

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



**ANNUAL REPORT
CALENDAR YEAR 1999**

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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. Four trustees are appointed by the Board of Education; and seven are elected by Retirement System members. 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. As of January 1, 2000, 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 administrative staff members listed below are employed by the Retirement System. Harold Haberman joined the Retirement System in February of 2000.

Executive Director	Gail A. Lakin
Director of Technology	Lonnie R. Caldwell
Accounting Specialist	Marty Winters
Insurance Benefits Specialist	Carolyn M. Feuchtenbeiner
Member Services Supervisor	Evelyn E. Gass
Member Services Specialist	Harold Haberman
Member Services Clerical Assistant	Rita E. Thiel

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 Bartley, Goffstein, Bollato, and Lange
Investment Advisor	Doris Ewing New England Pension Consultants
Independent Auditor	Thomas S. Helm Huber, Ring, Helm & Co.
Actuary	James S. Rubie, Jr. W. Alfred Hayes & Company

PUBLIC SCHOOL RETIREMENT SYSTEM
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OFFICE OF THE
EXECUTIVE DIRECTOR

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August, 2000

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, 1999. This report provides summary and detailed financial, investment, actuarial, and statistical information about the status of the Retirement System.

Responsibility for the contents and presentation of material in this report rests with the management of the System. To the best of our knowledge, management believes the information in this report is accurate in all material respects. Management also believes 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

The Retirement System spent much of Calendar Year 1999 preparing its technology systems for the non-event of the new millennium. And, even though the Y2K bug never did bite, the work that was done to protect the System from Y2K problems provided valuable information for the System's next major project – automation of the Member Services Unit.

After almost eighteen years in the same location, in October of 1999, the Retirement System relocated its administrative offices to a new space in the same building. The new location provided much needed additional space, including a technology room for the System's new computer equipment and a counseling area where members can meet with staff in a comfortable and personal environment.

By the end of 1999, the Board of Trustees was very close to completing the restructuring of Retirement System's investments – an important multi-year project that was undertaken in 1998.

Internal Controls and Financial Summary

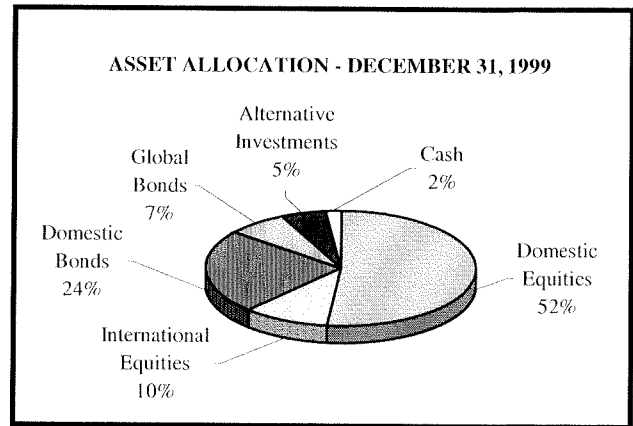
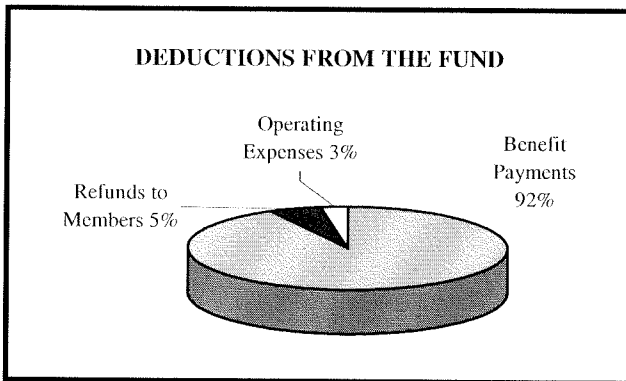
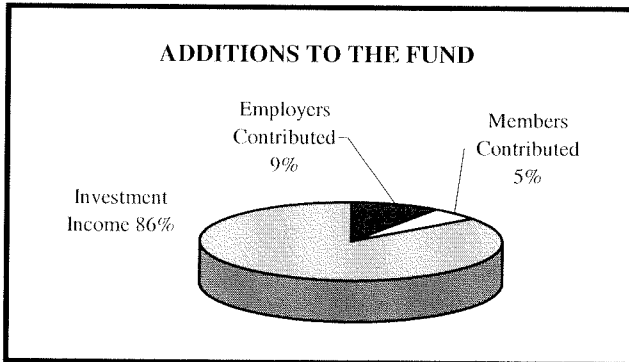
The Administrative Staff and the System's professional advisors are charged with the responsibility of maintaining appropriate internal accounting and procedural controls. These controls provide reasonable assurance

- 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.

The Retirement System's financial statements for the year ended December 31, 1999 were audited by Huber, Ring, Helm & Co., an independent accounting firm. Individuals who wish to review detailed financial information for the Retirement System's fiscal year ended December 31, 1999 are invited to refer to the audit report that is contained in this Annual Report. Summary financial information is provided below.

Net assets as of 12-31-98	\$857,520,961
Additions	
Employer contributions	17,307,595
Member contributions	9,729,871
Net investment income	155,209,426
Deductions	
Benefits paid to members	36,457,754
Refunds paid to members	2,084,900
Operating expenses	<u>1,147,961</u>
Net assets as of 12-31-99	\$1,000,077,238

The Retirement System's assets increased by almost \$143 million during calendar year 1999, reaching just over \$1 billion. Additions and deductions from the fund are presented graphically below.



For calendar year 1999, the financial composite of the Retirement System's portfolio earned a return of 18.2% and ranked 9th in the Independent Cooperative Consultants' (ICC) Universe of public pension plans. More importantly, over the three-year period ending December 31, 1999, the financial composite of the portfolio ranked in the 27th percentile of the ICC Universe with an annualized return of 16.4%. This performance exceeds the Retirement System's long-term goals of earning a return of 9.0% and exceeding the rate of inflation by 4.0%.

