Salomon Smith Barney PMI EPAC Index lost 15.5% for the year and emerging market equities were down 6.0%.

Primarily due to the weak U.S. dollar, global bonds posted relatively strong returns during 2002, ending the year up 19.5%.

## INVESTMENT PERFORMANCE

### *Investment Goals*

The Retirement System has a well-diversified investment portfolio with long-term goals of earning a 9.0% return and exceeding the rate of inflation by 4.0%. Over the short-term (three to five years), the System's assets are structured to mitigate volatility while ranking in the top half of a universe of public funds.

### *Investment Performance*

For the year ending December 31, 2002, the Retirement System's portfolio lost 5.9% but ranked in the upper 26% of the Investment Consultants' Cooperative (ICC) Universe of Public Funds. This universe of public funds includes 1,700 public funds with assets of $1.5 trillion. For the five-year period ending December 31, 2002, the System's investment performance ranked in the upper 26% of the ICC Universe, earning a 4.5% return.

The Retirement System is a long-term, patient investor, believing that its well-diversified portfolio will ultimately revert to the long-term mean. With this in mind, we believe that our portfolio is well-positioned to participate in improved performance when the economy begins its rebound.

Investment performance by asset class for one-year and five-year periods ending December 31, 2002 is set forth below.

| | One Year | Five Years |
|---|---|---|
| *PSRS Total Portfolio* | -5.9% | 4.1% |
| Allocation Index | -8.0% | 2.6% |
| Median Public Fund | -8.0% | 3.7% |
| *PSRS Domestic Equities* | -17.1% | 3.3% |
| S&P 500 | -22.1% | -0.6% |
| Median Public Fund | -21.6% | 0.6% |
| *PSRS Domestic Bonds* | 6.1% | 5.6% |
| Lehman Aggregate Index | 10.3% | 7.5% |
| Median Public Fund | 9.6% | 7.5% |
| *PSRS International Equities* | -15.4% | N/A |
| PMI EPAC Index | -15.5% | -2.1% |
| MSCI Emerging Index | -6.0% | -4.6% |
| Median International Fund | -15.0% | 0.9% |
| *PSRS Global Bonds* | 26.9% | N/A |
| Salomon Global Index | 19.5% | 5.8% |
| Median Global Bonds | 18.8% | 6.2% |

## INVESTMENT STATISTICS

The Investment Information Section of this report provides statistical information about the Retirement System's investment managers, securities held in the portfolio, and brokerage fees paid in 2002.

# INVESTMENTS AS OF DECEMBER 31, 2002 (000s omitted)

| Manager | Market Value | Percent of Fund | Management Style | Asset Class | Percent of Fund | Target |
|---|---|---|---|---|---|---|
| Buford, Dixon, Harper | $13,253 | 1.5% | Large Cap Growth Equity | | | |
| Monetary Management | 20,101 | 2.3% | Large Cap Growth Equity | | | |
| New Amsterdam | 27,495 | 3.2% | Large Cap Growth Equity | | | |
| Weatherfield | 13,801 | 1.6% | Large Cap Growth Equity | Large Cap Growth Domestic Equities | 8.7% | 10.0% |
| Batterymarch | 22,815 | 2.7% | Large Cap Core Equity | | | |
| Progress 21st | 8,221 | 1.0% | Large Cap Core Equity | | | |
| Todd Investment | 26,473 | 3.1% | Large Cap Core Equity | | | |
| Vangard Admiral | 27,934 | 3.3% | Large Cap Core Equity | | | |
| Vangard Institutional | 10,335 | 1.2% | Large Cap Core Equity | Large Cap Core Domestic Equities | 11.2% | 10.0% |
| Chicago Equity Partners | 29,778 | 3.5% | Large Cap Value Equity | | | |
| Edgar Lomax Company | 14,270 | 1.7% | Large Cap Value Equity | Large Cap Value Domestic Equities | 5.1% | 10.0% |
| Systematic Financial | 32,240 | 3.8% | Small Cap Value Equity | | | |
| Westfield Capital | 22,637 | 2.6% | Small Cap Growth Equity | | | |
| Dimensional Fund Advisors | 26,483 | 3.1% | Micro Cap Equity | Small/Micro Cap Domestic Equities | 9.5% | 5.0% |
| Putnam Investments | 81,601 | 9.5% | International Equity | International Equities | 9.5% | 13.0% |
| Invesco Capital | 84,683 | 9.9% | Balanced Fund | Balanced Fund | 9.9% | 10.0% |
| John Hancock | 93,354 | 10.9% | Core Bond Fund | | | |
| MDL Capital | 29,099 | 3.4% | Core Bond Fund | | | |
| Vanderbilt | 84,395 | 9.9% | Core Bond Fund | Core Domestic Bonds | 24.2% | 20.0% |
| Credit Suisse | 49,637 | 5.8% | High Yield Bond Fund | High Yield Domestic Bonds | 5.8% | 5.0% |
| Delaware International | 92,441 | 10.8% | Global Bond Fund | Global Bonds | 10.8% | 10.0% |
| 3 Partnerships | 7,503 | 0.9% | Mezanine Debt | | | |
| 7 Funds | 14,177 | 1.7% | Real Estate | | | |
| 17 Investments | 21,180 | 2.5% | Venture Capital | Alternative Investments * | 5.0% | 7.0% |
| Cash | 2,197 | 0.3% | STIF | Cash | 0.3% | 0% |
| Total Market Value | $856,103 | 100.0% | | | | 100.0% |

* Alternative Investments are valued at cost.

