## 2007 Annual Report



Public School Retirement System of the City of St. Louis

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...to enhance the well being and
financial security of its members.


## Board of Trustees

An eleven-member Board of Trustees is responsible for general administration and investment of PSRSSTL's assets. The Board of Education appoints four trustees; PSRSSTL members elect seven. 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. Terms of office are four years. At June 1, 2008, the following individuals served on the Board of Trustees.

Appointed by the Board of Education<br>Christina Bennett<br>Paulette McKinney<br>Veronica C. O’Brien<br>Richard Sullivan<br>Elected by Retired Members<br>Joseph Clark<br>Helen Lynch<br>Elected by Active Members<br>Byron Clemens<br>Kathryn Lamb<br>Katha L. McKinney<br>Thaha Menkara<br>Cynthia Warren

## Administrative Staff

PSRSSTL employs the administrative staff members listed below.

| Executive Director | Andrew Clark |
| :--- | :--- |
| Publications/LAN Manager | James U. Hammond |
| Technology Manager | Thomas Kinealy II |
| Accounting Specialist | Terry Mayes |
| Insurance Benefits Specialist | Beverly Wessels |
| Member Services Lead | Angela Johnson |
| Member Services Specialist | Stephanie L. Johnson |
| Customer Service Representative | Terri Beckwith |
| Member Services Clerical Assistant | Brenda Buggs |

## 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 <br> Bartley Goffstein, LLC |
| :--- | :--- |
| Investment Advisor | Doris Ewing <br> New England Pension Consultants <br> Independent Auditor <br> Actuary |
|  | Thomas S. Helm <br> Huber, Ring, Helm \& Company <br>  <br>  <br> James S. Rubie, Jr. |
|  | JP Morgan Chase \& Co. |

# PUBLIC SCHOOL RETIREMENT SYSTEM <br> OF THE CITY OF ST. LOUIS <br> 3641 Olive Street, Suite 300 <br> ST. LOUIS, MO 63108-3601 

OFFICE OF THE
PHONE: (314) 534-7444
EXECUTIVE DIRECTOR
FAX: (314) 533-0531
June, 2008

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, 2007. 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 present the information in a manner we believe that fairly represents the status of PSRSSTL.

## The Year in Review

During 2007, we processed 372 new retirements and 152 applications for Supplemental Pension Benefits under the Sick Leave Conversion Program sponsored by St. Louis Public Schools. In addition, we processed more than 829 distributions for members who left PSRSSTL and we extended a hearty welcome to 490 new members.

## Financial Summary

PSRSSTL management is responsible for maintaining appropriate internal accounting and procedural controls. These controls protect PSRSSTL assets from loss due to unauthorized use or disposition; provides a reasonable assurance that PSRSSTL executes its financial transactions in accordance with proper authorization; and ensures the accurate recording of transactions 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, 2007. This Annual Report contains those audited financial statements in their entirety. Summary financial information is as follows.

Net Assets as of 12-31-2006
Additions
Employer Contributions
Member Contributions
Net Investment Income
Deductions
Benefits Paid to Members
Refunds Paid to Members
Administrative Expenses
Net Assets as of 12-31-2007

Additions and deductions from the fund are presented graphically below.



## Investment Performance

Proper asset allocation is important for controlling volatility and increasing the probability of favorable long-term investment returns. Members entrust its Board of Trustees with making vital decisions to properly allocate and diversify the Plan investments among different asset classes.
As of December 31, 2007, PSRSSTL assets were broadly diversified as follows.

| Domestic Equities | $33.5 \%$ |  |
| :--- | ---: | ---: |
| International Equities | $14.9 \%$ |  |
| Domestic Fixed Income | $14.6 \%$ |  |
| Global Fixed Income | $9.3 \%$ |  |
| GTAA* | $9.3 \%$ |  |
| Cash | $2.4 \%$ |  |
| Financial Composite |  | $84.0 \%$ |
| Real Estate Investments |  | $4.9 \%$ |
| Market Neutral |  | $4.4 \%$ |
| Hedge Funds | $5.6 \%$ |  |
| Alternative Investments |  | $\underline{1.1 \%}$ |
| Total Portfolio |  | $100.0 \%$ |

## * GTAA - Global Tactical Asset Allocation

The overall return for PSRSSTL financial investments was $9.2 \%$ for fiscal year 2007 and $13.6 \%$ for fiscal year 2006. The lower investment return in fiscal year 2007 compared to fiscal year 2006 is reflective of the volatility in the financial markets. These overall positive increases in the investment returns for fiscal years 2007 and 2006 can be attributed to a sound 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. The return for fiscal year 2007 was well above the actuarially assumed $8.0 \%$ rate of return.

