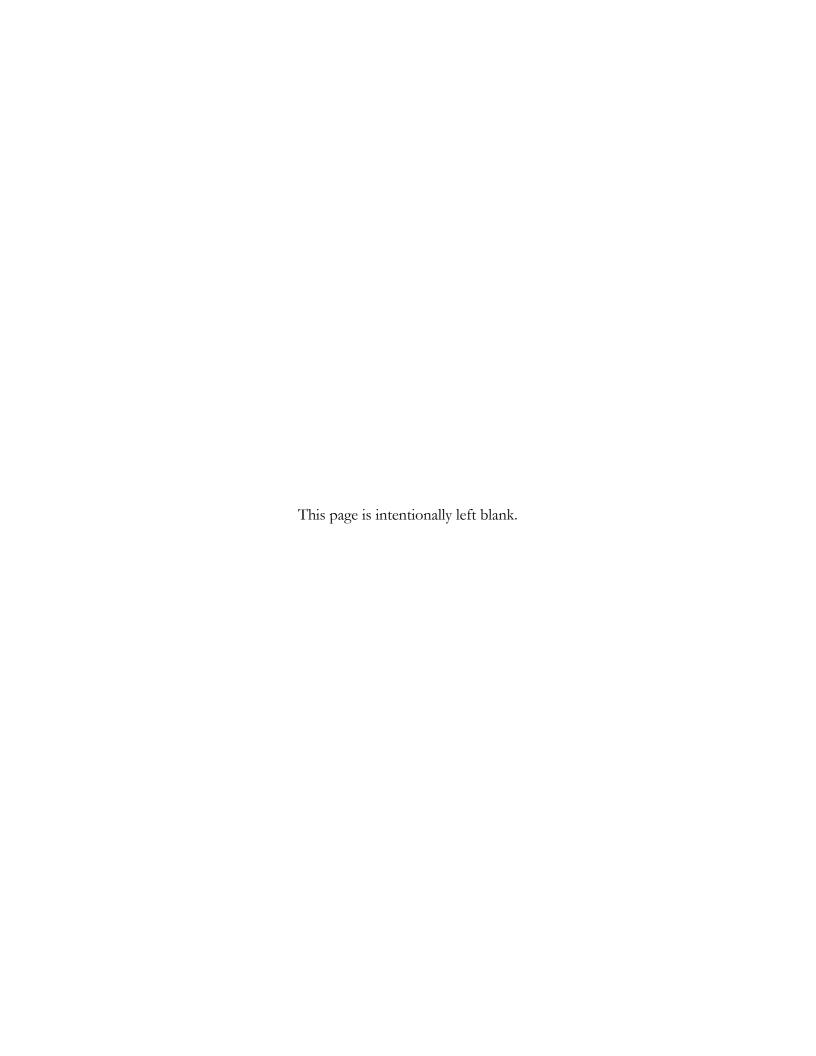
# 2004 Annual Report

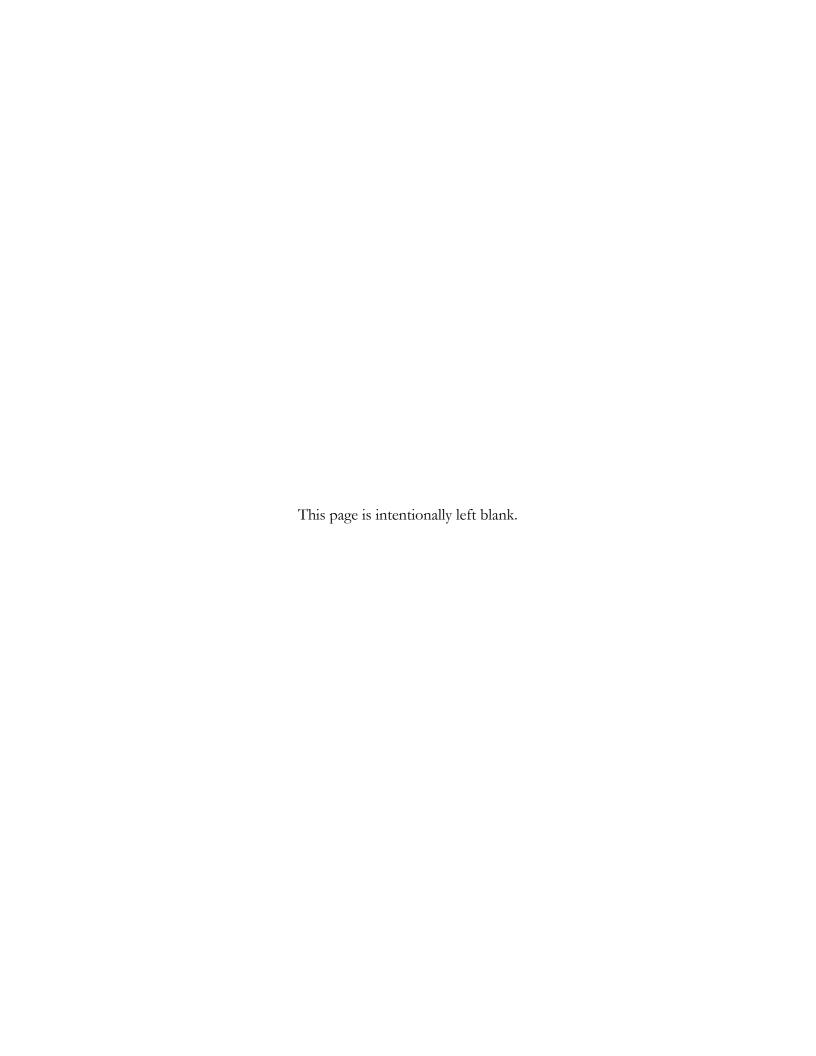
The Public School Retirement System of The City Of St. Louis







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### Board of Trustees

An eleven-member Board of Trustees is responsible for general administration of PSRSSTL as well as investment of PSRSSTL assets. The Board of Education appoints four trustees; PSRSSTL members elect seven. Terms of office are four years. Active PSRSSTL 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 April 1, 2005, the following individuals served on the Board of Trustees.

### Appointed by the Board of Education Elected by Active Members

Marlene E. Davis Richard Bates
Christina Bennett Amy S. Collins

Paulette McKinney Joseph H. Davenport Vincent Schoemehl, Jr. Doris A. Graham Helen L. Herndon

Elected by Retired Members

Norbert Eisele Lois Jean Turner

### Administrative Staff

PSRSSTL employs the administrative staff members listed below.

Interim Executive Director Marty Winters
Publications/LAN Manager James U. Hammond
Technology Manager Thomas Kinealy II

Insurance Benefits Specialist Carolyn M. Feuchtenbeiner

Member Services SupervisorAmy WilliamsMember Services SpecialistJoAnne CouchMember Services SpecialistMiasha TateMember Services Clerical AssistantMichelle Taylor

### Professional Advisors

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

Legal Counsel Jeffrey E. Hartnett

Bartley Goffstein, LLC

Investment Advisor Doris Ewing

New England Pension Consultants

Independent Auditor Thomas S. Helm

Huber, Ring, Helm & Company

Actuary James S. Rubie, Jr.

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 PHONE: (314) 241-7763
EXECUTIVE DIRECTOR

FAX: (314) 241-1806

April, 2005

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 (PSRSSTL) for the fiscal year ended December 31, 2004. This report provides financial, investment, actuarial and statistical information about PSRSSTL.

PSRSSTL 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 PSRSSTL.

### The Year in Review

During 2004, we processed 344 new retirements, 256 DROP Applications and 179 applications for Supplemental Pension Benefits under the Sick Leave Conversion Program sponsored by St. Louis Public Schools. In addition, we processed more than 1300 distributions for members who left PSRSSTL and we extended a hearty welcome to more than 450 new members.

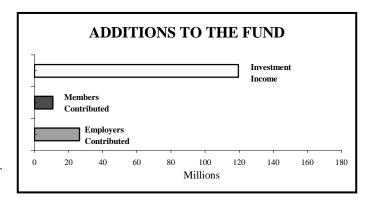
### Financial Summary

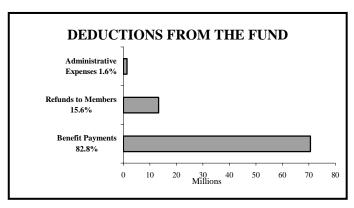
PSRSSTL management is responsible for maintaining appropriate internal accounting and procedural controls. These controls provide reasonable assurance that PSRSSTL assets are protected from loss due to unauthorized use or disposition, that financial transactions are executed in accordance with proper 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 PSRSSTL financial statements for the year ended December 31, 2004. This Annual Report contains those audited financial statements in their entirety. Summary financial information is provided as follows.