As of December 31, 1999, the Retirement System's alternative investments, comprised of real estate, mezzanine debt funds and venture capital investments, posted a 10.6% internal rate of return. A return of 10.6% compares favorably with the 7.2% benchmark median return.

Investment Performance

One of the most important decisions made by any retirement system's board of trustees is how a fund's investments will be allocated and diversified among different asset classes. As of December 31, 1999, the Retirement System's assets were allocated as follows.

Domestic Equities	50%
International Equities	13%
Domestic Fixed Income	23%
Global Bonds	7%
Cash	2%
Financial Composite	95%
Real Estate Investments	1%
Private Investments	4%
Alternative Investments	5%
Total Portfolio	100%

Additional investment information is provided in the Investment 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.

The actuarial valuation as of January 1, 2000 recognized liabilities for the improvement in the benefit formula that became effective for active

members retiring on or after June 29, 1999, and liabilities for the Catch-up Cost of Living Adjustment (COLA) that will be paid to retired members effective July 1, 2000. However, because of the margin by which the System's investment returns exceeded the actuarially assumed rate of return, recognizing benefit improvement liabilities increased the Annual Required Contribution Rate by only 0.72%.

With respect to its funding status, the Retirement System is 100% funded on an actuarial basis; and 120% 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 \$771,464,357

Net Assets Available for Benefits

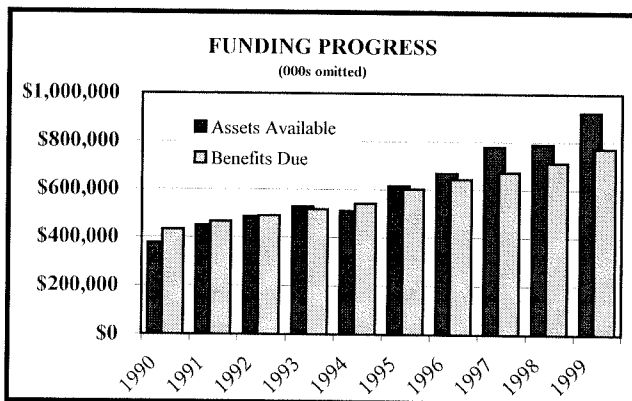
Actuarial Value of Assets \$770,090,498

Market Value of Assets \$922,081,344

Funding Ratio (Assets ÷ Obligations)

Actuarial Value Funding Ratio 100%

Market Value Funding Ratio 120%



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. Finally, 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, 1999 AND 1998

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INDEPENDENT AUDITOR'S REPORT

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A PROFESSIONAL CORPORATION
OF CERTIFIED PUBLIC ACCOUNTANTS

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 as of December 31, 1999 and 1998 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 generally accepted auditing standards. Those standards require that we plan and perform the audit 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 \$38,760,489 and \$31,790,470 (4 percent of plan net assets) as of December 31, 1999 and 1998, respectively, have been valued at cost. Generally accepted accounting principles 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 generally recorded at cost. The effect 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 effects of the procedures used to determine the valuation of investments in partnerships at December 31, 1999 and 1998, 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, 1999 and 1998 and changes in plan net assets for the years then ended in conformity with generally accepted accounting principles.

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

St. Louis, Missouri
January 28, 2000

**STATEMENTS OF PLAN NET ASSETS
DECEMBER 31, 1999 AND 1998**

	ASSETS	
	1999	1998
CASH	\$ 3,037,475	\$ 2,930,311
ACCRUED INTEREST AND DIVIDEND RECEIVABLES	3,113,374	2,007,362
INVESTMENTS, at fair value		
Cash equivalents	45,478,033	25,067,477
Bonds		
U.S. Government and agency issues	119,897,484	135,939,550
Corporate	94,236,248	93,124,355
Common stocks	464,089,128	395,554,634
Mutual funds	230,041,087	169,085,508
Real estate partnerships - insurance contracts	1,359,330	1,657,237
	955,101,310	820,428,761
INVESTMENTS, at estimated fair value		
Real estate loans, first mortgages	353,835	548,692
INVESTMENTS, at cost		
Limited partnerships	11,840,613	10,159,928
Real estate partnerships - other	8,016,169	7,525,488
Venture capital partnerships	18,903,707	14,105,054
	38,760,489	31,790,470
Total investments	994,215,634	852,767,923
Total assets	1,000,366,483	857,705,596
	LIABILITIES	
ACCOUNTS PAYABLE AND ACCRUED EXPENSES	289,245	184,635
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS (A schedule of funding progress is presented on page 16)	\$ 1,000,077,238	\$ 857,520,961

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

**STATEMENTS OF CHANGES IN PLAN NET ASSETS
YEARS ENDED DECEMBER 31, 1999 AND 1998**

ADDITIONS	1999	1998
Contributions		
Board of Education - City of St. Louis	\$ 17,279,683	\$ 16,901,912
Retirement System	18,050	15,936
Harris-Stowe State College	9,862	107,730
Employees	9,729,871	8,744,889
	27,037,466	25,770,467
Net appreciation (depreciation) in fair value of investments		
Cash equivalents	1,713,777	3,317,220
Bonds		
U.S. Government and agency issues	(1,176,623)	17,746,678
Corporate	398,684	(4,104,006)
Preferred stock		(2,241)
Common stock	99,749,332	64,484,878
Mutual funds	48,788,562	12,649,365
Real estate loans	56,109	78,615
Limited partnerships	1,253,547	687,331
Real estate partnerships	748,357	605,373
Venture capital partnerships	7,376,104	(1,688,395)
	158,907,849	93,774,818
Less investment expense	3,698,423	3,324,099
Net investment income	155,209,426	90,450,719
Total additions	182,246,892	116,221,186
DEDUCTIONS		
Benefits paid		
Retirement and death benefits	31,852,634	31,117,650
Supplemental payments	4,605,120	3,281,068
	36,457,754	34,398,718
Operating expenses	1,147,961	812,726
Contribution refunds due to death or resignation	2,084,900	2,055,711
Total deductions	39,690,615	37,267,155
NET INCREASE	142,556,277	78,954,031
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
BEGINNING OF YEAR	857,520,961	778,566,930
END OF YEAR	\$ 1,000,077,238	\$ 857,520,961