## DOMESTIC EQUITY INVESTMENTS

| | |
|---|---|
| 2002 Return | -17.1% |
| Average Market Capitalization | $46,866,700 |
| P/E Ratio | 16.38 |
| Price/Book Ratio | 3.24 |
| Five Year Earnings Growth Rate | 11.36 |

**Ten Largest Equity Holdings**

| Company | Dollar Value | Percent of Portfolio | Company | Dollar Value | Percent of Portfolio |
|---|---|---|---|---|---|
| Microsoft Corp. | $7,255,381 | 2.1% | Altria Group Inc. | 4,153,851 | 1.2% |
| General Electric | 6,463,604 | 1.9% | Pfizer Inc. | 4,015,721 | 1.2% |
| Citigroup Inc. | 6,419,117 | 1.9% | American Intel Group | 3,815,383 | 1.1% |
| Exxon Mobil Corp. | 6,044,955 | 1.7% | Bank of America | 3,754,323 | 1.1% |
| Merck & Co. | 5,777,244 | 1.7% | United Technologies | 3,731,004 | 1.1% |

**Ten Best Performing Equity Holdings**

| Company | Return | Company | Return |
|---|---|---|---|
| Gish Biochemical Inc. | 596.0% | Enherent Corp. | 350.0% |
| Athey Prods. Corp. | 476.0% | Evolving Systems Inc. | 325.0% |
| Bolder Technologies | 405.0% | Key Tronic Corp. | 286.7% |
| Wireless Webconnect | 405.0% | Index Dev Partners | 271.4% |
| Thomaston MLS Inc. | 400.0% | Plx Technology, Inc. | 255.5% |

**Ten Worst Performing Equity Holdings**

| Company | Return | Company | Return |
|---|---|---|---|
| Acceptance Insurance | -98.9% | Friede Goldman Halt | -91.7% |
| Data Race Inc. | -96.8% | Omni Nurtaceuticals | -89.5% |
| U. S. Diagnostic Labs | -96.7% | Uniroyal Technology | -88.3% |
| CD Whse Inc. | -93.8% | Digital Helvetica Tec. | -88.2% |
| Eco Soils Systems Inc. | -91.7% | House2home Inc. | -87.3% |

## DOMESTIC BOND INVESTMENTS

The System's domestic bond investments had an overall average maturity of 7.31 years, a duration of 3.93 years, and an average quality rating of 8.14. During 2002, the System's bond portfolio earned 6.1%. A statistical description of the bond investments is shown below.

| Bond Portfolio Maturity in Years | Percent of Portfolio |
|---|---|
| 0.0 - 1.0 | 4.4% |
| 1.0 - 3.0 | 34.3% |
| 3.0 - 5.0 | 19.2% |
| 5.0 - 10.0 | 26.7% |
| 10.0 - 20.0 | 1.2% |
| 20 + | 6.2% |
| Unclassified | 8.0% |

| Bond Portfolio Duration in Years | Percent of Portfolio |
|---|---|
| 0.0 - 1.0 | 10.4% |
| 1.0 - 3.0 | 27.9% |
| 3.0 - 4.0 | 10.6% |
| 4.0 - 6.0 | 22.1% |
| 6.0 - 8.0 | 10.8% |
| 8.0 + | 7.3% |
| Unclassified | 10.9% |

| Bond Portfolio Quality Rating | Percent of Portfolio |
|---|---|
| Government (10) | 42.1% |
| Aaa(10) | 6.3% |
| Aa(9) | 3.1% |
| A(8) | 9.2% |
| Baa(7) | 13.7% |
| Below Baa(6-1) | 23.4% |
| Other | 2.2% |

## BROKERAGE FEES

| Brokerage Company | Commission | Brokerage Company | Commission | Brokerage Company | Commission |
|---|---|---|---|---|---|
| A G Edwards | 2,250.00 | First Chicago Capital | 3,437.50 | Ormes Capital Markets | 1,060.00 |
| ABD Securities | 120.00 | First Union | 724.00 | Pacific Equities Growth | 2,911.74 |
| Access Securities Inc | 6,380.24 | Frank Russell | 90.00 | Paine Webber | 4,660.00 |
| Adams Harkness & Hill | 5,572.00 | Friedman Billings & Ramsey | 100.00 | Paulsen Dowling Securiities Inc | 720.00 |
| Alex Brown & Sons | 5,468.00 | Goldman Sachs | 12,215.44 | Pershing | 4,070.00 |
| Autranet Inc. | 666.00 | Griswold Company | 2,041.20 | Prudential Securities | 5,849.40 |
| B Trade Services | 1,695.00 | GRW Capital Corp | 7,926.00 | Raymond James | 1,450.00 |
| Bear Stearns | 7,899.25 | Heflin | 120.00 | RBC Dominion Securities Group | 736.00 |
| Berean Capital Inc | 2,728.50 | Hoenig & Co. | 2,390.00 | Regional Operations Group | 728.60 |
| Berstein Sandford & Co | 3,310.00 | Instinet | 5,724.23 | Robertson Coleman | 145.00 |
| Blair, William | 400.00 | Investment Technology Group | 12,137.68 | Salomon Brothers Inc | 10,221.38 |
| Boston Institutional Svc. | 3,748.85 | ISI Group Inc | 595.00 | Sanders Morris Mundy | 432.00 |
| Brick Securities | 32.00 | J P Morgan | 666.00 | Sandler O'Neill | 705.54 |
| Bridge Trading | 130.00 | Jackson Partners | 75.00 | SBC Capital Markets | 21,396.12 |
| Broadcourt | 151,445.47 | Jefferies | 16,025.00 | Schwab, Charles & Co | 288.00 |
| Buckingham Research Group | 36.00 | Johnson Rice | 1,146.00 | SK International | 160.00 |
| Cantor Fitzgerald | 11,577.05 | Jones Associates | 11,893.00 | Smith Barney | 40.00 |
| Capital Institution Svc. | 5,042.46 | Keefe Bruyette | 378.00 | Soundview Financial | 683.00 |
| Chicago Corp. | 228.00 | Kemper Capital Market | 654.50 | Spear Leed Kellog | 1,033.08 |
| Citicorp Securities Market | 222.00 | Knight Securities | 764.50 | Standard/Poor Securities | 11,381.43 |
| Cowen & Co | 813.00 | Lehman Bros | 14,059.22 | Stechler & Co | 2,982.00 |
| Croix Securities | 184.00 | Liquidnet Inc | 1,617.50 | Stephens Inc | 127.00 |
| Donald & Co | 6,424.05 | Loop Capital Markets | 2,832.00 | Stifel Nicolaus | 600.00 |
| Donaldson Lufkin | 1,014.70 | Lynch Jones & Ryan | 84.00 | Thomson Institutional Services | 325.00 |
| Dresdner Securites | 256.00 | Merrill Lynch | 5,764.50 | US Bank Asset Mgmt | 275.00 |
| Execution Services | 1,830.00 | Montgomery Securities | 3,702.50 | Utendahl Capital Partners | 935.00 |
| Factset Data Systems | 5,298.80 | Morgan Stanley | 12,377.50 | Wedbush Securities | 100.00 |
| Fahnestock & Co | 64.00 | Ned Davis Resources | 120.00 | Weeden & Co. | 5,535.58 |
| Fidelity Capital Markets | 5,855.00 | Needham | 385.00 | Weiss Peck & Greer | 160.00 |
| First Boston | 18,254.90 | Neuerger & Berman | 275.00 | Wheat First Securities | 40,610.00 |
| | | Oppenheimer | 1,834.00 | Wilshire Associates Inc. | 74,426.30 |
| **Total Commissions** | | | | | **$565,846.71** |