Net Assets as of 12-31-2003	\$ 989,100,973
Additions	
Employer Contributions	26,406,806
Member Contributions	10,825,664
Net Investment Income (Loss)	119,511,676
Deductions	
Benefits Paid to Members	70,601,943
Refunds Paid to Members	13,274,756
Administrative Expenses	1,391,243
Net Assets as of 12-31-2004	\$1,060,577,177

Additions and deductions from the fund are presented graphically below.



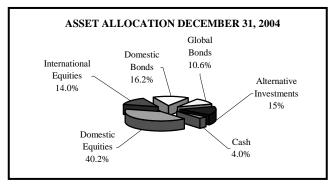


### Investment Performance

One of the most important decisions a retirement system's board of trustees can make is the allocation and diversification of Plan investments among different asset classes. A fund's asset allocation is critical to mitigating volatility and improving long-term returns.

As of December 31, 2004, PSRSSTL assets were broadly diversified as follows.

Domestic Equities	40.2%	
International Equities	14.0%	
Domestic Fixed Income	16.2%	
Global Fixed Income	10.6%	
Cash	4.0%	
E: 1.1.C :		05.007
Financial Composite		85.0%
Real Estate Investments	4.6%	85.0%
•	4.6% 10.4%	85.0%
Real Estate Investments		85.0% 15.0%



The return on PSRSSTL *investments* was 12.0% for fiscal year 2004 and 22.8% for fiscal year 2003. These returns were due to the general improvement in the financial markets, conscientious re-balancing of the portfolio to maintain the PSRSSTL Asset Allocation Policy, and active management by the Board of Trustees in retaining quality investment managers while focusing on long-term PSRSSTL investment objectives.

During 2004, the S&P 500 increased 9.2% in the fourth quarter, capping off at 10.9% for the year. The Russell 2000 Index was up 14.1% the fourth quarter and finished at 18.3% for the year.

Overall, financial markets posted strong results in the last quarter of 2004. Domestic equity markets rose sharply, capping off two consecutive years of gain. Domestic fixed income markets were slightly positive following their strong rebound in the third quarter.

Whereas the Lehman Aggregate Bond Index rose 4.3% over the year, the Lehman High Yield Bond rose 11.1%.

International stock and bond markets posted strong returns, largely fueled by the falling U.S. dollar. After an unsatisfactory performance during the first three quarters of 2004, international equity markets advanced higher during the fourth quarter. The EAFE Index (the benchmark for international equities) posted returns of 15.3% for the fourth quarter and 20.2% for the year while emerging markets finished 2004 with a 25.6% return. International bonds, measured by the Citigroup WGBI Index (excluding U.S. Bonds), rose 12.1%.

The well-diversified PSRSSTL *portfolio* allowed for a favorable investment year. During 2004, the PSRSSTL portfolio earned 12.3%, ranking in the top 35% of public pension systems. Focusing on the long-term PSRSSTL investment horizon, for the five-year period ending December 31, 2004, the PSRSSTL portfolio earned 5.1% ranking in the top 29% of public plans.

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

### Actuarial and Funding Summary

Each year, PSRSSTL has an independent actuarial valuation conducted. The valuation has two primary purposes: (1) to measure the relative financial condition of the System, and (2) to determine the level of the annual contribution that should be made to PSRSSTL during the upcoming year so that sufficient assets are available for benefit payments in the future.

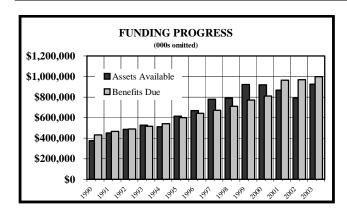
The annual valuation as of January 1, 2004 indicated PSRSSTL was 90.3% funded on an actuarial basis; and 92.6% funded on a market value basis. Additional detail about the funding status of PSRSSTL is provided in the Actuarial Section of this report.

In summary, as measured at the beginning of 2004, PSRSSTL benefit obligations and the assets available to satisfy those obligations are set forth as follows:

Proiected Benefit Obligations ......\$998.767.881

17900000 20000000000000000000000000000000
Net Assets Available for Benefits
Actuarial Value of Assets\$901,996,455
Market Value of Assets\$925,312,217
Funding Ratio (Assets ÷ Obligations)
Actuarial Value Funding Ratio90.3%
Market Value Funding Ratio92.6%

### **Letter of Transmittal**



As we discussed in the Financial and Investment Sections of this report, it is noteworthy that the market value of PSRSSTL assets increased from \$989,100,973 at the beginning of the year to \$1,060,577,177 at year-end.

It is the opinion of the independent actuary, assuming future contributions will be made as recommended, that PSRSSTL will continue to be funded on a sound actuarial basis.

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

### Acknowledgments & Reflections

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 PSRSSTL during the past year. I also want to recognize the outstanding quality of the services provided by the PSRSSTL professional advisors. In addition, I want to thank the administrative staff for their enthusiastic assistance, expertise and hard work. Because of their dedication, PSRSSTL continues to be a strong dependable pension organization.

Finally, as we complete in our sixty-first year, I want to thank the employers and members who regularly contribute to PSRSSTL to ensure its stability and solvency. Their contributions along with the return on our investments continue to allow the system to flourish. As we glance back with pride over the history of our organization, we look forward to the challenges and successes that the next sixty years will bring. May our future be as prosperous as our past so we may continue to help protect the well-being and financial security of those who dedicate their professional lives to improving public education in the City of St. Louis.

Sincerely,

Marty Winters Interim Executive Director

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

FINANCIAL STATEMENTS

**DECEMBER 31, 2004 AND 2003** 

### **Financial Statements**

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### INDEPENDENT AUDITOR'S REPORT

1600 S. Brentwood Blvd. Suite 600 St. Louis, MO 63144 (314) 962-0300 (314) 962-9474 fax



3660 W. Clay St. Charles, MO 63301

> (636) 946-3366 fax (636) 946-0753

### **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, 2004 and 2003 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 \$22,031,393 and \$31,110,813 (2% in 2004 and 3% in 2003 of plan net assets) as of December 31, 2004 and 2003, 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.

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MEMBERS OF THE SEC AND PRIVATE COMPANIES PRACTICE SECTIONS. AMERICAN INSTITUTE OF CERTIFIED PUBLIC ACCOUNTANTS

### INDEPENDENT AUDITOR'S REPORT CONTINUED

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

In our opinion, except for the affects of the procedures used to determine the valuation of investments in partnerships at December 31, 2004 and 2003 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, 2004 and 2003 and changes in plan net assets for the years then ended in conformity with accounting principles generally accepted in the United States of America.

Our audit was made for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental Management Discussion and Analysis on pages 1-4 is not a required part of the basic financial statements of the System, but is supplemental information required by the accounting principles generally accepted in the United States of America. For the supplemental Management Discussion and Analysis, we have applied certain limited procedures, which consisted principally of inquiries of management regarding the methods of measurement and presentation of the required supplemental information. However, we did not audit the information and express no opinions on it.

Huber, Ring, Helm + Co., P.C. St. Louis, Missouri January 28, 2005

### STATEMENTS OF PLAN NET ASSETS DECEMBER 31, 2004 AND 2003

<u>ASSETS</u>	2004	2002
CASH	<b>2004</b> \$ 7,560,170	<b>2003</b> \$ 24,466,747
		,
RECEIVABLES	4.724.405	F 440 000
Accrued interest and dividends	4,731,425	5,449,000
Contributions	39,910	124,737
	4,771,335	5,573,737
INVESTMENTS, at fair value		
Cash equivalents	42,809,647	24,954,579
Bonds		
U.S. Government and agency issues	68,052,963	97,451,454
Corporate	87,503,497	125,806,789
Foreign corporate and government bonds	110,270,524	105,190,045
Common and preferred stocks	360,491,905	404,008,767
Mutual funds	321,796,877	170,285,419
Real estate partnerships - insurance contracts	36,157,517	1,156,835
	1,027,082,930	928,853,888
INVESTMENTS, at estimated fair value		
Real estate loans, first mortgages	93,325	111,156
INVESTMENTS, at cost		
Limited partnerships	5,772,973	6,825,048
Real estate partnerships - other	9,451,298	9,451,298
Venture capital partnerships	6,807,122	14,834,467
	22,031,393	31,110,813
Total investments	1,049,207,648	960,075,857
Total assets	1,061,539,153	990,116,341
<u>LIABILITIES</u>		
ACCOUNTS PAYABLE AND ACCRUED EXPENSES ADVANCED CONTRIBUTIONS RECEIVED	851,326 110,650	1,015,368
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
(A schedule of funding progress is presented on page 16.)	\$1,060,577,177	\$ 989,100,973