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 (System) is a funding agency existing under provisions of the Revised Statutes of the State of Missouri (the Statutes) to provide retirement benefits for all employees of the Board of Education of the City of St. Louis, of the System, and of 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, 1999	January 1, 1998
Active members	6,121	5,968
Inactive members	566	611
Total members not retired	<u>6,687</u>	<u>6,579</u>
Retired members		
Service and survivors	3,008	2,999
Disability	258	256
	<u>3,266</u>	<u>3,255</u>

NOTES TO FINANCIAL STATEMENTS

NOTE 1 – DESCRIPTION OF SYSTEM (CONTINUED)

Benefits

Upon retirement at age 65 (or at any age, if age plus years of creditable service add up to 85 or more), members receive monthly payments for life of yearly benefits equal to years of creditable service multiplied by 1¼% of average final compensation (effective for members actively at work as of June 29, 1999 retiring on or after June 30, 1999, benefits equal to years of creditable 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 creditable 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.

In certain circumstances, retirees receive supplemental payments under Sections 169.475 and 169.585 of the Statutes, as an expense of the System.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles 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 (4% of salaries through June 30, 1998, 4.5% July 1, 1998 through June 30, 1999, and 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 term 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.

NOTES TO FINANCIAL STATEMENTS

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

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 a national or international exchange 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 include: realized gains (losses), unrealized appreciation (depreciation), dividends, interest, and other investment income.

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 to be immaterial in relation to the total assets of the System.

NOTES TO FINANCIAL STATEMENTS

NOTE 3 – INVESTMENTS

At December 31, 1999 and 1998, investments consisted of the following:

	1999	
	Market Value	Cost
Cash equivalents	\$ 45,478,033	\$ 45,478,033
Bonds		
U.S. Government and agency issues	119,897,484	123,755,942
Corporate	94,236,248	101,388,812
Common stocks	464,089,128	347,719,137
Mutual funds	230,041,087	169,453,884
Real estate partnerships - insurance contracts	1,359,330	2,516,067
	<u>955,101,310</u>	<u>790,311,875</u>
Real estate loans, first mortgages	353,835	353,835
Limited partnerships	11,840,613	11,840,613
Real estate partnerships - other	8,016,169	8,016,169
Venture capital partnerships	18,903,707	18,903,707
	<u>38,760,489</u>	<u>38,760,489</u>
	<u>\$ 994,215,634</u>	<u>\$ 829,426,199</u>

	1998	
	Market Value	Cost
Cash equivalents	\$ 25,067,477	\$ 25,067,477
Bonds		
U.S. Government and agency issues	135,939,550	133,704,481
Corporate	93,124,355	97,540,552
Preferred stocks		419,264
Common stocks	395,554,634	322,874,055
Mutual funds	169,085,508	146,982,521
Real estate partnerships - insurance contracts	1,657,237	2,751,017
	<u>820,428,761</u>	<u>729,339,367</u>
Real estate loans, first mortgages	548,692	548,692
Limited partnerships	10,159,928	10,159,928
Real estate partnerships - other	7,525,488	7,525,488
Venture capital partnerships	14,105,054	14,105,054
	<u>31,790,470</u>	<u>31,790,470</u>
	<u>\$ 852,767,923</u>	<u>\$ 761,678,529</u>

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, 1999 and 1998 was \$40,469 and \$32,074, respectively. Approximate future minimum lease payments for the remaining term of the lease are as follows:

<u>Year</u>	<u>Minimum Lease Payments</u>
2000	\$ 68,938
2001	70,027
2002	71,115
2003	72,204
2004	48,620
	<u>\$ 330,904</u>

NOTE 5 – CONCENTRATION OF CREDIT AND MARKET RISK

Financial instruments that potentially subject the System to concentrations of credit risk and market risk consist principally of cash and investments. The System places its temporary cash investments with major financial institutions. At December 31, 1999 and 1998 the System had approximately \$49,000,000 and \$28,000,000 in cash and cash equivalents at Mercantile Bank. These balances were insured by the Federal Depository Insurance Corporation for \$100,000. The remaining balances are neither insured nor collateralized. A significant portion of the System's net assets are held by Mercantile 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, 1999 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 represent five percent or more of net assets held in trust for pension benefits:

	<u>Fair Value</u>
Mutual funds	
Putnam Investments - Putnam International Trust	<u>\$ 128,249,452</u>
Delaware Pooled Trust - Global Fixed Income Portfolio	<u>\$ 71,769,210</u>

**INDEPENDENT AUDITOR'S REPORT
ON SUPPLEMENTAL INFORMATION**

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A PROFESSIONAL CORPORATION
OF CERTIFIED PUBLIC ACCOUNTANTS

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 1999 and 1998 appears on page 1. 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. All of 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 28, 2000

SCHEDULE OF FUNDING PROGRESS (in millions)

DECEMBER 31, 1999

Actuarial Valuation Date <u>January 1,</u>	Actuarial Value of Assets <u>(a)</u>	Actuarial Accrued Liability (AAL) - Frozen Entry Age <u>(b)</u>	Unfunded AAL (UAAL) <u>(b-a)</u>
1990	373.3	460.7	87.4
1991	395.7	472.5	76.8
1992	427.8	502.0	74.2
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

Actuarial Valuation Date <u>January 1,</u>	Funded Ratio <u>(a/b)</u>	Annual Covered Payroll <u>(c)</u>	UAAL as a % of Covered Payroll <u>((b-a)/c)</u>
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

See independent auditor's report on supplemental information.