During 2007, the Core-S\&P 500 decreased $3.3 \%$ in the fourth quarter, capping off at $5.5 \%$ for the year. The Russell 2000 Growth Index was down 2.1 \% in the fourth quarter and finished at $7.0 \%$ for the year.

Financial markets posted negative results in the last quarter of 2007. PSRSSTL domestic equities decreased
$2.5 \%$, after three solid years of gain. PSRSSTL domestic bonds rose a respectable $1.3 \%$ in 2007 with a $6.4 \%$ return over the 5 -year period.
In contrast, for year ending 2007, the Lehman Aggregate Bond Index rose $7.0 \%$ with a $4.4 \%$ return over the 5 -year period.
International stock markets performed well for the year with the MSCI EAFE (the benchmark for international equities) and MSCI Emerging Market Indices posting returns of $11.2 \%$ and $39.4 \%$ respectively for 2007. Citigroup World Government Global Bonds Index performed satisfactorily during the fourth quarter which contributed to an overall gain of $10.9 \%$ for the year.
Focusing on the long-term PSRSSTL investment horizon, for the five-year period ending December 31, 2007, the PSRSSTL portfolio earned $12.9 \%$ ranking in the top $41 \%$ 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 sufficient assets are available for benefit payments in the future.

The annual valuation as of January 1, 2007 indicated PSRSSTL was $90.1 \%$ funded on an actuarial basis and $94.2 \%$ 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 January 1, 2007, PSRSSTL benefit obligations and the assets available to satisfy those obligations are set forth as follows:

Total Projected Benefit Obligations ............. $\$ 1,114,100,609$
Net Assets Available for Benefits
Actuarial Value of Assets $\qquad$
Market Value of Assets ..................... $\$ 1,049,484,561$
Funding Ratio (Assets $\div$ Obligations)
Actuarial Value Funding Ratio 90.1\%

Market Value Funding Ratio 94.2\%

## FUNDING PROGRESS



As indicated in the Financial and Investment Sections of this report, the market value of PSRSSTL assets changed from $\$ 1,061,478,889$ at the beginning of 2006 to $\$ 1,124,465,383$ at the beginning of 2007.

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 $\mathcal{E}$ Reflections

I am grateful to serve a Board of Trustees that devotes personal time, energy and enthusiasm to PSRSSTL on a regular basis. I am fortunate to work with professional advisors that continue to provide excellent service to the Retirement System. I want to thank the staff for their dedication to PSRSSTL. The staff's integrity and professionalism helps ensure that PSRSSTL operates efficiently and continues to be a strong dependable pension organization.

Moreover, I want to thank the members and employers because we exist to serve you. Your financial contributions along with the return on investments allow PSRSSTL to thrive. Your commitment to education preserves the future of St. Louis and helps guarantee the stability of the Retirement System for the next generation. As we complete our sixty-fourth year, we will continue looking forward to future opportunities to enhance the well-being and financial security for the membership.

## .

PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

FINANCIAL STATEMENTS
DECEMBER 31, 2007 AND 2006

## INDEX TO FINANCIAL STATEMENTS

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## INDEPENDENT AUDITOR'S REPORT



# Independent Auditor's Report 

The Board of Trustees<br>Public School Retirement System<br>of the City of St. Louis<br>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, 2007 and 2006 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 $\$ 13,781,497$ and $\$ 11,623,301$ ( $1 \%$ in 2007 and $1 \%$ in 2006 of plan net assets) as of December 31, 2007 and 2006, 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 effect on the financial statements of not applying adequate procedures to determine the fair value of these investments is not determinable.