## MARKET VALUE OF ASSETS

| Investment Category | As of December 31, 2000 | | As of December 31, 2001 | | As of December 31, 2002 | |
|---|---|---|---|---|---|---|
| | Market Value | % of Total | Market Value | % of Total | Market Value | % of Total |
| Cash, Receivables, Cash Equivalents | $55,833,843 | 5.6% | $54,629,662 | 5.8% | $56,232,688 | 6.6% |
| U.S. Bonds, Bills and Mortgages | 152,626,142 | 15.2% | 104,712,936 | 11.1% | 98,092,066 | 11.5% |
| Corporate Bonds | 115,611,809 | 11.5% | 147,404,245 | 15.6% | 135,775,862 | 15.9% |
| Common Stocks | 396,377,582 | 39.6% | 380,796,183 | 40.4% | 282,364,602 | 33.1% |
| Mutual Funds | 231,589,133 | 23.1% | 213,058,724 | 22.6% | 247,014,623 | 28.9% |
| Real Estate - Insurance Contracts | 1,099,644 | 0.1% | 1,020,690 | 0.1% | 1,087,389 | 0.1% |
| Mortgages | 276,617 | 0.0% | 172,166 | 0.0% | 129,852 | 0.0% |
| Alternative Investments * | 47,826,856 | 4.8% | 41,304,911 | 4.4% | 33,668,151 | 3.9% |
| **Total** | **$1,001,241,626** | **100.0%** | **$943,099,517** | **100.0%** | **$854,365,233** | **100.0%** |

* Carried at Cost Value

**PUBLIC SCHOOL RETIREMENT SYSTEM**
**OF THE CITY OF ST. LOUIS**

## ACTUARIAL VALUATION
**AS OF JANUARY 1, 2002**

**NOVEMBER**
**2002**

## PURPOSE OF THE REPORT

This report is submitted in accordance with Section 169.450-15 Revised Statutes of Missouri (R.S. Mo.) 1997 and amendments that require the actuary to make an annual valuation of the assets and liabilities of the System. The purpose of the actuarial valuation is twofold: (1) to determine the required annual contributions from the Board of Education, the Retirement System and Harris-Stowe State College (or the State of Missouri); and (2) to develop information to measure the relative financial condition of the System.

The required contribution to the Retirement System from the Board of Education, the Retirement System, charter schools and Harris-Stowe State College (or the State of Missouri) is computed in accordance with Section 169.490 R.S. Mo. 1997. The amount of the required contribution is stated in Table C of this report. A description of the actuarial cost method and assumptions appears in Section 3.

Information concerning the financial condition and factors affecting it will be found throughout the report. There is no generally accepted single measure or standard for determining whether or not a retirement system is "actuarially sound." The financial health of a retirement system is measured best on a relative basis. Results are compared over a period of years to determine whether adequate progress is being made in the funding of the system's liabilities. Another relative measure is the stability of the contribution rate, with recognition for changes in funding requirements due to changes in benefit provisions. The actuarial balance sheet also provides an indication of the relative financial condition of the plan.

## COMMENTS

This actuarial valuation reflects the (1) an increase in benefits (the 2.6% COLA effective July 1, 2002); (2) the changes enacted in HB 660; (3) the change in actuarial assumptions adopted by the Board of Trustees, following the 5-year experience study; and (4) modifications to the actuarial cost method adopted by the Board of Trustees. The net effect of these changes combined with unfavorable actuarial experience for the year ending December 31, 2001 resulted in an increase in the Annual Required Contribution rate from 7.73% to 8.00%. The primary factor producing the unfavorable experience was the unanticipated increase in compensation for additional members participating in the extended school year program. Partially offsetting the unfavorable demographic experience was a net investment return on an actuarial basis slightly in excess of the 8.0% assumed rate of return for 2001.

As a part of the package to increase benefits in 2001, the Board of Education agreed to fix the employer contribution at 8.00% for 2001 and institute a one-year lag for future years. Therefore, this actuarial valuation is used to determine the actual contribution rate for 2003. The dollar amount of the actual contribution increased from $18,168,580 for 2002 to $19,517,288 for 2003. As a percentage of covered compensation the actual contribution for 2003 increased to 8.00% from 7.73% for 2002.

Under the actuarial funding method used to determine the contribution, actuarial gains (or losses) result in a decrease (or increase) in the normal cost rate. Actuarial gains (or losses) result from differences between the actual experience of the System and the expected experience projected by the actuarial assumptions. The assumptions are based on the long-term expected experience of the System. Actuarial gains (or losses) reflect short-term deviations between actual and expected experience. Since the normal cost is redetermined on an annual basis, the normal cost will usually fluctuate from year-to-year. For 2002, the annual normal cost is $982,401 or 0.40% of the covered payroll of $243,880,038.

The actuarial accrued liability contribution is determined as the amount necessary to amortize the remaining Unfunded Frozen Actuarial Accrued Liability (UFAAL) over a period of 30 years. As a modification to the actuarial cost method, the Board of Trustees acted to redetermine the UFAAL effective January 1, 2002 and to phase in the difference between the new and old UFAAL over a five-year period. This portion of the contribution only changes to reflect changes in benefits or changes in actuarial assumptions and methods. The UFAAL was increased by $32,588,797 to reflect the effect of the change in benefits and assumptions and decreased by $15,174,627 as the initial adjustment of the 5-year phase-in of the redetermined UFAAL. The Board of Trustees also adopted a 30-year amortization period for the UFAAL, replacing the 30 to 50 year periods applying to the original UFAAL and supplements.

In our opinion, the Retirement System has been and will continue to be funded on a sound actuarial basis provided the required contributions are made as recommended in this report.

Respectfully submitted,

James S. Rubie, Jr., F.S.A.