SCHEDULE OF EMPLOYER CONTRIBUTIONS

DECEMBER 31, 1999		
<u>Employer Contributions</u>		
<u>Year Ended December 31,</u>	<u>Annual Required Contribution</u>	<u>Percent Contributed</u>
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	*

* 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, 1999. Additional information related to the above actuarial valuation follows:

- Actuarial cost method: Frozen entry age.
- Rate of investment return: 8% for 1999 and 6.5% for 1998, 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 members and the same table with ages set up one year for retired members and 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 the System, assumed to be 4.5%-6.0%.
- 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, 1999 AND 1998**

	1999	1998
Actuarial services	\$ 115,620	\$ 132,600
Accounting and auditing fees	54,465	26,850
Computer programming and consultation	36,941	9,923
Convention, conferences, seminars		
Executive Director	5,080	4,284
Trustees (See Below)	26,910	22,869
Dues and subscriptions	3,349	3,633
Executive Director - miscellaneous	1,080	990
Furniture and equipment	85,693	13,941
Insurance - group hospitalization	21,592	16,836
Insurance - casualty and bonding	40,292	39,281
Legal fees and expense	209,678	122,394
Medical fees	541	289
Office repairs and maintenance	2,563	3,601
Office supplies and expense	8,432	7,500
Postage	49,889	38,959
Pension contribution	18,050	15,936
Printing and stationery	17,485	27,179
Rent - office	40,469	32,074
Salaries - administrative and clerical	325,897	242,845
Payroll taxes	24,600	18,349
Telephone	12,769	5,911
Miscellaneous expense	46,566	26,482
	\$ 1,147,961	\$ 812,726

Trustee 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:

	1999	1998
Transportation and registration	\$ 12,457	\$ 7,417
Lodging, meals, and miscellaneous	13,253	13,783
Other	1,200	1,669
Total	\$ 26,910	\$ 22,869

See independent auditor's report on supplemental information.

THE CAPITAL MARKET ENVIRONMENT

Domestic Stocks

Nineteen ninety-nine was another year marked by volatility and uncertainty. However, even with Y2K fears and pre-emptive strikes by the Federal Reserve against inflation, the S&P 500 Index reached another all time high earning 21.0% for the year. Small cap stocks, as represented by the Russell 2000 Index, earned 21.3%.

Domestic Bonds

It was a difficult year for most bond markets, as rising interest rates and an over abundance of corporate bonds weighed heavily on bond prices. Inflation concerns did help mortgage-backed securities due to decreased pre-payment risk, however, the Lehman Brothers Aggregate Bond Index was down 0.8% for the year – the second negative return for this benchmark over the past twenty-five years. One bright spot in the bond market was high yield bonds, which benefited from a strong economy, and posted a 1.7% return as measured by the Salomon Brothers High Yield Index.

International Markets

The international arena saw international stocks performing very well as the EAFE Index returned 27.0%, and the MSCI Emerging Markets Index earned 68.8% in U.S. Dollars for the year.

Amid rising interest rates at home and a depreciating Euro abroad, the global bond market ended the year with a disappointing loss of 4.3% for the year.

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, 1999, the Retirement System’s portfolio returned 18.2% and ranked 9th in the Investment Consultants’ Cooperative (ICC) Universe of Public Funds. This outstanding performance resulted in increasing the System’s asset base by more than \$140 million – which lifted the System’s assets over \$1 billion for the first time. For the three-year period ending December 31, 1999, the System ranked in the 27th percentile, earning a 16.4% return.

Investment performance by asset class for one and three year periods ending December 31, 1999 is set forth below.

	<u>One Year</u>	<u>Three Years</u>
<i>PSRS Total Portfolio</i>	18.2%	16.4%
Allocation Index	14.0%	17.4%
Median Public Fund	11.7%	15.4%
<i>PSRS Domestic Equities</i>	26.1%	23.2%
S&P 500	21.0%	27.6%
Median Public Fund	17.0%	23.1%
<i>PSRS Domestic Bonds</i>	-0.2%	5.4%
Lehman Aggregate Index	-0.8%	5.7%
Median Public Fund	-0.9%	5.8%
<i>PSRS International Equities</i>	54.6%	18.7%
EAFE Index	27.0%	15.7%
MSCI Emerging Index	66.4%	3.2%
Median International Fund	33.4%	17.1%
<i>PSRS Global Bonds</i>	-3.8%	N/A
Salomon Global Index	-4.3%	3.4%
Median Global Bonds	-4.8%	3.1%

INVESTMENT STATISTICS

The following pages in the Investment Section of this report provide statistical information about the Retirement System’s investment managers, securities held in the portfolio, and brokerage fees paid in 1999.

INVESTMENTS AS OF DECEMBER 31, 1999 (000s omitted)