## INDEPENDENT AUDITOR'S REPORT CONTINUED

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

In our opinion, except for the effects of the procedures used to determine the valuation of investments in partnerships at December 31, 2007 and 2006 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, 2007 and 2006 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 audits were conducted for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental management discussion and analysis on pages $1-4$, and the supplemental schedules of funding progress and employer contributions on pages 19-20 are not a required part of the basic financial statements of the System, but are supplemental information required by the Governmental Accounting Standards Board. For the supplemental management discussion and analysis, and schedules of funding progress and employer contributions, and schedule of operating expenses found on pages 21-22, 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 opinion on it.
Huber, Rung HARms Co., P.C.
St. Louis, Missouri
June 12, 2008

STATEMENTS OF PLAN NET ASSETS
DECEMBER 31, 2007 AND 2006

| ASSETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2007 |  | 2006 |  |
| CASH | \$ | 9,711,703 | \$ | 8,097,817 |
| BUILDING PROJECT |  | 2,242,885 |  | 2,215,143 |
| RECEIVABLES |  |  |  |  |
| Accrued interest and dividends |  | 5,010,412 |  | 4,309,827 |
| Contributions |  |  |  | 4,914 |
|  |  | 5,010,412 |  | 4,314,741 |
| INVESTMENTS, at fair value |  |  |  |  |
| Cash equivalents |  | 37,810,347 |  | 44,054,173 |
| Bonds |  |  |  |  |
| U.S. Government and agency issues |  | 33,923,065 |  | 44,981,780 |
| Corporate |  | 91,593,979 |  | 92,714,940 |
| Foreign investments |  | 161,158,260 |  | 169,014,610 |
| Common and preferred stocks |  | 336,024,232 |  | 313,606,346 |
| Mutual funds |  | 405,583,124 |  | 385,706,954 |
| Real estate partnerships - insurance contracts |  | 55,314,250 |  | 49,214,004 |
|  |  | 1,121,407,257 |  | 1,099,292,807 |
| INVESTMENTS, at estimated fair value |  |  |  |  |
| Real estate loans, first mortgages |  | 16,340 |  | 47,625 |
| INVESTMENTS, at cost |  |  |  |  |
| Limited partnerships |  | 10,153,468 |  | 5,635,495 |
| Real estate partnerships - other |  | 2,177,979 |  | 2,177,979 |
| Venture capital partnerships |  | 1,450,050 |  | 3,809,827 |
|  |  | 13,781,497 |  | 11,623,301 |
| Total investments |  | 1,135,205,094 |  | 1,110,963,733 |
| Total assets |  | 1,152,170,094 |  | 1,125,591,434 |

## LIABILITIES

## CURRENT LIABILITIES

Accounts payable and accrued expenses
Advance contributions received
Total current liabilities
NET ASSETS HELD IN TRUST FOR PENSION BENEFITS
(A schedule of funding progress is presented on page 19.)

| $1,209,183$ |
| ---: |
| $1,209,183$ |

$$
\$ 1,150,960,911
$$ \$ 1,124,465,383

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

STATEMENTS OF CHANGES IN PLAN NET ASSETS
DECEMBER 31, 2007 AND 2006


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 University 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, $2007$ | January 1, 2006 |
| :---: | :---: | :---: |
| Active members | 5,010 | 5,156 |
| Inactive members | 1,488 | 952 |
| Total members not retired | 6,498 | 6,108 |
| Retired members |  |  |
| Service and survivors | 3,820 | 3,771 |
| Disability | 264 | 255 |
|  | 4,084 | 4,026 |
| Total Membership | $\underline{ }$ | $\underline{ }$ |

## 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 <br> 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, 2007 and 2006.

## 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 $15.5 \%$ 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 administrative 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.

## Property and Building

The System records property and building at cost while expenditures for normal repairs and maintenance are charged to operations as incurred. The System utilizes the straight-line method for the depreciation of the building over the estimated life of 40 years.