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

### **Financial Statements**

### STATEMENTS OF PLAN NET ASSETS DECEMBER 31, 2004 AND 2003

ADDITIONS	2004	2003
Employer Contributions	\$26,406,806	\$19,742,779
Member Contributions	10,825,664	12,186,084
	37,232,470	31,928,863
Net appreciation (depreciation) in fair value of investments		
Cash equivalents	341,329	412,375
Bonds		
U.S. Government and agency issues	4,414,347	1,872,007
Corporate	14,445,756	13,166,136
Income from foreign corporate and government bonds	12,810,252	10,770,461
Common and preferred stock	46,217,305	94,490,425
Mutual funds	39,295,775	57,097,575
Real estate loans	11,889	16,006
Limited partnerships	(592,346)	765,141
Real estate partnerships	1,185,697	1,420,408
Venture capital partnerships	4,972,447	(132,041)
	123,102,451	179,878,493
Less investment expense	3,590,775	3,680,903
Net investment income (loss)	119,511,676	176,197,590
Total additions	156,744,146	208,126,453
DEDUCTIONS		
Benefits paid		
Retirement and death benefits	68,008,801	61,652,472
Health care subsidies and supplemental payments	2,593,142	2,490,924
	70,601,943	64,143,396
Operating expenses	1,391,243	1,401,994
Contribution refunds due to death or resignation	13,274,756	7,090,729
Total deductions	85,267,942	72,636,119
NET INCREASE	71,476,204	135,490,334
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS		
BEGINNING OF YEAR AS REPORTED	989,100,973	853,610,639
END OF YEAR	\$ 1,060,577,177	\$ 989,100,973

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 all employees of the Board of Education of the City of St. Louis, of the Charter Schools located within the St. Louis School District, of all employees of the Public School Retirement System of the City of St. Louis, 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, 2004	January 1, 2003
Active members Inactive members	6,074 509	6,928 494
Total members not retired	6,583	7,422
Retired members		
Service and survivors	3,418	3,312
Disability	282	266
	3,700	3,578
Total Membership	10,283	11,000

### 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.

### Contributions 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, 2004 and 2003, offset by certain contributions received prior to the due date of January 31, 2004.

### Advanced Contributions Received

Advanced contributions received consist of certain contributions received prior to the due date of January 31, 2005.

### 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.

### NOTES TO FINANCIAL STATEMENTS

**NOTE 3 – INVESTMENTS** 

At December 31, 2004 and 2003, investments consisted of the following:

	2004			
	Market Value			Cost
Cash equivalents	\$	42,809,647	\$	42,809,647
Bonds				
U.S. Government and agency issues		68,052,963		67,609,624
Corporate		87,503,497		87,034,111
Foreign corporate and government bonds		110,270,524		96,790,981
Common and preferred stocks		360,491,905		289,420,902
Mutual funds		321,796,877		192,559,607
Real estate partnerships - insurance contracts		36,157,517		35,586,744
		1,027,082,930		811,811,616
Real estate loans, first mortgages		93,325		93,325
Limited partnerships		5,772,973		5,772,973
Real estate partnerships - other		9,451,298		9,451,298
Venture capital partnerships		6,807,122		6,807,122
		22,031,393		22,031,393
	\$	1,049,207,648	\$	833,936,334

	2003			
	N	Iarket Value		Cost
Cash equivalents	\$	24,954,579	\$	24,954,579
Bonds				
U.S. Government and agency issues		97,451,454		98,481,209
Corporate		125,806,789		127,954,212
Foreign corporate and government bonds		105,190,045		98,232,011
Common and preferred stocks		404,008,767		340,759,379
Mutual funds		170,285,419		158,943,414
Real estate partnerships - insurance contracts		1,156,835		1,122,635
		928,853,888		850,447,439
Real estate loans, first mortgages		111,156		111,156
Limited partnerships		6,825,048		6,825,048
Real estate partnerships - other		9,451,298		9,451,298
Venture capital partnerships		14,834,467		14,834,467
		31,110,813		31,110,813
	\$	960,075,857	\$	881,669,408

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

The System leases office space under an operating lease expiring in August 2006. Rent expense for the years ended December 31, 2004 and 2003 was \$80,500 and \$77,506, respectively. Approximate future minimum lease payments for the remaining term of the lease are as follows:

Year	Minimum Lease Payments
2005	\$ 72,930
2006	48,620
	121,550

### 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, 2004 and 2003 the System had approximately \$7,915,000 and \$24,900,000 in cash on deposit at US Bank. These balances were insured by the Federal Deposit Insurance Corporation ("FDIC") for \$100,000. A portion of the remaining balances is collateralized by US Bank assets held jointly in the name of US Bank, NA and the System, held by the Federal Reserve Bank of Cleveland as Trustee. Regulations require that government entities, in case of bank failure, have collateral to cover losses that could exceed the FDIC limit of \$100,000. The market value of the collateralized securities at December 31, 2004 was \$24,992,964. The remaining deposit balances are neither insured nor collateralized. A significant portion of the System's investments is held by US Bank of St. Louis, N.A.

On December 31, 2004, the System received \$21,922,626 from the St. Louis Board of Education for the 2004 St. Louis Public Schools' annual regular pension contribution and sick leave conversion contribution. The funds were transferred from the cash equivalents to investments on January 6, 2005.

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, 2004 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 5% or more of net assets held in trust for pension benefits.

Mutual Funds		Fair Value
State Street Global Advisors - EAFE Index Fund	\$	115,454,505

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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 2004 and 2003 appears on pages 5 and 6. 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.

Huler, Kug, TElm & Co., P.C. St. Louis, Missouri January 28, 2005

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### **SCHEDULE OF FUNDING PROGRESS (in millions)**

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
2003	873.3	1,063.2	189.9
2004	902.0	1,074.3	172.3
Actuarial Valuation Date January 1,	Funded Ratio (a/b)	Annual Covered Payroll (c)	UAAL as a % of Covered Payroll ((b-a)/c)
Valuation Date	Ratio	Covered Payroll	as a % of Covered Payroll
Valuation Date January 1,	Ratio (a/b)	Covered Payroll (c)	as a % of Covered Payroll ((b-a)/c)
Valuation Date January 1, 1990	Ratio (a/b) 81.0	Covered Payroll (c) 194.6	as a % of Covered Payroll ((b-a)/c) 44.9
Valuation Date January 1,  1990 1991	Ratio (a/b) 81.0 83.7	Covered Payroll (c) 194.6 198.5	as a % of Covered Payroll ((b-a)/c) 44.9 38.7
Valuation Date January 1,  1990 1991 1992	Ratio (a/b) 81.0 83.7 85.2	Covered Payroll (c) 194.6 198.5 194.2	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3
Valuation Date January 1,  1990 1991 1992 1993	Ratio (a/b) 81.0 83.7 85.2 86.3	Covered Payroll (c)  194.6 198.5 194.2 194.6	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3
Valuation Date January 1,  1990 1991 1992 1993 1994	Ratio (a/b) 81.0 83.7 85.2 86.3 87.4	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9
Valuation Date January 1,  1990 1991 1992 1993 1994 1995	Ratio (a/b) 81.0 83.7 85.2 86.3 87.4 88.3	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3
Valuation Date January 1,  1990 1991 1992 1993 1994 1995 1996	Ratio (a/b)  81.0 83.7 85.2 86.3 87.4 88.3 84.6	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1 206.9	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3 49.6
Valuation Date January 1,  1990 1991 1992 1993 1994 1995 1996 1997	Ratio (a/b)  81.0 83.7 85.2 86.3 87.4 88.3 84.6 83.5	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1 206.9 210.2	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3 49.6 56.2
Valuation Date January 1,  1990 1991 1992 1993 1994 1995 1996 1997 1998	Ratio (a/b)  81.0 83.7 85.2 86.3 87.4 88.3 84.6 83.5 84.8	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1 206.9 210.2 210.8	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3 49.6 56.2 54.7
Valuation Date January 1,  1990 1991 1992 1993 1994 1995 1996 1997 1998 1999	Ratio (a/b)  81.0 83.7 85.2 86.3 87.4 88.3 84.6 83.5 84.8 82.0	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1 206.9 210.2 210.8 215.6	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3 49.6 56.2 54.7 70.8
Valuation Date January 1,  1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000	Ratio (a/b)  81.0 83.7 85.2 86.3 87.4 88.3 84.6 83.5 84.8 82.0 82.1	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1 206.9 210.2 210.8 215.6 216.7	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3 49.6 56.2 54.7 70.8 77.3
Valuation Date January 1,  1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001	Ratio (a/b)  81.0 83.7 85.2 86.3 87.4 88.3 84.6 83.5 84.8 82.0 82.1 81.0	Covered Payroll (c)  194.6 198.5 194.2 194.6 202.4 207.1 206.9 210.2 210.8 215.6 216.7 235.1	as a % of Covered Payroll ((b-a)/c) 44.9 38.7 38.3 37.3 34.9 33.3 49.6 56.2 54.7 70.8 77.3 82.5

See independent auditor's report on supplemental information.