Manager	Market Value	Percent of Fund	Management Style	Asset Class	Percent of Fund	Target
Buford, Dixon, Sparrow	\$7,688	0.8%	Large Cap Growth Equity			
Daedalus Capital	58,731	5.9%	Large Cap Growth Equity			
Monetary Management	23,081	2.3%	Large Cap Growth Equity			
New Amsterdam	58,434	5.8%	Large Cap Growth Equity			
Weatherfield	29,722	3.0%	Large Cap Growth Equity	Large Cap Growth Domestic Equities	17.7%	10.0%
Batterymarch	42,370	4.2%	Large Cap Core Equity			
Conning Asset Mgmt	36,292	3.6%	Large Cap Core Equity			
Todd Investment	40,460	4.0%	Large Cap Core Equity			
Progress Trust	16,833	1.7%	Large Cap Core Equity	Large Cap Core Domestic Equities	13.5%	10.0%
Chicago Equity	60,316	6.0%	Large Cap Value Equity			
Edgar Lomax Company	30,911	3.1%	Large Cap Value Equity	Large Cap Value Domestic Equities	9.1%	10.0%
Systematic Financial	24,368	2.4%	Small Cap Value Equity			
DFA	9,789	1.0%	Micro Cap Equity	Small/Micro Cap Domestic Equities	3.4%	5.0%
New Africa Advisors	3,400	0.3%	Emerging Market Equity			
Putnam Investments	128,249	12.8%	International Equity	International Equities	13.1%	13.0%
Invesco Capital	81,157	8.1%	Balanced Fund	Balanced Fund	8.1%	10.0%
Smith Graham	8,189	0.8%	Core Bond Fund			
Abacus	14,263	1.4%	Long Bond Fund			
John Hancock	153,430	15.3%	Core Bond Fund	Core/Long Domestic Bonds	17.5%	20.0%
Credit Suisse	34,863	3.5%	High Yield Bond Fund	High Yield Domestic Bonds	3.5%	5.0%
Delaware International	71,769	7.2%	Global Bond Fund	Global Bonds	7.2%	10.0%
3 Partnerships	10,058	1.0%	Mezanine Debt			
7 Funds	13,131	1.3%	Real Estate			
17 Investments	27,165	2.7%	Venture Capital	Alternative Investments	5.0%	7.0%
Cash	18,879	1.9%	STIF	Cash	1.9%	0%
Total Market Value	\$1,003,548	100.0%				100.0%

* Alternative Investments are valued at cost.

EQUITY INVESTMENTS

1999 Return	26.1%
Average Market Capitalization	\$79,121,800,000
P/E Ratio	22.45
Price/Book Ratio	5.77
Five Year Earnings Growth Rate	21.29

Ten Largest Equity Holdings					
<u>Company</u>	<u>Dollar Value</u>	<u>Percent of Portfolio</u>	<u>Company</u>	<u>Dollar Value</u>	<u>Percent of Portfolio</u>
Qualcomm Inc	\$12,892,716	2.7%	Sun Microsystems Co	\$7,349,056	1.6%
Citigroup Inc	9,723,474	2.1%	Adobe Systems Inc	6,778,800	1.4%
Oracle Corporation	9,127,287	1.9%	Exxon Mobil Corp	6,652,725	1.4%
General Electric Company	7,470,556	1.6%	Microsoft Corp	6,588,203	1.4%
Sony Corp Adr New 5	7,431,975	1.6%	Broadcom Corp	6,264,740	1.3%

Ten Best Performing Equity Holdings			
<u>Company</u>	<u>Return</u>	<u>Company</u>	<u>Return</u>
Immunomedic Inc Com	811.6%	Interlinks Electrs	628.7%
Digital Lighwave	798.2%	Dataware Technology	607.7%
Puma Technology Inc	756.6%	Extended Sys Inc	597.4%
Zamba Corp	717.6%	Elcom Intl Inc	597.4%
Ortel Corp	674.2%	East/West Communi	516.0%

Ten Worst Performing Equity Holdings			
<u>Company</u>	<u>Return</u>	<u>Company</u>	<u>Return</u>
Wolf Howard B. Inc	-98.0%	Filenes Basement Co	-86.5%
Metrotrans Corp	-97.8%	Laclede Stl Co Com	-81.7%
Eagle Geophysical	-94.7%	Safeguard Health En	-80.8%
Number Nine Visual	-92.4%	New Amern Healthcare	-80.0%
Tultex Corp Com	-87.2%	Bonded Mtrs Inc	-78.6%

BOND INVESTMENTS

The System's domestic bond investments had an overall average maturity of 9.30 years, a duration of 5.27 years, and an average quality rating of 8.72. During 1999, the System's bond portfolio earned -0.2%.

A statistical description of the bond investments is shown below.

Bond Portfolio Maturity in Years	Percent of Portfolio
0.0 - 1.0	0.8%
1.0 - 3.0	11.2%
3.0 - 5.0	12.2%
5.0 - 10.0	37.4%
10.0 - 20.0	18.3%
20 +	9.7%

Bond Portfolio Duration in Years	Percent of Portfolio
0.0 - 1.0	1.3%
1.0 - 3.0	13.5%
3.0 - 4.0	12.5%
4.0 - 6.0	40.1%
6.0 - 8.0	7.1%
8.0 +	15.1%

Bond Portfolio Quality Rating	Percent of Portfolio
Government (10)	56.9%
Aaa(10)	2.6%
Aa(9)	3.6%
A(8)	11.4%
Baa(7)	8.9%
Below Baa(6-1)	13.0%
Other	3.6%

BROKERAGE FEES PAID IN 1999

A G Edwards	\$18,417	Instinet	\$4,643
Abel Noser Corp	1,313	Interstate - Johnson Lane	4,262
Access Securities	6,195	Investment Technology Group	15,504
Alex Brown & Sons	564	Jeffries	4,583
Allen & Co	440	Keefe Bruyette	934
Ashland Global	840	Kemper Capital Market	44,606
Autranet	9,768	Lehman Bros	6,522
Baum, George K	115	Lewco Securities	4,716
Bear Stearns	9,547	Lynch Jones & Ryan	1,130
Berean Capital Inc	5,986	Magna Securities	2,358
Berstein Sanford C & Co	4,197	McDonald & Co	1,506
Blair, William	1,680	Merrill Lynch	140,580
Boston Instit Svcs	6,991	Montgomery Securities	527
Bridge Trading-Ernst Co	144	Morgan Equities Inc	5,226
Broadcourt	248,269	Morgan Stanley	9,827
Buckingham Research Group	1,752	Omni Financial	7,770
Cantor Fitzgerald	2,339	Oppenheimer	2,573
Capital Institutional Svcs	6,657	Paine Webber	77,729
Chicago Corp	1,856	Prudential Securities	76,408
County Natwest Securities	1,508	Prudential-Ken Neely	13,935
Cowen & Co.	1,359	Pryor Mclendon Counts	384
D E Shaw	5,216	Q Clearing Corp	4,636
Donaldson Lufkin	6,486	Quaker Securities	9,402
Eberstadt, Fleming	427	Regional Operations Group	6,195
Edward Jones	788	Rochdale	4,067
Factset Data Systems	3,158	Russell, Frank	50
Fidelity Capital	6	SBCI Swiss Bank	2,019
First Boston	10,034	Schwab, Charles	15,832
Gardner Rich & Co	1,980	Sherwood Securities	515
Gerard, Klauer, Mattison	1,260	Smith Barney Shearson	17,516
Goldman Sachs	18,958	Standard/Poor Securities	5,086
Grayson Wayne Capital	7,279	Stifel Nicolaus	15,072
Guzman	309	Weeden & Co	1,351
Hanifen Imhoff	148	Weiss, Peck & Greer	937
Hoening & Co Inc	3,827	Wheat First Securities	348
Howard Weil	1,793	Williams Capital Group	546
		Wilshire	51,471
TOTAL			\$952,372