## SUMMARY OF PRINCIPAL RESULTS OF THE ACTUARIAL VALUATION AS OF JANUARY 1, 2002

### ANNUAL REQUIRED CONTRIBUTION

| 2002 | Board of Education | Harris-Stowe State College | Retirement System | Charter Schools | Total |
|---|---|---|---|---|---|
| Normal Cost Contribution | $ 952,895 | $ 629 | $ 1,626 | $ 27,251 | $ 982,401 |
| Actuarial Accrued Liability Contribution | 17,978,190 | 11,876 | 30,682 | 514,139 | 18,534,887 |
| Annual Required Contribution | $ 18,931,085 | $ 12,505 | $ 32,308 | $ 541,390 | $19,517,288 |
| Covered Payroll | 236,555,079 | 156,266 | 403,712 | 6,764,981 | 243,880,038 |
| ARC as % of Covered Payroll | 8.00% | 8.00% | 8.00% | 8.00% | 8.00% |
| **2001*** | | | | | |
| Normal Cost Contribution | $ 0 | $ 0 | $ 0 | $ 0 | $ 0 |
| Actuarial Accrued Liability Contribution | 17,862,598 | 10,079 | 30,295 | 265,608 | 18,168,580 |
| Annual Required Contribution | $ 17,862,598 | $ 10,079 | $ 30,295 | $ 265,608 | $18,168,580 |
| Covered Payroll | 231,127,985 | 130,420 | 391,991 | 3,436,755 | 235,087,151 |
| ARC as % of Covered Payroll | 7.73% | 7.73% | 7.73% | 7.73% | 7.73% |

| **SYSTEM ASSETS** | **January 1, 2001*** | **January 1, 2002** |
|---|---|---|
| Expense and Contingency Reserve | $ 77,995,894 | $ 73,531,272 |
| Market Value, excluding Expense & Contingency Reserve | 922,081,344 | 868,714,978 |
| Actuarial Value | 770,090,498 | 861,128,076 |
| **SYSTEM LIABILITIES** | | |
| Unfunded Actuarial Accrued Liability | $ 167,578,602 | $ 208,661,737 |
| Actuarial Present Value of Projected Accrued Benefits | 771,464,357 | 964,833,027 |
| **FUNDING RATIO** | | |
| Actuarial Value Funding Ratio | 99.8% | 89.3% |
| Market Value Funding Ratio | 119.5% | 90.0% |

** Prior year shown for comparison purposes only.*

## ACTUARIAL METHODOLOGY (continued)

### INTRODUCTION

The actuarial valuation of a defined benefit retirement system is comprised of two separate processes.

First, the actuarial present value, as of the valuation date, of both current and projected benefits to be paid under the plan is determined. In determining the actuarial present value of these benefits, actuarial assumptions must be made as to the number of participants eventually receiving benefits, the amount of benefits to be paid, and the portion of the benefit obligation to be covered by future investment earnings.

Second, the financing of these benefit obligations on an advance basis is established. An actuarial cost method is applied to establish the NORMAL COST, which is the rate at which future costs will accrue annually after the valuation date. The actuarial cost method is applied to determine the ACTUARIAL ACCRUED LIABILITY, which is the amount of cost that has accrued as of the valuation date.

### ACTUARIAL ASSUMPTIONS

The true cost of a member's retirement benefit is not known until he or his beneficiary has received the final benefit payment. Consequently, the exact cost of system benefits for the current employee group will not be determinable for 50 to 75 years. Since provisions for this cost must be made prior to the exact determination, a model is established that will estimate the future cost of system benefits. The model utilizes parameters that require assumptions as to the future occurrences of various events affecting the demographic profile of the employee group and the assets of the system. Such actuarial assumptions include death, retirement, termination, disability, salary increases and investment return. Current and long-term economic factors, the nature of the employer's business and significant features of the system must be considered in the selection of a set of actuarial assumptions to assure the reasonableness of the results predicted by the assumptions.

While care is taken in the selection of actuarial assumptions, actual experience is expected to deviate from these assumptions over the short term. The suitability of actuarial assumptions is measured by how closely the experience of the system, on a long-term basis, conforms to projected results. Deviations from projected results are called actuarial gains and losses. Periodic actuarial valuations measure the extent of these gains and losses as of a valuation date. If either actuarial gains or losses predominate, then it is possible that one or more of the actuarial assumptions is no longer appropriate. Thus, actuarial assumptions must be continually monitored for reasonableness and subsequent cost estimates may be modified accordingly. While individual assumptions are intended to be representative, it is the aggregate effect of all actuarial assumptions working together that determines their appropriateness.

An analysis of the experience of the Retirement System for the five-year period ending December 31, 2000 was performed. On the basis of that analysis, several actuarial assumptions were changed effective with the January 1, 2002 valuation. The next scheduled experience analysis is for the five-year period ending December 31, 2005.

### ACTUARIAL LIABILITIES

Actuarial liabilities include the actuarial present value of all future benefits and expenses. To determine the actuarial present value of all future benefits, the probability of future events that establish benefit payments is forecast utilizing the actuarial assumptions. System provisions and current member data are used to forecast the amount of benefits to be paid. Assumptions for survival among retired members and beneficiaries are used to estimate the duration of these benefit payments. Each probable benefit payment is then discounted to the valuation date using the actuarial assumption for investment return. These discounted payments are then summed to arrive at the total actuarial present value of benefits.

### ACTUARIAL ASSETS

The actuarial assets at any time are equal to the sum of present assets, valued on an actuarial basis, plus future assets. Future assets will result from future contributions and future investment return on all assets.

### ASSET VALUATION METHOD

The actuarial value of other assets is determined using the assumed yield method of valuing assets, less the Expense and Contingency Reserve. Under the assumed yield asset valuation method, the prior year’s actuarial value is increased at the assumed rate of return with appropriate adjustments for contributions and disbursements to produce an expected actuarial

## ACTUARIAL METHODOLOGY (continued)

value of assets at the end of the year. The expected actuarial value is compared to the market value of assets, and 20% of the difference is added to the expected actuarial value. The Expense and Contingency Reserve is excluded from the calculation to produce the actuarial value of assets.

### ACTUARIAL BALANCE SHEET

The actuarial balance sheet of a retirement system displays the fundamental financial status of the system on the valuation date. As stated previously, the system liabilities are the sum of the actuarial present values of all future projected benefit payments to current active and inactive plan members and beneficiaries. Current assets, valued on an actuarial basis, plus the actuarial present value of future employer and employee contributions comprise the total actuarial assets of the system.