### SCHEDULE OF EMPLOYER CONTRIBUTIONS

Annual	
Required	Percent
Contribution	Contributed
13,147,093	94.0%
14,020,492	94.9%
14,970,746	97.2%
14,098,562	98.4%
15,441,488	99.2%
15,087,519	99.6%
16,619,187	100.1%
16,876,759	100.2%
15,328,067	111.1%
13,906,270	124.5%
15,543,984	111.9%
18,168,580	100.2%
19,076,442	100.6%
19,517,288	101.2%
19,210,506	*
	Required Contribution  13,147,093  14,020,492  14,970,746  14,098,562  15,441,488  15,087,519  16,619,187  16,876,759  15,328,067  13,906,270  15,543,984  18,168,580  19,076,442  19,517,288

<sup>\*</sup> 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, 2004. Additional information related to the above actuarial valuation follows:

Actuarial cost method: Frozen entry age.

Rate of investment return: 8% for 2004 and 2003, net of expenses.

Turnover or withdrawal rates: Various by age and year of membership based on actual experience

Turnover or withdrawal rates: of the System.

Mortality or death rates: 1983 Group Annuity Mortality Tables for males and females is used

for active and retired members and beneficiaries.

Various based on actual experience of the System.

Disability rates: Various by age of active members based on actual experience of the

System.

Rates of retirement between ages

of 55 and 70:

Rate of salary increases: Based on actual experience of the System, at the 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 (UFAAL) was originally determined and frozen as of January 1, 1981. Effective January 1, 2002, the UFAAL was redetermined. The difference between the original UFAAL and the new UFAAL will be phased in over five (5) years and the UFAAL will be amortized over thirty (30) years.

See independent auditor's report on supplemental information.

### **Financial Statements**

### SCHEDULES OF OPERATING EXPENSES YEARS ENDED DECEMBER 31, 2004 AND 2003

	 2004	 2003
Actuarial services	\$ 261,280	\$ 215,275
Accounting and auditing fees	39,067	44,686
Computer programming and consultation	76,115	57,177
Convention, conferences, seminars		
Executive Director	2,168	3,367
Trustees	24,447	20,703
Dues and subscriptions	3,386	1,565
Employee benefits	19,660	16,094
Furniture and equipment		76,844
Insurance - group hospitalization	39,393	52,781
Insurance - casualty and bonding	57,273	60,660
Legal fees and expense	63,624	66,553
Medical fees	1,843	3,743
Office repairs and maintenance	10,418	8,190
Office supplies and expense	15,074	16,862
Postage	57,657	60,616
Pension contribution	30,005	32,308
Printing and stationery	23,129	13,043
Rent	80,500	77,506
Salaries - administrative and clerical	511,811	495,280
Payroll taxes	37,696	36,615
Telephone	8,773	11,170
Miscellaneous expense	 27,924	 30,956
Total	\$ 1,391,243	\$ 1,401,994

### 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:

	 2004	2003
Transportation and registration	\$ 10,443	\$ 8,725
Lodging, meals, and miscellaneous	14,004	11,978
Other		
Total	\$ 24,447	\$ 20,703

See independent auditor's report on supplemental information.

### THE CAPITAL MARKET ENVIRONMENT

### Domestic Stocks

The S&P Index was positive for calendar year 2004, posting a return of 10.9%. Both value and growth stocks contributed to the gains, as shown by the Russell 1000 Growth Index up 6.3% and the Russell 1000 Value Index up 16.5%.

### Domestic Bonds

Fixed income markets posted moderate gains following their strong rebound in the third quarter. The Lehman Aggregate Index was up 4.3% for the year, with corporate bonds gaining 5.2% and treasury bonds up 3.5%. LB high-yield bonds were up 4.6% for the fourth quarter and capped off at 11.1% for the year.

### International Markets

The international equity markets performed well with the Citigroup PMI EPAC Index up 20.4% while emerging markets equities gained more than 25.6%.

The Citigroup World Government Bond Index gained 10.4%, up over 8.5% in just the last quarter.

### **INVESTMENT PERFORMANCE**

### Investment Goals

PSRSSTL has a well-diversified investment portfolio with long-term goals of earning an 8.6% return and exceeding the rate of inflation by 4.0%. Over the short-term (three to five years), PSRSSTL 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, 2004, the PSRSSTL portfolio returned 12.3%, ranking in the upper 35% of the Investment Consultants' Cooperative (ICC) Universe of Public Funds. This universe includes 1,700 public funds with assets of \$1.5 trillion. For the five-year period ending December 31, 2004, PSRSSTL investment performance ranked in the upper 26% of the ICC Universe, earning a 5.3% return.

Investment performance by asset class for one-year and five-year periods ending December 31, 2004 is set forth below.

	One <u>Year</u>	Five <u>Years</u>
PSRS Total Portfolio	12.0%	5.1%
Allocation Index	11.3%	3.2%
Median Public Fund	11.0%	4.1%
PSRS Domestic Equities	13.7%	3.6%
S&P 500	10.9%	-2.3%
Median Public Fund	13.0%	3.2%
PSRS Domestic Bonds	7.9%	7.7%
Lehman Aggregate Index	4.3%	7.7%
Median Public Fund	4.8%	7.8%
PSRS International Equities	19.7%	N/A
PMI EPAC Index	20.4%	-0.8%
MSCI Emerging Index	25.6%	4.5%
Median International Fund	20.5%	2.6%
PSRS Global Bonds	14.6%	12.8%
Citigroup Global Index	10.4%	8.8%
Median Global Bonds	11.1%	9.8%

### INVESTMENT STATISTICS

The Investment Information Section of this report provides statistical information about the PSRSSTL investment managers, securities held in the portfolio, and brokerage fees paid in 2004.

### **INVESTMENTS AS OF DECEMBER 31, 2004 (000s omitted)**

		RELATIVE TO TOTAL PORTFOLIO							
	MANAGEMENT	MARKE'	T VALUE	TARGE'	T VALUE	VARIA	NCE	MARKE	ET VALUE
	STYLE	Value	%	Value	%	Value	%	Value	%
LARGE CAP GROWTH DOMESTIC EQUITIES		93,004	8.8%	105,697	10.0%	(12,693)	-1.2%		
Buford, Dixon, Harper & Sparrow	Large Cap Growth							17,710	19.0%
Monetary Management Group	Large Cap Growth							49,083	52.8%
Weatherfield Capital	Large Cap Growth							26,211	28.2%
LARGE CAP CORE DOMESTIC EQUITIES		61,148	5.8%	95,127	9.0%	(33,979)	-3.2%		
Batterymarch Financial	Large Cap Core							33,167	54.2%
Mellon Equity Index	Large Cap Core							27,981	45.8%
LARGE CAP VALUE DOMESTIC EQUITIES		53,108	5.0%	52,849	5.0%	259	0.0%		
Chicago Equity Partners	Large Cap Value							23,015	43.3%
The Edgar Lomax Company	Large Cap Value							10,995	20.7%
Todd Investment Advisors	Large Cap Value							19,098	36.0%
MID CAP GROWTH DOMESTIC EQUITIES		33,322	3.2%	31,709	3.0%	1,613	0.2%		
New Amsterdam Partners	Mid Cap Growth							33,322	100.0%
SMALL/MICRO CAP DOMESTIC EQUITIES		119,881	11.3%	105,697	10.0%	14,184	1.3%		
Westfield Capital Management	Small Cap Growth							38,296	31.9%
Systematic Financial Management	Small Cap Value							42,120	35.1%
Dimensional Fund Advisors *	Small Cap Core							39,465	32.9%
TACTICAL ASSET ALLOCATION		90,042	8.5%	84,558	8.0%	5,484	0.5%		
Boston Trust Company	Balanced Fund							90,042	100.0%
INTERNATIONAL EQUITIES		147,830	14.0%	137,406	13.0%	10,424	1.0%		
Battermarch GI Emerging	Emerging Markets							32,375	21.9%
State Street Index Fund *	International Equities							115,455	78.1%
DOMESTIC BONDS		110,839	10.5%	105,697	10.0%	5,142	0.5%		
Mellon Bond	Core Domestic Bonds							14,023	12.7%
MDL Capital	Core Domestic Bonds							23,262	21.0%
John Hancock	Core Domestic Bonds							73,554	66.4%
HIGH YIELD DOMESTIC BONDS		50,889	4.8%	52,849	5.0%	(1,960)	-0.2%		
Credit Suisse	High Yield Bonds							50,889	100.0%
GLOBAL BONDS		113,633	10.8%	105,697	10.0%	7,936	0.8%		
Mondrian	Global Bonds							113,633	100.0%
MARKET NEUTRAL STRATEGY		40,506	3.8%	42,279	4.0%	(1,773)	-0.2%		
Blue Rock	Market Neutral							20,297	50.1%
First Quadrant	Market Neutral							20,209	49.9%
HEDGED STRATEGIES		51,991	4.9%	52,849	5.0%	(858)	-0.1%		
K2	Hedge Funds							26,129	50.3%
Mariner	Hedge Funds							25,862	49.7%
REAL ESTATE **		49,297	4.7%	52,849	5.0%	(3,552)	-0.3%		
Seven Funds & Residential Mortgages	Real Estate							49,297	100.0%
ALTERNATIVE INVESTMENTS **		11,540	1.1%	31,709	3.0%	(20,169)	-1.9%		
Three Partnerships	Mezzanine Debt							3,507	30.4%
Seventeen Investments	Venture Capital							8,033	69.6%
CASH (Does Not Include Managers' Residual Cash)	STIF	29,941	2.8%	0	0.0%	29,941	2.8%		
Arch Fund	Cash							23,706	79.2%
MMM	Cash							6,235	20.8%
TOTAL		\$1,056,971	100.0%	\$1,056,971	100.0%				