MARKET VALUE OF ASSETS

Investment Category	As of December 31, 1997		As of December 31, 1998		As of December 31, 1999	
	Market Value	% of Total	Market Value	% of Total	Market Value	% of Total
Cash, Receivables, Cash Equivalents	\$142,170,439	18.3%	\$30,005,150	3.5%	\$51,628,882	5.2%
U.S. Bonds, Bills and Mortgages	142,640,445	18.3%	135,939,550	15.8%	119,897,484	12.0%
Corporate Bonds	97,786,206	12.6%	93,124,355	10.9%	94,236,248	9.4%
Preferred Stocks	2,305	0.0%	NA	NA	NA	NA
Common Stocks	313,985,588	40.3%	395,554,634	46.1%	464,089,128	46.4%
Mutual Funds	NA	NA	169,085,508	19.7%	230,041,087	23.0%
Regulated Investments	34,564,011	4.4%	NA	NA	NA	NA
Real Estate - Insurance Contracts	5,327,558	0.7%	1,657,237	0.2%	1,359,330	0.1%
Mortgages	769,985	0.1%	548,692	0.1%	353,835	0.0%
Alternative Investments *	41,506,244	5.3%	31,790,470	3.7%	38,760,489	3.9%
Total	\$778,752,781	100.0%	\$857,705,596	100.0%	\$1,000,366,483	100.0%

* Carried at Cost Value

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

**ACTUARIAL VALUATION
AS OF
JANUARY 1, 2000**

JUNE, 2000

SECTION 1. REPORT OF THE ACTUARY

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 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 Section 2 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 increase in benefits (the catch-up COLA) effective July 1, 2000. These changes combined with favorable actuarial experience for the year ending December 31, 1999 resulted in an increase in the Annual Required Contribution rate from 6.45% to 7.17%. The primary factor producing the favorable experience was a net investment return in excess of the 8.0% assumed rate of return for 1999. Net experience from other

sources was also favorable and contributed to the lower than expected contribution rate.

Pursuant to Section 169.471 R.S. Mo. 1997, the Board of Education has adopted an increase in benefits. In addition, as part of the package to increase benefits, the Board of Education agreed to fix the employer contribution at 8.03% for 1998, 1999 and 2000. Therefore, the actual contribution rate for 2000 remains unchanged at 8.03% of covered payroll. The dollar amount of the actual contribution increased from \$17,312,869 to \$17,400,968 for 2000.

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 2000, the annual normal cost is \$0 or 0.00% of the covered payroll of \$216,699,483.

The actuarial accrued liability contribution is determined as the amount necessary to amortize the remaining Unfunded Frozen Actuarial Accrued Liability (UFAAL) over a specified period of years. This portion of the contribution only changes to reflect changes in benefits or changes in actuarial assumptions and methods. The UFAAL was increased by \$20,034,960 to reflect the effect of the change in benefits.

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.

**SECTION 2. SUMMARY OF PRINCIPAL RESULTS OF THE
ACTUARIAL VALUATION AS OF JANUARY 1, 2000**

ANNUAL REQUIRED CONTRIBUTION

	<u>Board of Education</u>	<u>Harris-Stowe State College</u>	<u>Retirement System</u>	<u>Total</u>
<u>2000</u>				
Normal Cost Contribution	\$ 0	\$ 0	\$ 0	\$ 0
Actuarial Accrued Liability Contribution	15,517,497	9,035	17,453	15,543,984
Annual Required Contribution	\$ 15,517,497	\$ 9,035	\$ 17,453	\$ 15,543,984
Covered Payroll	216,330,219	125,957	243,307	216,699,483
ARC as % of Covered Payroll	7.17%	7.17%	7.17%	7.17%
<u>1999*</u>				
Normal Cost Contribution	\$ 0	\$ 0	\$ 0	\$ 0
Actuarial Accrued Liability Contribution	13,879,615	12,157	14,498	13,906,270
Annual Required Contribution	\$ 13,879,615	\$ 12,157	\$ 14,498	\$ 13,906,270
Covered Payroll	215,189,079	188,489	224,783	215,602,351
ARC as % of Covered Payroll	6.45%	6.45%	6.45%	6.45%

SYSTEM ASSETS

	<u>January 1, 1999*</u>	<u>January 1, 2000</u>
Expense and Contingency Reserve	\$ 68,114,826	\$ 77,995,894
Market Value, <i>Excluding Expense & Contingency Reserve</i>	789,406,135	922,081,344
Actuarial Value	694,250,672	770,090,498

SYSTEM LIABILITIES

Unfunded Actuarial Accrued Liability	\$ 152,640,034	\$ 167,578,602
Actuarial Present Value of Projected Accrued Benefits	710,948,636	771,464,357

FUNDING RATIO

Actuarial Value Funding Ratio	97.7%	99.8%
Market Value Funding Ratio	111.0%	119.5%

* Prior year shown for comparison purposes only.