The actuarial present value of future employer contributions is the only item on the balance sheet that is not directly determined by the system provisions, current assets, member data and actuarial assumptions. In fact, the actuarial present value of future employer contributions is the balancing item and reflects the future employer funding requirements based on the existing member population.

### ACTUARIAL COST METHOD

To determine the funding requirements of the system, it is necessary to employ an actuarial cost method. The choice of the cost method does not affect the balance sheet financial status, which is a function only of the system provisions, actuarial assumptions, member data and assets. However, the actuarial cost method has a direct impact on the incidence of the funding requirements. The actuarial cost method allocates the actuarial present value of future employer contributions between the past and future, and thus establishes the Unfunded Actuarial Accrued Liability (UFAAL) and the Normal Cost.

The actuarial cost method is the "frozen entry age actuarial cost method." Entry age is determined at the date each member would have entered the system. On the initial actuarial valuation date for which the cost method is used, the annual cost accruals (individual normal costs for each member) are determined as a level percentage of pay for each year from entry age until retirement or termination. The sum of these individual normal costs for all active members whose attained ages are under the assumed retirement age is the normal cost for the initial plan year. The excess of all normal costs falling due prior to the initial actuarial valuation date, accumulated with interest, over the plan assets represents the initial UFAAL.

In subsequent years, the unfunded actuarial accrued liability is frozen, that is, it increases only because of the accrual of interest and additional normal costs, and decreases only as a result of contributions. Supplements to the UFAAL can occur for plan amendments or actuarial assumption changes. Supplements are determined by computing the change in the actuarial accrued liability as of the valuation date coincident with or next following the change. The UFAAL was originally determined and frozen as of January 1, 1981. Effective January 1, 2002, UFAAL was redetermined and the difference between the new and old UFAAL will be phased in over five years.

Subsequent normal costs are calculated as the level percentage of pay required to fund the excess of the actuarial present value of future benefits over the sum of the actuarial value of assets and the remaining UFAAL.

The funding requirement for each plan year is the sum of the "normal cost contribution" (equal to the normal cost for that year), plus the "actuarial accrued liability contribution." The "actuarial accrued liability contribution" is the payment required to amortize the UFAAL over 30 years.

## SECTION 4. ACTUARIAL ASSUMPTIONS

The following actuarial assumptions were used in the valuation:

***Interest*** – 8%per annum, net of expenses.

***Salary Scale*** – Salaries are assumed to increase at the rate of 4.5% per year.

***Mortality*** - The 1983 Group Annuity Mortality Table for males and females is used for active members, retired members and beneficiaries

***Disability Mortality*** - Disability mortality rates are based on the actual experience of the Retirement System.

***Disability*** - Disabilities are assumed to occur at rates based on the actual experience of the Retirement System.

***Withdrawal*** - Select and ultimate rates based on actual experience of the Retirement System are used.

During the first three years of membership, the rates for members employed by employers other than Charter Schools are:

| Year of | Withdrawal Rate | |
|---|---|---|
| Membership | Males | Females |
| 1 | 17.5% | 15.0% |
| 2 | 15.0% | 12.5% |
| 3 | 10.0% | 10.0% |

During the first three years of membership, the rates for members at Charter Schools are:

| Year of | Withdrawal Rate | |
|---|---|---|
| Membership | Males | Females |
| 1 | 50.0% | 50.0% |
| 2 | 25.0% | 25.0% |
| 3 | 15.0% | 15.0% |

***Retirement*** – Retirements are assumed to occur at rates based on the actual experience of the Retirement System. For those eligible to retire under the Rule of 85, it is assumed that 50% will retire when first eligible for unreduced benefits unless the age-related rate is greater, but not prior to 30 years of Credited Service.

***Family Structure*** - The probability of a member being married and the probable number of children are based on a table constructed by the Social Security Administration, modified to reflect the experience of the Retirement System

## ACTUARIAL ASSUMPTIONS (continued)

### ACTIVE MEMBER RATES OF DECREMENT

| Attained | Withdrawal Rates | | Disability Rates | | Retirement |
|---|---|---|---|---|---|
| Age | Males | Females | Males | Females | Rate |
| 20 | 15.00% | 15.00% | 0.00% | 0.00% | 0.00% |
| 25 | 12.50% | 12.50% | 0.00% | 0.00% | 0.00% |
| 30 | 9.00% | 9.00% | 0.40% | 0.40% | 0.00% |
| 35 | 7.00% | 7.00% | 0.40% | 0.40% | 0.00% |
| 40 | 6.00% | 6.00% | 0.80% | 0.75% | 0.00% |
| 45 | 3.00% | 3.00% | 0.15% | 0.10% | 0.00% |
| 50 | 2.00% | 2.00% | 0.20% | 0.15% | 0.00% |
| 55 | 1.50% | 1.50% | .450% | 0.25% | 5.00% |
| 60 | 1.00% | 1.00% | .550% | .325% | 7.50% |
| 65 | 0.00% | 0.00% | 0.00% | 0.00% | 35.00% |
| 70 | 0.00% | 0.00% | 0.00% | 0.00% | 100.00% |

### NON-DISABLED LIFE MORTALITY RATES

| Death Rate | | | Death Rate | | |
|---|---|---|---|---|---|
| Male | Age | Female | Male | Age | Female |
| .000860 | 35 | .000476 | .044597 | 75 | .023992 |
| .001238 | 40 | .000665 | .074070 | 80 | .042945 |
| .002183 | 45 | .001010 | .114836 | 85 | .069918 |
| .003909 | 50 | .001647 | .166307 | 90 | .111750 |
| .006131 | 55 | .002541 | .234086 | 95 | .182419 |
| .009158 | 60 | .004241 | .319185 | 100 | .295187 |
| .015592 | 65 | .007064 | .469531 | 105 | .487816 |
| .027530 | 70 | .012385 | 1.000000 | 110 | 1.000000 |

### DISABLED LIFE MORTALITY RATES

(PER 1,000 DISABLED PENSIONERS)

| Death Rate | | | Death Rate | | |
|---|---|---|---|---|---|
| Male | Age | Female | Male | Age | Female |
| 48.7 | 40 | 51.0 | 96.1 | 75 | 73.5 |
| 44.8 | 45 | 48.7 | 131.5 | 80 | 96.1 |
| 43.2 | 50 | 44.8 | 180.9 | 85 | 131.5 |
| 43.1 | 55 | 43.2 | 252.9 | 90 | 180.9 |
| 48.7 | 60 | 43.1 | 348.1 | 95 | 252.9 |
| 59.8 | 65 | 48.7 | 785.7 | 100 | 348.1 |
| 73.5 | 70 | 59.8 | 1000.0 | 101 | 1000.0 |