During the latter half of 2003, the Board of Trustees conducted its five-year analysis of the PSRSSTL Asset Allocation Policy. The target values shown above represent the newly adopted Asset Allocation Policy, which were funded when the portfolio was restructured during the first six months of 2004. Notable changes in the PSRSSTL Asset Allocation Policy include the addition of Market Neutral and Hedge Fund strategies as well as a modest increase to Real Estate and the decision to fund the Emerging Markets allocation.

### DOMESTIC EQUITY INVESTMENTS

2004 Return	13.7%
Average Market Capitalization	\$44,309,700
P/E Ratio	18.80
Price/Book Ratio	3.82
Five Year Earnings Growth Rate	11.29

Ten Largest Domestic Equity Holdings					
Company	Dollar Value	Percent of Portfolio	_Company_	Dollar Value	Percent of Portfolio
Bank of America Corp.	\$4,239,627	1.2%	Citigroup Inc.	3,567,049	1.0%
General Electric Co.	4,098,599	1.2%	Pfizer Inc	2,999,400	0.8%
Exxon Mobil Corp.	4,081,735	1.2%	Altria Group Inc.	2,645,044	0.8%
Verizon Com.	3,877,939	1.1%	Dell Inc.	2,633,430	0.7%
Microsoft Corp.	3,875,568	1.1%	Wall Mart Stores Inc	2,570,179	0.7%

Ten Best Performing Domestic Equity Holdings				
Company	Return	Company	Return	
Index Dev. Partners	4225.0%	Cogent Comm.	227.3%	
Ampex Corp.	1900.0%	LMI Aerospace Inc.	223.0%	
Mediabay Inc.	384.4%	Cheniere Energy Inc.	222.4%	
Dynamic Matls Corp.	280.6%	Sunair Electronics	214.5%	
Southwall Tech.	230.8%	Butler International	211.6%	

Ten Worst Performing Domestic Equity Holdings				
Company	Return	Company	Return	
Amcastindl Corp	-97.5%	Fibermark Inc.	-80.0%	
Datatec Systems Inc.	-95.8%	Keystone Cons Inds.	-76.7%	
Falcon Prod. Inc.	-89.1%	Network Plus Inc.	-76.0%	
Tropical Sportswear	-86.7%	American Business	-70.0%	
Rexhall Inds Inc.	-81.3%	Seec Inc.	-68.2%	

### DOMESTIC BOND INVESTMENTS

PSRSSTL domestic bond investments had an average maturity of 5.99 years, a duration of 4.35 years, and an average quality rating of 7.12. During 2004, the PSRSSTL domestic bond portfolio earned 7.9%. Statistical descriptions of the bond investments are shown below.

Bond Portfolio Maturity in Years	Percent of Portfolio
0.0 - 1.0	3.8%
1.0 - 3.0	21.0%
3.0 - 5.0	20.4%
5.0 - 10.0	38.1%
10.0 - 20.0	2.3%
20 +	3.2%
Unclassified	11.2%

Bond Portfolio Duration in Years	Percent of Portfolio
0.0 - 1.0	3.0%
1.0 - 3.0	27.6%
3.0 - 4.0	13.4%
4.0 - 6.0	29.1%
6.0 - 8.0	10.6%
8.0 +	5.1%
Unclassified	11.2%

Bond Portfolio Quality Rating	Percent of Portfolio
Government (10)	26.4%
Aaa(10)	2.0%
Aa(9)	2.7%
A(8)	4.9%
Baa(7)	8.7%
Below Baa(6-1)	34.8%
Other	20.4%