SECTION 3. ACTUARIAL METHODOLOGY

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, 1994 was performed. On the basis of that analysis, several actuarial assumptions were changed effective with the January 1, 1996 valuation. The next scheduled experience analysis is for the five-year period ending December 31, 1999.

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.

SECTION 3. ACTUARIAL METHODOLOGY

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 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 specified in Section 169.490 of the statutes.

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 UFAAL 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 created. The "actuarial accrued liability contribution" is the sum of these amortization payments.

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, in this case January 1, 1981, 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. Such supplements are determined by computing the change in the actuarial accrued liability as of the valuation date coincident with or next following the change.

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.

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 rates based on the actual experience of the Retirement System. The rates used are shown in Exhibit A.

Mortality - The 1983 Group Annuity Mortality Table for males and females is used for active members and the same table with ages set up one year for retired members and beneficiaries. Rates used are shown in Exhibits A and B.

Disability Mortality - Disability mortality rates are based on the actual experience of the Retirement System. The rates used are shown in Exhibit B.

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 are:

Year of Membership	Withdrawal Rate	
	Males	Females
1	17.5%	12.5%
2	15.0%	10.0%
3	10.0%	7.5%

Retirement - Retirements are assumed to occur at rates based on the actual experience of the Retirement System. Illustrative age-related rates are shown in Exhibit A. For those eligible to retire under the Rule of 85, it is assumed that 10% will retire when first eligible for unreduced benefits unless the age-related rate is greater, but not prior to age 55.

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 - EXHIBIT A

ACTIVE MEMBER RATES OF DECREMENT AND SALARY INCREASE

Attained Age	<u>Withdrawal Rates</u>		<u>Disability Rates</u>		Retirement Rate	Rate of Salary Increase
	<u>Males</u>	<u>Females</u>	<u>Males</u>	<u>Females</u>		
20	15.00%	10.00%	0.00%	0.00%	0.00%	6.00%
25	12.50%	7.50%	0.00%	0.00%	0.00%	6.00%
30	9.00%	6.00%	0.08%	0.07%	0.00%	5.50%
35	7.00%	4.50%	0.08%	0.07%	0.00%	5.00%
40	4.50%	3.00%	0.16%	0.15%	0.00%	4.80%
45	3.00%	2.00%	0.30%	0.20%	0.00%	4.70%
50	2.00%	1.50%	0.40%	0.30%	0.00%	4.50%
55	1.50%	1.20%	0.90%	0.50%	5.00%	4.50%
60	1.00%	1.00%	1.10%	0.65%	7.50%	4.50%
65	0.00%	0.00%	0.00%	0.00%	35.00%	4.50%
70	0.00%	0.00%	0.00%	0.00%	100.00%	4.50%

ACTIVE LIFE MORTALITY RATES

<u>Male</u>	<u>Death Rate</u>		<u>Male</u>	<u>Death Rate</u>	
	<u>Age</u>	<u>Female</u>		<u>Age</u>	<u>Female</u>
.000377	20	.000189	.015592	65	.007064
.000464	25	.000253	.027530	70	.012385
.000607	30	.000342	.044597	75	.023992
.000860	35	.000476	.074070	80	.042945
.001238	40	.000665	.114836	85	.069918
.002183	45	.001010	.166307	90	.111750
.003909	50	.001647	.234086	95	.182419
.006131	55	.002541	.319185	100	.295187
.009158	60	.004241	.469531	105	.487816
			1.000000	110	1.000000

ACTUARIAL ASSUMPTIONS - EXHIBIT B

RETIRED LIFE MORTALITY RATES
(SERVICE PENSIONERS AND BENEFICIARIES)

<u>Male</u>	<u>Death Rate</u> <u>Age</u>	<u>Female</u>	<u>Male</u>	<u>Death Rate</u> <u>Age</u>	<u>Female</u>
.006618	55	.002803	.124170	85	.076570
.010064	60	.004702	.178214	90	.123076
.017579	65	.007817	.248436	95	.201757
.030354	70	.014128	.341086	100	.325225
.049388	75	.027184	.521945	105	.545886
.081484	80	.047655	1.000000	109	1.000000

DISABLED LIFE MORTALITY RATES
(PER 1,000 DISABLED PENSIONERS)

<u>Male</u>	<u>Death Rate</u> <u>Age</u>	<u>Female</u>	<u>Male</u>	<u>Death Rate</u> <u>Age</u>	<u>Female</u>
48.7	40	51.0	96.1	75	73.5
44.8	45	48.0	131.5	80	96.1
43.2	50	44.0	180.9	85	131.5
43.1	55	43.0	252.9	90	180.9
48.7	60	43.0	348.1	95	252.9
59.8	65	48.0	785.7	100	348.1
73.5	70	59.0	1000.0	101	1000.0

ACTUARIAL BALANCE SHEET AS OF JANUARY 1, 2000**ACTUARIAL ASSETS**

Actuarial value of present assets		\$ 770,090,498
Actuarial present value of future member contributions		94,018,053
Actuarial present value of future employer contributions for:		
Normal Costs		(36,512,675)
Actuarial Accrued Liability		167,578,602
Total present and future assets		<u>\$ 995,174,478</u>

ACTUARIAL LIABILITIES

Actuarial present value of benefits now payable		\$ 340,964,432
Actuarial present value of benefits payable in the future		
Active members -New Plan	641,100,912	
Active members - Old Plan	220,589	
Members on leave of absence without pay	1,190,426	
Terminated members	11,698,119	
Total payable in the future	<u>654,210,046</u>	
Total liabilities for benefits		<u>\$ 995,174,478</u>

PROJECTED BENEFIT OBLIGATION FUNDED STATUS

At January 1, 2000, the Projected Benefit Obligation was as follows:

Retired members and beneficiaries currently receiving benefits and terminated members not yet receiving benefits	\$ 353,852,977
Current active members:	
Accumulated member contributions, including interest	129,398,364
Employer-financed vested benefits	284,986,621
Employer-financed non-vested benefits	3,226,395
Total Projected Benefit Obligation	\$ 771,464,357

At January 1, 2000 the Projected Benefit Obligation was funded as follows:

Net assets available for benefits at actuarial value	\$ 770,090,498
Unfunded Projected Benefit Obligation	1,373,859
Actuarial value funding ratio	99.8%
Net assets available for benefits at market value	\$ 922,081,344
Unfunded Projected Benefit Obligation	(150,616,987)
Market value funding ratio	119.5%

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.