## ACTUARIAL BALANCE SHEET AS OF JANUARY 1, 2002

**Actuarial Assets**

| | | |
|---|---|---|
| Actuarial value of present assets | | $ 861,128,076 |
| Actuarial present value of future member contributions | | 95,765,965 |
| Actuarial present value of future employer contributions for: | | |
| Normal Costs | | 7,143,813 |
| Actuarial Accrued Liability | | 208,661,737 |
| Total present and future assets | | $ 1,172,699,591 |

**Actuarial Liabilities**

| | | |
|---|---|---|
| Actuarial present value of benefits now payable | | $ 465,462,191 |
| Actuarial present value of benefits payable in the future | | |
| Active members – New Plan | 602,958,496 | |
| Active members -- Old Plan | 134,477 | |
| Active members -- DROP | 93,502,102 | |
| Members on leave of absence without pay | 844,925 | |
| Terminated members | 9,797,400 | |
| Total payable in the future | | 707,237,400 |
| Total liabilities for benefits | | $ 1,172,699,591 |

## PROJECTED BENEFIT OBLIGATION FUNDING STATUS

**Projected Benefit Obligation at January 1, 2002:**

| | |
|---|---|
| Retired members and beneficiaries currently receiving benefits and terminated members not yet receiving benefits | $ 476,104,516 |
| Current active members: | |
| Accumulated member contributions, including interest | 116,506,785 |
| Employer-financed vested benefits | 369,876,662 |
| Employer-financed non-vested benefits | 2,345,064 |
| Total Projected Benefit Obligation | $ 964,833,027 |

**At January 1, 2002, the Projected Benefit Obligation was funded as follows:**

| | |
|---|---|
| Net assets available for benefits at actuarial value | $ 861,128,076 |
| Unfunded Projected Benefit Obligation | 103,704,951 |
| Actuarial value funding ratio | 89.3% |
| Net assets available for benefits at market value | $ 868,714,978 |
| Unfunded Projected Benefit Obligation | 96,118,049 |
| Market value funding ratio | 90.0% |

## PRIORITIZED SOLVENCY TEST

The funding objective of the Retirement System is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percentage of covered Compensation. If the contributions are level in concept and realistically determined, the System will pay all benefits when due -- the ultimate test of financial soundness. Testing for level contribution rates is the long-term solvency test.

A prioritized solvency test is an additional means of checking a system's progress under its funding program. In a prioritized solvency test, the plan's present assets (cash and investments) are compared with:
-- active member contributions, accumulated with interest;
-- the liabilities for future benefits to present inactive members and beneficiaries; and
-- the liabilities for service already rendered by active members.

In a system that has been following the discipline of level percent of payroll financing, the liabilities for active member accumulated contributions (liability 1) and the liabilities for future benefits to inactive members and beneficiaries (liability 2) will be fully covered by assets (except in unusual circumstances). In addition, the liabilities for service already rendered by active members (liability 3) are normally partially covered by the remainder of the present assets. Generally, if the system has been using level cost financing, the funded portion of liability 3 will increase over time. Liability 3 being fully funded does not necessarily result from level percent of payroll funding methods.

The schedule below illustrates the history of the liabilities of the system and is indicative of the system following the discipline of level percent of compensation funding.

| | Actuarial Present Value of Credited Projected Benefits | | | | | | |
|---|---|---|---|---|---|---|---|
| | (1) | (2) | (3) | | | | |
| Valuation Date January 1 | Active Members' Accumulated Contributions | Retirants, Inactive Members & Beneficiaries | Active Members (Employer-Financed) | Actuarial Value of Assets | Percent of Present Value Covered by Valuation Assets (1) | (2) | (3) |
| 1992 | 88,975,156 | 163,137,064 | 214,404,373 | 427,706,455 | 100 | 100 | 82 |
| 1993 | 96,350,532 | 176,391,424 | 216,680,909 | 458,279,727 | 100 | 100 | 86 |
| 1994 | 104,202,541 | 189,651,537 | 222,503,913 | 487,385,302 | 100 | 100 | 87 |
| 1995 | 108,933,074 | 204,234,143 | 226,947,717 | 519,088,399 | 100 | 100 | 91 |
| 1996 | 114,061,708 | 236,007,330 | 250,659,986 | 562,177,274 | 100 | 100 | 85 |
| 1997 | 118,041,749 | 272,393,748 | 251,827,653 | 598,638,356 | 100 | 100 | 83 |
| 1998 | 122,227,173 | 296,455,647 | 252,445,749 | 644,429,672 | 100 | 100 | 90 |
| 1999 | 130,705,014 | 276,290,128 | 303,953,494 | 694,250,672 | 100 | 100 | 95 |
| 2000 | 129,398,364 | 353,852,977 | 288,213,016 | 770,090,498 | 100 | 100 | 100 |
| 2001 | 127,086,325 | 414,052,293 | 269,590,438 | 828,097,298 | 100 | 100 | 100 |
| 2002 | 116,506,785 | 476,104,516 | 372,221,726 | 861,128,076 | 100 | 100 | 72 |

## ACTUARIAL VALUE OF ASSETS

This section of the report shows the development of the actuarial value of the assets of the System and provides information regarding the Expense and Contingency Reserve, investment results and the various assets of the System.

The amount of assets used in the actuarial valuation is known as the "actuarial value of assets." An important element in the development of the actuarial value of assets is the Expense and Contingency Reserve (called the Expense Fund prior to 1988). The amount of the Reserve is determined pursuant to a policy adopted by the Board of Trustees.

The fund had a rate of return of 8.24% on an actuarial value basis, 0.24% above the assumed rate of return of 8.0% for 2001. The rate of return on an actuarial value basis is intended to be a stable rate of return and fluctuate less than rates of return on book or market value basis. Thus, the rate of return on an actuarial basis is not always a fair measure of the investment performance of the fund. Another indicator of actual performance during the year is the rate of return on a market value basis of -2.52%.

### DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

| | | |
|---|---|---|
| (1) | Actuarial value of assets as of January 1, 2001 | $ 828,097,298 |
| (2) | Member contributions | 12,327,077 |
| (3) | Employer contributions | 18,213,595 |
| (4) | Benefit payments and expenses | 63,603,352 |
| (5) | Investment increment at 8.0% | 64,196,733 |
| (6) | Expected actuarial value on January 1, 2002: | |
| | (1) + (2) + (3) - (4) + (5) | 859,231,351 |
| (7) | Market value of assets on January 1, 2002 | 942,246,250 |
| (8) | Expense and Contingency Reserve on January 1, 2002 | 73,531,272 |
| (9) | Excess of market value over expected actuarial value: (7) – (8) – (6) | 9,483,627 |
| (10) | Market value adjustment: 20% x (9) | 1,896,725 |
| (11) | Actuarial Value of Assets as of January 1, 2002: (6) + (10) | 861,128,076 |

## MEMBERSHIP AND BENEFITS PAID AS OF JANUARY 1, 2002

| | Males | Females | Total |
|---|---|---|---|
| **ACTIVE MEMBERS** | | | |
| Old Plan | 1 | 2 | 3 |
| New Plan | 1,797 | 4,511 | 6,308 |
| DROP | 70 | 208 | 278 |
| Total Active | 1,868 | 4,721 | 6,589 |
| **INACTIVE MEMBERS** | | | |
| Terminated or Leave of Absence Without Pay | 26 | 92 | 118 |
| Total Members Not Retired | 1,894 | 4,813 | 6,707 |
| **RETIRED MEMBERS AND BENEFICIARIES** | | | |
| Retired Members and Contingent Annuitants | 861 | 2,199 | 3,060 |
| Survivors | 44 | 236 | 280 |
| Disabled Members | 77 | 173 | 250 |
| Total Retired Members and Beneficiaries | 982 | 2,608 | 3,590 |
| **TOTAL MEMBERSHIP** | 2,876 | 7,421 | 10,297 |

### NUMBER OF RETIRED MEMBERS AND BENEFICIARIES

| Option | Service Benefit | Disability Benefit | Survivor Benefit | TSA Benefit |
|---|---|---|---|---|
| 0 | 2,668 | 231 | 280 | 44 |
| 1 | 96 | 11 | 0 | 1 |
| 2 | 70 | 0 | 0 | 2 |
| 3 | 117 | 3 | 0 | 0 |
| 4 | 109 | 5 | 0 | 0 |
| Total | 3,060 | 250 | 280 | 47 |

### AMOUNT OF ANNUAL BENEFIT

| Option | Service Benefit | Disability Benefit | Survivor Benefit | TSA Benefit |
|---|---|---|---|---|
| 0 | $42,222,920 | $1,958,052 | $2,112,897 | $42,623 |
| 1 | 1,383,736 | 123,994 | 0 | 3,034 |
| 2 | 1,259,055 | 0 | 0 | 1,524 |
| 3 | 1,770,402 | 24,774 | 0 | 0 |
| 4 | 2,123,293 | 59,040 | 0 | 0 |
| Total | $48,759,406 | $2,165,860 | $2,112,897 | $47,181 |

## Background

The Public School Retirement System of the City of St. Louis was established and became effective January 1, 1944. It provides retirement, disability, death, and survivor benefits for eligible employees of the St. Louis Public School District, employees of Charter Schools located in St. Louis, employees of the Retirement System, and certain employees of Harris-Stowe State College.

Members of the Retirement System are also covered by Social Security, and are eligible for full Social Security benefits in addition to their benefits from the Retirement System.

Retirement System benefits are funded by a combination of member contributions, employer contributions, and investment earnings on the System's assets. Eligible employees of the School District, Charter Schools and the Retirement System are required to participate.

A summary of the primary benefit provisions of the Retirement System as of December 31, 2002 follows. These provisions apply for all but a few active members who elected to remain under provisions of the law as of October 13, 1961.

Actual benefits and eligibility for benefits are described in detail in statutes of the State of Missouri and the Retirement System's Rules and Regulations. In any circumstance where there appears to be a discrepancy between this summary and actual statutes or the Retirement System's Rules and Regulations, the law and the Rules and Regulations will govern.

## Eligibility for Benefits

*Normal Pension*

Members become eligible for Normal Pension when they attain age 65 or when the sum of their years of Credited Service plus their age equals at least 85 (known as the Rule of 85).

*Early Pension*

Members at least age 60 with five or more years Credited Service who do not satisfy the eligibility requirements for a Normal Pension may elect a reduced Early Pension.

*Disability Pension*

Members unable to perform their job duties due to physical or mental incapacity who are not eligible for Normal Pension will qualify for Disability Pension if: (a) they have at least five years Credited Service, and (b) they are recommended for Disability Pension by the Medical Board, and (c) their Disability Pension is approved by the Board of Trustees.

## Benefit Amounts

Benefit calculations require determining a member's:

*Average Final Compensation* – defined as the average of a member's Compensation for the highest consecutive three years out of the last ten years of service,

*Compensation* – includes a member's "regular" pay and employer contributions for a member's fringe benefits, but does not include overtime pay or pay for such services as extracurricular activities and summer school, and

*Credited Service* – defined as membership service plus any service credit that a member has purchased pursuant to state statutes. In addition, unused sick leave at the time of retirement is added to a member's age and years of Credited Service.

*Normal Pension*

A Normal Pension is a lifetime monthly benefit equal to 2.0% of a member's Average Final Compensation multiplied by the member's years of Credited Service; however, the monthly benefit will not exceed 60% of the member's Average Final Compensation. In addition, members retiring at or after attaining age 65 with at least five years of Credited Service will be entitled to a minimum monthly benefit equal to $10 for each year of Credited Service up to $150.

*Early Pension*

An Early Pension is a lifetime monthly benefit calculated in the same manner as a Normal Pension; however, an Early Pension is reduced by 5/9 of 1% for each month by which a member's Early Pension date precedes the date on which the member would become eligible for a Normal Pension.

*Disability Pension*

A Disability Pension is a lifetime monthly benefit (subject to verification of continued disability and certain earnings limitations) that is the greater of (a) a benefit calculated in the same manner as a Normal Pension as if the member were age 65, or (b) one-fourth (1/4) of a member's Average Final Compensation; however, a Disability Pension cannot exceed what a member's Normal Pension would have been if the member had continued to work until he/she became eligible for Normal Pension.