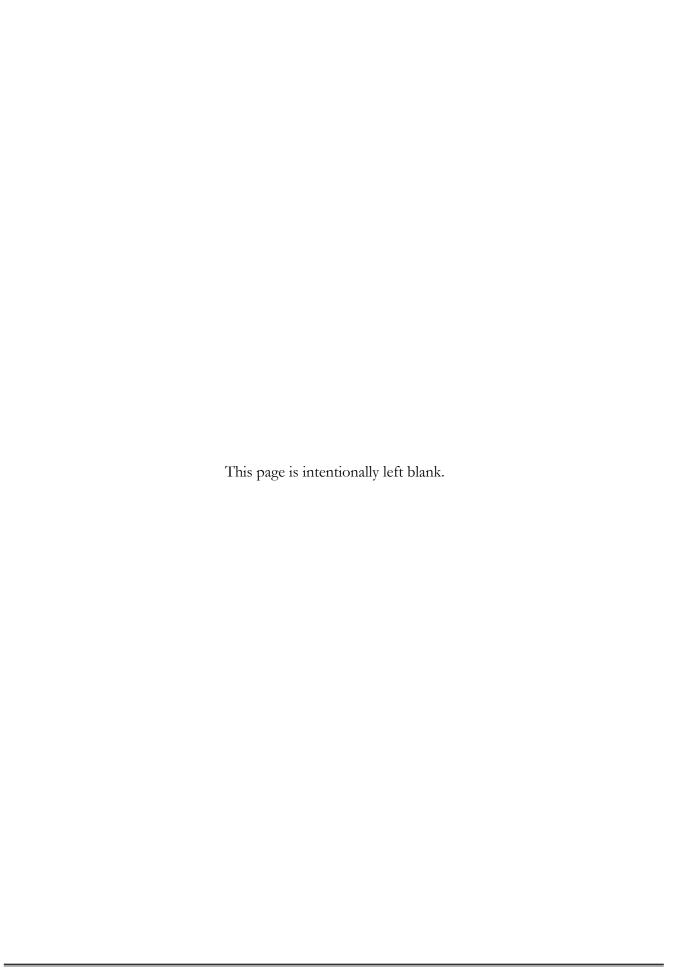
### **BROKERAGE FEES**

Brokerage Company	Commission Paid	Brokerage Company	Commission	Brokerage Company	Commission
A G Edwards	2,200.00	First Southwest Company	530.00	National Financial Services	45.00
Abel Noser Corp.	1,226.00	First Union	220.00	Nationsbank of Georgia	967.05
Access Securities Inc	6,198.00	Fox Pitt Kelton Inc.	32.00	Needham & Company	3,296.00
Adams Harkness & Hill	6,703.50	Friedman Billings & Ramsey	928.00	NFSC	52.00
Advest	68.00	Fulcrum Global Partners	495.00	Nutmeg Securities	40.00
Alex Brown & Sons	882.00	Goldman Sachs	7,904.00	Oppenheimer	448.00
American Technology Research	1,828.00	Griswold Company	1,103.25	Ormes Capital Markets	380.00
Americas Growth Capital	28.00	Guzman & Co.	1,840.00	Pacific Equities Growth	1,715.00
Autranet Incorporated	250.00	harborside Securities	54.00	Pershing	817.50
Baird & Company	2,992.50	Harris Nesbitt Corp.	208.00	Pritchard Capital Partner	1,044.00
BancBoston Securities Inc.	1,299.00	Henderson Brothers, Inc.	588.00	Prudential Securities	2,815.50
Bankers Trust Company	20.00	Hibernia Southcoast Capital	65.00	Pulse Trading LLC	203.00
Bear Stearns	8,630.75	Howard Weil	233.00	Raymond James	376.00
Berean Capital Inc.	830.00	Instinet	3,738.05	RBC Dominion Security Group	3,188.00
Berstine, Sanford & Co.	5,579.00	Investment Technology Group	13,024.51	Sandler O'Neill	1,531.00
Blair, William	54.00	ISI Group Inc.	1,053.00	SBC Capital Markets	4,884.94
Bluefin Research partners	56.00	IVY Securities, Inc.	315.00	SBK-Brooks Investment Corp	190.00
BNY/ITC Dealer Clearance	2,935.00	J P Morgan	3,548.00	Sherwood Securities	200.00
Boston Institutional Service	3,018.80	Jackson Partners	195.00	Simmons & Company	272.00
Bridge Trading - Ernst Co.	1,504.00	Jefferies & Company	7,625.50	Smith Barney Shearson	5.00
Broadcort	145,124.87	JMP Securities	228.00	Standard Poor Securities	4,690.60
Brockhouse & Cooper Inc.	368.00	JNK Securities	30.00	State Street Global Markets	20,217.00
B-Trade Services LLC	519.00	Johnson, Rice	728.00	Stephen M. Ferretti Investments	87.00
Burns Fry & Timm	20.00	JOM Securities	1,212.00	Stephens Inc.	328.00
C E Unterberg	196.00	Jones Associates	4,623.00	Stifel Nicolaus	500.00
Cabrera Capital Markets	85.00	Keefe Bruyette	216.50	The Precursor Group Inc.	810.00
Cantor Fitzgerald	11,218.65	Knight Securitees LP	297.00	Thomas Weisel Partners	36.00
Capital Institution Services	4,219.51	La Branche Financial	51.00	Thinkequity Partners LLC	68.00
Charles Schwab & Co.	1,628.00	Lazard, Freres & Co.	104.00	UBS Securities Inc.	12,453.00
Cheevers & Co., Inc.	1,045.00	Leerink, Swann & Co.	1,860.00	Unterburg Harris	836.00
CIBC Workd Markets Corp	1,010.00	Legg Mason Wood Walker Inc	804.00	US Bancorp Piper Jaffray	268.00
Citicorp Securities Market	5,764.64	Lehman Brtothers	9,655.00	US Bank Asset Management	1,240.00
Correspondent Services Co.	297.00	Liquidnet Inc.	11,215.64	Wachovia Capital Markets	2,841.00
Cowen & Co.	1,795.72	Loop Capital Markets	900.00	Wagner Stott	436.50
Cresit Suisse First Boston	8,658.80	Lynch Jones & Ryan	63.00	Wave Securities, LLC	950.00
Crittenden & Co.	120.00	M S Howells & Co.	164.00	Wedbush Securities Inc.	720.00
Deutsche Bank Capital	1,787.25	Magna Securities	2,160.00	Weeden & Co.	4,991.50
Dougherty Company	120.00	McDonald & Co.	1,000.00	Weiss Peck and Greer	5,214.00
Execution Services	57.50	Medford Financial Inc.	1,540.00	Wells Fargo Securities	216.00
Factset Data Systems	3,685.00	Merrill Lynch Pierce Fenner Smith	7,910.00	Westminster Resources	236.00
Ferris & Company	90.00	Merriman Curhan Ford & Co.	108.00	Wexford Clearing Services	135.35
Fielity Captial Markets	3,600.50	Midwest Research Securities	1,032.00	Wheat First Securities	19,213.50
First Analysis Securities	1,000.00	Miller Tabak Roberts Securities	592.86	White Cap Trading LLC	17.00
First Boston	2,532.50	Morgan Equities Inc.	1,632.00	Williams Capital Group	2,458.75
First Clearing	26,024.00	Morgan Stanley	8,110.00	Wilshire-Invesco	4,375.00
Total Comissions					\$473,012.99

### MARKET VALUE OF ASSETS

	As of December 31, 2002		As of December 3	31, 2003	As of December 3	31, 2004
Investment Category	Market Value	% of Total	Market Value	% of Total	Market Value	% of Total
Cash, Receivables, Cash Equivalents	\$56,232,688	6.6%	\$54,995,063	5.6%	\$55,141,152	5.6%
U.S. Bonds, Bills and Mortgages	98,092,066	11.5%	97,451,454	9.8%	68,052,963	6.9%
Corporate Bonds	135,775,862	15.9%	125,806,789	12.7%	87,503,497	8.8%
Foreign Corporate & Government Bonds	0	0.0%	105,190,045	33.1%	110,270,524	33.1%
Common Stocks	282,364,602	33.0%	404,008,767	33.1%	360,491,905	33.1%
Mutual Funds	247,014,623	28.9%	170,285,419	17.2%	321,796,877	32.5%
Real Estate - Insurance Contracts	1,087,389	0.1%	1,156,835	0.1%	36,157,517	3.7%
Mortgages	129,852	0.0%	111,156	0.0%	93,325	0.0%
Alternative Investments *	33,668,151	3.9%	31,110,813	3.1%	22,031,393	2.2%
Total	\$854,365,233	100.0%	\$990,116,341	100.0%	\$1,061,539,153	100.0%

<sup>\*</sup> Carried at Cost Value



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

ACTUARIAL VALUATION
AS OF JANUARY 1, 2004

AUGUST 2004

### 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 is based on the same actuarial assumptions and actuarial cost method as were sued in the prior actuarial valuation. The System had unfavorable actuarial experience for the year ending December 31, 2003, resulting in an increase in the Annual Required Contribution rate to 7.58% from 6.77%. The primary factor producing the unfavorable experience was the decrease in number of active members. Partially offsetting the favorable demographic experience was a net investment return on an actuarial basis of 8.69%, which was above the 8.00% assumed rate of return for 2003

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 2005. The dollar amount of the actual contribution increased to \$19,364,705 for 2004 from \$19,210,506 for 2003. As a percentage of covered compensation the contribution rate for 2004 increased to 7.58% from 6.77% for 2003.

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 2004, the annual normal cost is \$3,562,881 or 1.40% of the covered payroll of \$255,317,974.

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 decreased by \$15,174,627 as the 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, 2004

### ANNUAL REQUIRED CONTRIBUTION

Board of Education			Retirement System	Charter Schools	<u>Total</u>
\$ 3,428,196	\$	904	\$ 7,996	\$ 125,785	\$ 3,562,881
15,204,478		<b>4,</b> 010	35,464	557,872	15,801,824
\$ 18,632,674	\$	4,914	\$ 43,460	\$ 683,657	\$ 19,364,705
245,666,358		64,796	573,002	9,013,818	255,317,974
7.58%		7.58%	7.58%	7.58%	7.58%
\$ 1,973,677	\$	953	\$ 3,179	\$ 57,738	\$ 2,035,547
16,652,928		8,040	26,826	487,165	17,174,959
\$ 18,626,605	\$	8,993	\$ 30,005	\$ 544,903	\$ 19,210,506
275,305,609		132,920	443,494	8,053,787	283,935,810
6.77%		6.77%	6.77%	6.77%	6.77%
			January 1, 2004		January 1, 2003
ve .			\$ 63,788,756		\$ 62,712,231
e & Contingency	Reserve		925,312,217		790,058,583
			901,996,455		873,260,102
oility			\$ 172,263,173		\$ 189,949,103
ted Accrued Ben	efits		998,767,881		970,023,191
			90.3%		90.0%
ł	Education \$ 3,428,196	Education	Education         State College           \$ 3,428,196         \$ 904	Education         State College         System           \$ 3,428,196         \$ 904         \$ 7,996	Education         State College         System         Schools           \$ 3,428,196         \$ 904         \$ 7,996         \$ 125,785

<sup>\*</sup> Prior year shown for comparison purposes only.

### **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, 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

### ACTUARIAL METHODOLOGY (continued)

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 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.