Valuation Date	Actuarial Present Value of Credited Projected Benefits			Actuarial Value of Assets	Percent of Present Value Covered by Valuation Assets		
	(1) Active Members' Accumulated Contributions	(2) Retirants, Inactive Members & Beneficiaries	(3) Active Members (Employer-Financed)		(1)	(2)	(3)
January 1 1990	75,499,264	132,381,291	203,485,341	373,300,585	100	100	81
1991	81,666,231	149,239,594	201,521,149	395,749,015	100	100	82
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

VALUATION OF THE SYSTEM'S 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." The method is discussed in Section 3 and the development of the actuarial value of assets is shown below. 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 13.61% on an actuarial value basis, 5.61% above the assumed rate of return of 8.0% for 1999. 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 18.71%.

DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial value of assets as of January 1, 1999	\$ 694,250,672
(2)	Member contributions	9,729,871
(3)	Employer contributions	17,307,595
(4)	Benefit payments and expenses	43,389,038
(5)	Investment increment at 8.0%	54,193,687
(6)	Expected actuarial value on January 1, 2000: (1) + (2) + (3) - (4) + (5)	732,092,787
(7)	Market value of assets on January 1, 2000	1,000,077,238
(8)	Expense and Contingency Reserve on January 1, 2000	77,995,894
(9)	Excess of market value over expected actuarial value: (7) - (8) - (6)	189,988,557
(10)	Market value adjustment: 20% x (9)	37,997,711
(11)	Actuarial Value of Assets as of January 1, 1999: (6) + (10)	\$ 770,090,498

MEMBERSHIP AND BENEFITS PAID AS OF JANUARY 1, 2000

	Males	Females	Total
ACTIVE MEMBERS			
Old Plan	1	5	<u>6</u>
New Plan	<u>1,704</u>	<u>4,363</u>	<u>6,067</u>
Total Active	1,705	4,368	6,073
INACTIVE MEMBERS			
Terminated or Leave of Absence Without Pay	<u>246</u>	<u>538</u>	<u>784</u>
Total Members Not Retired	1,951	4,906	6,857
RETIRED MEMBERS AND BENEFICIARIES			
Retired Members and Contingent Annuitants	823	2,003	2,826
Survivors	41	226	267
Disabled Members	<u>76</u>	<u>177</u>	<u>253</u>
Total Retired Members and Beneficiaries	<u>940</u>	<u>2,406</u>	<u>3,346</u>
TOTAL MEMBERSHIP	2,891	7,312	10,203

NUMBER OF RETIRED MEMBERS AND BENEFICIARIES

Option	Service <u>Benefit</u>	Disability <u>Benefit</u>	Survivor <u>Benefit</u>	TSA <u>Benefit</u>	COLA & <u>Supplements</u>
0	2,466	236	267	59	1,754
1	91	10	0	1	56
2	72	0	0	3	47
3	107	3	0	0	60
4	<u>90</u>	<u>4</u>	<u>0</u>	<u>0</u>	<u>53</u>
Total	2,826	253	267	63	1,970

AMOUNT OF ANNUAL BENEFIT

Option	Service <u>Benefit</u>	Disability <u>Benefit</u>	Survivor <u>Benefit</u>	TSA <u>Benefit</u>	COLA & <u>Supplements</u>
0	\$29,177,914	\$1,586,191	\$1,245,528	\$54,837	\$1,417,741
1	1,097,975	87,357	0	3,034	27,605
2	1,023,645	0	0	2,398	30,341
3	1,352,921	21,056	0	0	32,538
4	<u>1,442,448</u>	<u>30,675</u>	<u>0</u>	<u>0</u>	<u>25,692</u>
Total	\$34,094,903	\$1,725,279	\$1,245,528	\$60,269	\$1,533,917

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 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 and the Retirement System are required to participate.

A summary of the primary benefit provisions of the Retirement System as of December 31, 1999 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 Creditable 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 Creditable 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 Creditable 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

Creditable 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 Creditable 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 Creditable 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 Creditable Service will be entitled to a minimum monthly benefit equal to \$10 for each year of Creditable Service up to 15 years.

➤ *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 under which their monthly pension benefits are reduced so that payments can continue to their Option Beneficiaries after their deaths. The amount of the reduction is determined by the difference in age between a member and his/her Option Beneficiary.

Four 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.

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 Creditable 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 Creditable 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 to preserve its tax-deferred status.

➤ *Pension Benefit*

In lieu of a refund or rollover, members with five or more years of Creditable 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 Creditable 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 from the following sources:

➤ *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.

The surviving spouse of a deceased retired member is eligible to retain health care insurance after the death of the member.

The surviving spouse of a deceased active member who elects to receive monthly benefit payments under Option 1 may also be eligible for health insurance coverage.

SUPPLEMENTS AND COLAS

Supplements

Over the years, retired members have received ad hoc increases, called supplements. Supplements were granted in 1993, 1990, 1989, 1988, 1986, 1984, 1981, and 1975.

COLAs

Members who retired with at least 15 years of Creditable Service on or before August 28, 1997 receive annual cost-of-living adjustments based on the Consumer Price Index (CPI). COLA adjustments are equal to any increase of 1% or greater in the CPI, subject to an annual maximum of 3% and a cumulative maximum increase of 10%.

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.