## Benefit Payment Options

Members may elect an optional form of payment that will coordinate their monthly pension benefits with estimated Social Security benefits and/or that will pay them reduced monthly pension benefits so that payments can continue to an Option Beneficiary after their death. The amount of the reduction is determined by the difference in age between a member and his/her Option Beneficiary.

Seven Benefit Payment Options are available.

- *Option 1* provides that upon a member's death, the member's reduced monthly benefit will continue to the member's Option Beneficiary for the Option Beneficiary's lifetime.
- *Option 2* provides that upon a member's death, one-half (1/2) of the member's reduced monthly benefit will continue to the member's Option Beneficiary for the Option Beneficiary's lifetime.
- *Option 3* is like Option 1, except that if the Option Beneficiary predeceases the member, the member's monthly benefit increases to what it would have been if the member had not elected a Benefit Payment Option.
- *Option 4* is like Option 2, except that if the Option Beneficiary predeceases the member, the member's monthly benefit increases to what it would have been if the member had not elected a Benefit Payment Option.
- *Option 5* provides that a member's monthly pension benefit prior to age 62 will be increased to an amount such that his/her monthly pension benefit prior to age 62 will be approximately equal to the sum of his/her monthly pension benefit after age 62 plus estimated Social Security benefits.
- *Option 6* is a combination of Options 1 and 5. Option 6 provides a monthly pension benefit that adjusts for a member's estimated Social Security benefits based on the date the member will attain age 62, or would have attained age 62, and provides that upon the member's death, the amount of the member's adjusted monthly pension benefit will continue to the member's Option Beneficiary for the Option Beneficiary's lifetime.
- *Option 7* is a combination of Options 2 and 5. Option 7 provides a monthly pension benefit that adjusts for the member's estimated Social Security benefits based on the date the member will attain age 62, or would have attained age 62, and provides that upon the member's death, one-half of the amount of the member's adjusted monthly pension benefit will continue to the member's Option Beneficiary for the Option Beneficiary's lifetime.

## Death and Survivor Benefits

*Upon the death of an active member,* the member's beneficiary(ies) is entitled to a refund of the member's accumulated contributions plus interest thereon.

*Upon the death of an active member with at least 18 months of Credited Service, or upon the death of a member on Disability Pension,* an eligible beneficiary(ies), (or if there is no surviving beneficiary, the unmarried dependent child(ren) of the member who are under age 22) may elect one of the survivor benefits set forth below in lieu of a refund of the member's accumulated contributions.

In the context of discussing survivor benefits:

An "eligible beneficiary" is the surviving spouse, an unmarried dependent child(ren) under age 22, or a dependent parent(s) of the member, if designated as beneficiary.

A "dependent" is an individual(s) who was receiving at least one-half of his/her support from the member at the member's death.

1. A surviving spouse who was married to the member for at least one year, and who is at least age 62 (or upon attaining age 62), may elect to receive $60 per month.
2. A surviving spouse who cares for an unmarried dependent child(ren) of the deceased member who is under the age of 22 may elect to receive $60 per month plus $60 per month per dependent child up to a maximum of $240 per month.

   If the surviving spouse is under age 62 when the youngest eligible child reaches the age of 22, the benefit will cease, but will resume when the surviving spouse attains age 62.
3. If no benefits are payable under 2 above, an unmarried, dependent child(ren) under age 22 may receive $60 per month. If there are more than three eligible children, $180 per month will be shared equally.
4. If no benefits are payable at any time under 1, 2, or 3 above, upon attaining age 62, a dependent parent who has not remarried may receive $60 per month, or if two dependent parents are eligible, $60 per month will be shared between them.

*Upon the death of an active member with at least five years of Credited Service,* if the member designated a dependent beneficiary, the beneficiary may elect to receive the member's pension benefit under Benefit Payment Option 1 in lieu of receiving a refund of the member's accumulated contributions and interest thereon.

If the deceased member was less than age 60 at the time of death, the Option 1 payment due the dependent beneficiary will be computed as if the deceased member had attained age 60 and retired under Option 1 as of the date of his/her death.

In addition, if a beneficiary who is eligible for Option 1 benefit payments is the surviving spouse of the deceased member, such surviving spouse shall receive $60 per month for each unmarried dependent child of the deceased member who is under age 22 and is under the care of the surviving spouse. If there are more than three eligible children, $180 per month will be shared equally.

## *Termination of Employment*

*Refund*

Upon employment separation, members are entitled to a refund of their accumulated contributions with interest thereon.

*Rollover*

At a member's election, that portion of a refund that is eligible for rollover treatment may be transferred to a member's IRA or to another qualified plan to preserve its tax-deferred status. Rollovers are subject to applicable provisions of the Internal Revenue Code at the time of the distribution.

*Pension Benefit*

In lieu of a refund or rollover, members with five or more years of Credited Service may elect to leave their contributions with the Retirement System and receive a Normal or Early Pension upon becoming eligible. The benefit paid to a terminated, vested member is based on the member's Credited Service, Average Final Compensation, and benefit provisions in effect at the time of the member's employment termination.

## *Retirement System Funding*

The Retirement System is funded by:

*Member Contributions*

Except members employed by Harris-Stowe State College, active members are required to contribute 5.0% of their Compensation. Member contributions are withheld from members' pay on a tax-deferred basis.

*Employer Contributions*

An actuarial valuation of the Retirement System that determines the required contribution is conducted annually. Based on the valuation, employer contributions are equal to the actuarially required contribution less the portion that members contribute.

*Investment Income*

The assets of the Retirement System are invested and generate income that is used to fund benefits and pay expenses.

## *Health Insurance*

The Retirement System makes a variety of medical, dental, and vision insurance plans available to retired members, their spouses, and eligible dependent children. The System pays a portion of the premiums for retired members. Retired members pay the remainder of the cost for their own coverage, if any, and all the cost of any dependent coverage they elect. On an annual basis, retired members are permitted to make changes to their medical, dental, and vision insurance.

Surviving spouses of deceased retired members are eligible to retain health care insurance after the death of the member.

Surviving spouses of deceased active members who elect to receive monthly benefit payments under Option 1 may also be eligible for health insurance coverage for themselves and for otherwise eligible children of deceased active members.

## *COLAs*

Cost of Living Adjustments (COLAs) are paid to retired members and surviving beneficiaries when such COLAs are approved by both the Board of Education and the Board of Trustees

The information presented below shows how member benefit payments have increased and how the assets of the Retirement System have grown since the Retirement System was established in 1944.