### **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	Withdra	awal Rate
<u>Membership</u>	<u>Males</u>	<u>Females</u>
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	Withdra	awal Rate
<u>Membership</u>	<u>Males</u>	<u>Females</u>
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

Withdray	val Rates	Disabili	ty Rates	Retirement
Males	<u>Females</u>	Males	<u>Females</u>	Rate
15.00%	15.00%	0.00%	0.00%	0.00%
12.50%	12.50%	0.00%	0.00%	0.00%
9.00%	9.00%	0.40%	0.40%	0.00%
7.00%	7.00%	0.40%	0.40%	0.00%
6.00%	6.00%	0.80%	0.75%	0.00%
3.00%	3.00%	0.15%	0.10%	0.00%
2.00%	2.00%	0.20%	0.15%	0.00%
1.50%	1.50%	0.45%	0.25%	5.00%
1.00%	1.00%	0.55%	0.32%	7.50%
0.00%	0.00%	0.00%	0.00%	35.00%
0.00%	0.00%	0.00%	0.00%	100.00%
	Males 15.00% 12.50% 9.00% 7.00% 6.00% 3.00% 2.00% 1.50% 0.00%	15.00%       15.00%         12.50%       12.50%         9.00%       9.00%         7.00%       7.00%         6.00%       6.00%         3.00%       2.00%         1.50%       1.50%         1.00%       0.00%	Males         Females         Males           15.00%         15.00%         0.00%           12.50%         12.50%         0.00%           9.00%         9.00%         0.40%           7.00%         7.00%         0.40%           6.00%         6.00%         0.80%           3.00%         3.00%         0.15%           2.00%         2.00%         0.20%           1.50%         1.50%         0.45%           1.00%         0.00%         0.00%	Males         Females         Males         Females           15.00%         15.00%         0.00%         0.00%           12.50%         0.00%         0.00%         0.00%           9.00%         0.40%         0.40%         0.40%           7.00%         7.00%         0.40%         0.40%           6.00%         0.80%         0.75%           3.00%         0.15%         0.10%           2.00%         0.20%         0.15%           1.50%         1.50%         0.45%         0.25%           1.00%         0.00%         0.00%         0.00%

### NON-DISABLED LIFE MORTALITY RATES

	Death Rate			Death Rate	
<u>Male</u>	<u>Age</u>	<u>Female</u>	<u>Male</u>	<u>Age</u>	<u>Female</u>
.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)

	<u>Death Rate</u>			<u>Death Rate</u>	
<u>Male</u>	<u>Age</u>	<u>Female</u>	<u>Male</u>	<u>Age</u>	<u>Female</u>
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 Information**

### ACTUARIAL BALANCE SHEET

Actuarial value o	of present assets		\$ 901,996,45
Actuariai present	t value of future member contributions		96,436,72
•	t value of future employer contributions for	:	
Normal Co			25,388,28
	ccrued Liability	-	172,263,17
Total present and	d future assets		\$ 1,196,084,63
Actuarial Liabilities	s		
Actuarial present	t value of benefits now payable		\$ 517,882,96
Actuarial present	t value of benefits payable in the future		
Active men	nbers – New Plan	516,104,523	
Active men	nbers Old Plan	61,371	
Active men	nbers DROP	151,631,616	
Members o	on leave of absence without pay	1,358,174	
Terminated	l members	9,045,980	
T-4-11	1 . 1 .		
1 otai payab	ble in the future	<u>-</u>	678,201,66
Total liabilities fo	or benefits	-	678,201,66 \$ 1,196,084,63
Total liabilities for ROJECTED BEN		rus	
Total liabilities for ROJECTED BEND Projected Benefit Control Retired members 1985 Retired me	or benefits  EFIT OBLIGATION FUNDING STATE		\$ 1,196,084,63
Total liabilities for ROJECTED BEND Projected Benefit Control Retired members 1985 Retired me	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be end members not yet receiving benefits		
Total liabilities for ROJECTED BEND Projected Benefit Control Retired members and terminate Current active	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be end members not yet receiving benefits	nefits	\$ 1,196,084,63
Total liabilities for ROJECTED BEND Projected Benefit Consideration Retired members and terminated Current active Accum	EFIT OBLIGATION FUNDING STATE Obligation at January 1, 2004: bers and beneficiaries currently receiving beed members not yet receiving benefits e members:	nefits	\$ 1,196,084,63 \$ 528,287,12
Total liabilities for ROJECTED BEND Projected Benefit Construction Retired members and terminate Current active Accum Emplo	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be ed members not yet receiving benefits e members:  mulated member contributions, including in	nefits	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05
Total liabilities for ROJECTED BEND Projected Benefit Concept Retired members and terminate Current active Accuments Accuments active Employees Employees Research Retired Retired Accuments active Employees Retired	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be ed members not yet receiving benefits e members:  mulated member contributions, including in over-financed vested benefits	nefits	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22
Total liabilities for ROJECTED BEND Projected Benefit Concept Retired members and terminate Current active Accument Employees Total Projected Rojected Projected Rojected Roje	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be end members not yet receiving benefits e members:  mulated member contributions, including incover-financed vested benefits  over-financed non-vested benefits	nefits terest	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05
Total liabilities for ROJECTED BEND Projected Benefit Concentrated members and terminated Courrent active Accument Employment Projected Total Projected At January 1, 2004, to	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be ed members not yet receiving benefits e members:  mulated member contributions, including in over-financed vested benefits  over-financed non-vested benefits  ed Benefit Obligation	nefits terest	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05
Total liabilities for ROJECTED BEND Projected Benefit Concept and terminate Current active Accument Employ Employ Total Projected Total Projected At January 1, 2004, to Net assets available ROJECTED Research Projected Rojected R	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be ed members not yet receiving benefits e members:  mulated member contributions, including in over-financed vested benefits over-financed non-vested benefits ed Benefit Obligation  the Projected Benefit Obligation was fur	nefits terest	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05 \$ 998,767,88
Total liabilities for ROJECTED BEND Projected Benefit Concept and terminate Current active Accument Employ Employ Total Projected Act January 1, 2004, to Net assets avan Unfunded Professional Projected Projected Act January 1, 2004, to Net assets avan Unfunded Professional Projected Projected Act January 1, 2004, to Net assets avan Unfunded Professional	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be end members not yet receiving benefits e members:  mulated member contributions, including into over-financed vested benefits over-financed non-vested benefits ed Benefit Obligation  the Projected Benefit Obligation was furnialable for benefits at actuarial value	nefits terest	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05 \$ 998,767,88 \$ 901,996,45
Total liabilities for ROJECTED BEND Projected Benefit Concept Retired members and terminate Current active Accument Employment Projected Total Projected Total Projected Total Projected Actuarial value Accurring Value Accurring Value Accurring Value Accurring Value ROJECTED BEND PROJECTED PROJECT	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be ed members not yet receiving benefits e members:  mulated member contributions, including into oyer-financed vested benefits oyer-financed non-vested benefits ed Benefit Obligation  the Projected Benefit Obligation was fur aliable for benefits at actuarial value ojected Benefit Obligation	nefits terest	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05 \$ 998,767,88 \$ 901,996,45 96,771,42
Total liabilities for ROJECTED BEND Projected Benefit Concentration and terminate Current active Accume Employ Employ Total Projected Total Projected It January 1, 2004, to Net assets avan Unfunded Projected Actuarial value Net assets avan Unfunded Projected Actuarial value Net assets avan Unfunded Projected Actuarial value Net assets avan Net Actuarial Value Net assets avan Net	EFIT OBLIGATION FUNDING STATE  Obligation at January 1, 2004:  bers and beneficiaries currently receiving be end members not yet receiving benefits at members:  mulated member contributions, including in over-financed vested benefits  over-financed non-vested benefits  ed Benefit Obligation  the Projected Benefit Obligation was fur aliable for benefits at actuarial value ojected Benefit Obligation  the funding ratio	nefits terest	\$ 1,196,084,63 \$ 528,287,12 106,021,47 361,555,22 2,904,05 \$ 998,767,88 \$ 901,996,45 96,771,42 90.39

### 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	Valu	ent of P e Cover nation A (2)	red by
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
2003	115,570,837	492,633,382	361,818,972	873,260,102	100	100	73
2004	106,021,476	528,287,121	364,459,284	901,996,455	100	100	73

### **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". The method is discussed on pages 27 and 28 of this Report and the development of the actuarial value of assets is shown in the table 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 history of the Reserve is presented on page 35 of this Report.

As shown on page 36 of this Report, the fund had a rate of return of 8.69% on an actuarial value basis. This was 0.69% above the assumed rate of return of 8.0% for 2003. In accordance with Rule XI, nothing was added to the investment contingency portion of the Reserve, because the preliminary actuarial rate of return was within 1% of the assumed rate of return.

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 21.64%, also presented on page 36 of this Report.

### DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1)	Actuarial value of assets as of January 1, 2003	\$ 873,260,102
(2)	Member contributions	12,186,084
(3)	Employer contributions	19,742,779
(4)	Benefit payments and expenses	76,317,022
(5)	Investment increment at 8.0%	67,295,571
(6)	Expected actuarial value on January 1, 2004:	
	(1) + (2) + (3) - (4) + (5)	896,167,514
(7)	Market value of assets on January 1, 2004	989,100,973
(8)	Expense and Contingency Reserve on January 1, 2004	63,788,756
(9)	Adjustment to the Contingency Reserve on January 1, 2004	0
(9)	Excess of market value over expected actuarial value: $(7) - (8) - (6)$	29,144,703
(10)	Market value adjustment: 20% x (9)	5,828,941
(11)	Actuarial Value of Assets as of January 1, 2004: (6) + (10)	901,996,455

### EXPENSE AND CONTINGENCY RESERVE

Effective January 1, 1996 the Board of Trustees revised Rule XI, which governs the determination of the amount of the Expense and Contingency Reserve. The expense portion of the Reserve is the sum of:

- (1) The estimated annual operating expenses for the ensuing year:
- (2) An amount equal to the liability for non-insurance supplements;
- (3) An amount equal to the liability for insurance supplements for those members participating in the program on January 1; and

(4) The estimated amount of insurance supplements to be paid for members expected to retire and participate in the program during the ensuing year.

The contingency portion of the Reserve is intended to cover significant shortfall in the rate of return. When a shortfall of more than 1% occurs, the Reserve is used to reduce the amount of the shortfall. When the rate of return exceeds the assumed rate of return by more than 1%, an addition is made to the Reserve according to a formula in Rule XI.

Below is a history of the Expense and Contingency Reserve:

т 4	Б. В	Investment Contingency	Total Expense and
<u>January 1</u>	Expense Reserve	Reserve	Contingency Reserve
1996	\$ 33,702,346	\$ 0	\$ 33,702,346
1997	25,403,190	5,220,821	30,624,011
1998	30,891,555	24,100,041	54,991,596
1999	22,142,759	45,972,067	68,114,826
2000	27,992,032	50,003,862	77,995,894
2001	29,837,776	50,003,743	79,841,519
2002	23,527,529	50,003,743	73,531,272
2003	24,952,255	37,759,976	62,712,231
2004	26,028,780	37,759,976	63,788,756

### INVESTMENT PERFORMANCE

There are several different methods of approximating the rates of return on investments of the Trust Fund. Following is a brief comparison of the actuarial assumed rate of return as compared with rates of return on Market and Actuarial Value bases:

### (a) Market Value Basis

The rate of return on a Market Value Basis is the ratio of the appreciation (or depreciation) of assets less contributions plus disbursements to the Market Value at the beginning of the year plus the average of the receipts and disbursements made during the year. This may be approximated as follows:

(i)	A = Market Value of Assets as of January 1, 2003	\$ 853,610,639
(ii)	B = Market Value of Assets as of January 1, 2004	989,100,973
(iii)	C = Contributions during the period	31,928,863
(iv)	D = Disbursements during the period	76,317,022
(v)	Rate of Return: B - A + D - C	
	$A + \frac{1}{2}(C - D)$	21.64%
(vi)	Actuarial Assumed Rate of Return for 2003	8.00%
(vii)	Difference between actual and assumed rates of return: $(v) - (vi)$	13.64%

### (b) Actuarial Value Basis

The rate of return on an Actuarial Value Basis is approximated using the same method as the Market Value Basis:

(i)	A = Actuarial Value of Assets as of January 1, 2003	\$ 873,260,102
(ii)	I = Income Allocated as of January 1, 2004	73,124,512
(iii) C =	6,093,042	
(iv)	D = Disbursements during the period, time-weighted	38,158,511
(v)	Rate of Return:	
	<u> </u>	
	A + C - D	8.69%
(vi)	Actuarial Assumed Rate of Return for 2003	8.00%
(vii)	Difference between actual and assumed rates of return: (v) – (vi)	0.69%

### MEMBERSHIP AND BENEFIT'S PAID AS OF JANUARY 1, 2004

	Males	Females	Total
ACTIVE MEMBERS			
Old Plan	0	1	1
New Plan	1,499	<b>4,</b> 107	5,606
DROP	<u>99</u>	<u>368</u>	<u>467</u>
Total Active	1,598	4,476	6,074
INACTIVE MEMBERS			
Terminated or Leave of Absence Without Pay	<u>247</u>	<u>262</u>	<u>509</u>
Total Members Not Retired	1,845	4,738	6,583
RETIRED MEMBERS AND BENEFICIARIES			
Retired Members and Contingent Annuitants	895	2,259	3,154
Survivors	40	224	264
Disabled Members	<u>82</u>	<u>200</u>	<u>282</u>
Total Retired Members and Beneficiaries	<u>1,017</u>	<u>2,683</u>	<u>3,700</u>
TOTAL MEMBERSHIP	2,862	7,421	10,283

### NUMBER OF RETIRED MEMBERS AND BENEFICIARIES

<u>Option</u>	Service Benefit	Disability Benefit	Survivor Benefit	TSA Benefit
0	2,742	249	264	34
1	118	17	0	2
2	76	3	0	1
3	105	5	0	0
4	110	3	0	0
5	2	3	0	0
6 _	1	2	0	0
Total	3,154	282	264	37

### AMOUNT OF ANNUAL BENEFIT

<u>Option</u>	Service Benefit	Disability Benefit	Survivor Benefit	TSA Benefit
0	\$47,293,404	\$2,230,264	\$2,140,410	\$35,884
1	1,702,433	222,184	0	4,611
2	1,439,211	39,507	0	1,009
3	1,779,436	41,965	0	0
4	2,296,062	56,219	0	0
5	32,676	24,055	0	0
6 _	4,194	16,828	0	0
Total	\$54,547,416	\$2,631,022	\$2,140,410	\$41,504

### Background

The Public School Retirement System of the City of St. Louis (PSRSSTL) 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 PSRSSTL are also covered by Social Security, and are eligible for full Social Security benefits in addition to their benefits from PSRSSTL.

PSRSSTL benefits are funded by a combination of member contributions, employer contributions, and investment earnings on PSRSSTL 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 PSRSSTL as of December 31, 2003 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 PSRSSTL Rules and Regulations. In any circumstance where there appears to be a discrepancy between this summary and actual statutes or PSRSSTL 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.

### **Summary of Benefits**

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.

### PSRSSTL Funding

PSRSSTL 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 PSRSSTL 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

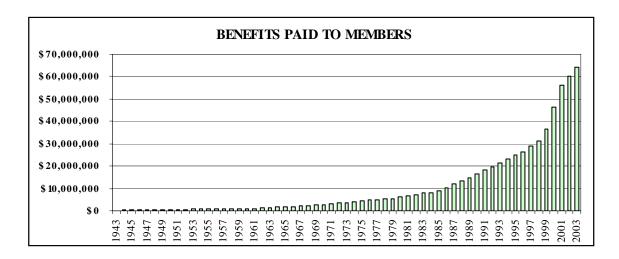
PSRSSTL makes a variety of medical, dental, and vision insurance plans available to retired members, their spouses, and eligible dependent children. PSRSSTL pays a portion of the premiums for retired members. Retired members pay the remainder of the cost for their own coverage, if any, and all the cost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

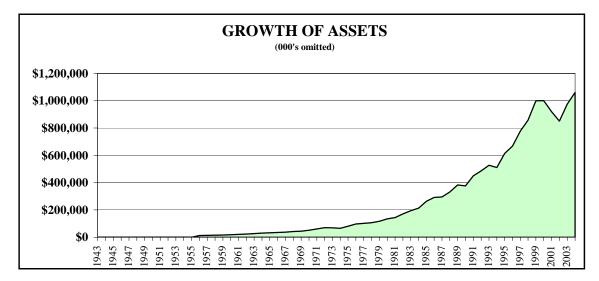
Surviving spouses of deceased retired members are eligible to retain health care insurance after the death of the member.

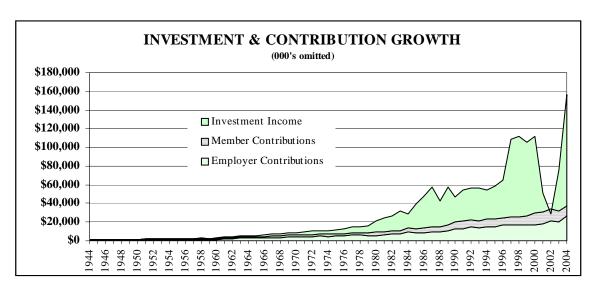
Surviving spouses of deceased active members who elect to receive monthly benefit payments under Option 1 may also be eligible for health insurance coverage for themselves and for otherwise eligible children of deceased active members.

### **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.









# Public Pension Coordinating Council Public Pension Standards 2004 Award

### Presented to

### Public School Retirement System of the City of St. Louis

In recognition of meeting professional standards for plan design and administration as set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA) National Conference on Public Employee Retirement Systems (NCPERS) National Council on Teacher Retirement (NCTR)

> Alan H. Winkle Program Administrator



Celebrating Excellence! PSRSSTL