## 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, 2007 and 2006, investments consisted of the following:

|  | 2007 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Market Value |  | Cost |  |
| Cash Equivalents |  | \$ 37,810,347 | \$ | 37,810,347 |
| Bonds |  |  |  |  |
| U.S. Government and agency issues |  | 33,923,065 |  | 33,068,505 |
| Corporate |  | 91,593,979 |  | 95,893,129 |
| Foreign investments |  | 161,158,260 |  | 151,170,690 |
| Common and preferred stocks |  | 336,024,232 |  | 295,460,046 |
| Mutual funds |  | 405,583,124 |  | 270,546,091 |
| Real estate partnerships - insurance contracts |  | 55,314,250 |  | 43,448,287 |
|  |  | 1,121,407,257 |  | 927,397,095 |
| Real estate loans, first mortgages |  | 16,340 |  | 16,340 |
| Limited partnerships |  | 10,153,468 |  | 10,153,468 |
| Real estate partnerships - other |  | 2,177,979 |  | 2,177,979 |
| Venture capital partnerships |  | 1,450,050 |  | 1,450,050 |
|  |  | 13,781,497 |  | 13,781,497 |
|  |  | \$ 1,135,205,094 |  | 941,194,932 |
|  | 2006 |  |  |  |
|  |  | Market Value |  | Cost |
| Cash Equivalents |  | \$ 44,054,173 | \$ | 44,054,173 |
| Bonds |  |  |  |  |
| U.S. Government and agency issues |  | 44,981,780 |  | 45,018,407 |
| Corporate |  | 92,714,940 |  | 92,793,263 |
| Foreign investments |  | 169,014,610 |  | 156,296,560 |
| Common and preferred stocks |  | 313,606,346 |  | 262,723,885 |
| Mutual funds |  | 385,706,954 |  | 296,014,822 |
| Real estate partnerships - insurance contracts |  | 49,214,004 |  | 40,525,048 |
|  |  | 1,099,292,807 |  | 937,426,158 |
| Real estate loans, first mortgages |  | 47,625 |  | 47,625 |
| Limited partnerships |  | 5,635,495 |  | 5,635,495 |
| Real estate partnerships - other |  | 2,177,979 |  | 2,177,979 |
| Venture capital partnerships |  | 3,809,827 |  | 3,809,827 |
|  |  | 11,623,301 |  | 11,623,301 |
|  |  | \$ 1,110,963,733 |  | 949,097,084 |

## Financial Statements

## NOTES TO FINANCIAL STATEMENTS NOTE 4 - OCCUPANCY EXPENSE

The System leased office space under an operating lease that expired in August 2006 at which time the lease was converted to a month-to-month basis. Rental expenses for the years ended December 31, 2007 and 2006 were $\$ 15,914$ and $\$ 83,456$, respectively. The System moved to its newly constructed office, owned by the System, in January 2007.

## NOTE 5 - CONCENTRATION OF RISK

During 2005, the Public School Retirement System of the City of St. Louis adopted Governmental Accounting Standards Board (GASB) Statement No. 40, Deposit and Investment Risk Disclosures, an Amendment of GASB Statement No. 3 (GASB 40). The adoption of GASB 40 modifies certain financial statement disclosure requirements. The new standard enhances the deposit and investment risk disclosures by updating the custodial credit risk disclosure requirements of GASB 3 and addressing other common risks, including concentrations of credit risk, interest rate risk, foreign currency risk, and investment rate risk. The implementation of GASB 40 had no effect on the financial statement amounts.

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, 2007 and 2006, the System had approximately $\$ 10,057,000$ and $\$ 9,097,000$, respectively, 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's assets held jointly in the name of US Bank, N.A. 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, 2007 was $\$ 12,351,839$. A significant portion of the System's investments is held by US Bank of St. Louis, N.A.

On December 28, 2007, the System received $\$ 21,359,981$ from the St. Louis Board of Education for the 2007 St. Louis Public Schools' annual regular pension contribution and sick leave conversion contribution. The funds were transferred from cash equivalents to investments on January 3, 2008.

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.

## Concentration of Credit Risk

At December 31, 2007, the System had the following concentrations, defined as investments (other than those issued or guaranteed by the U.S. Government) in any one organization that represent $5 \%$ or more of net assets held in trust for pension benefits.

| Mutual Funds | Fair Value |  | Percentage of Total <br> Investments |
| :---: | :---: | :---: | :---: |
| Fidelity Trust Company | \$ | 58,178,006 | 5.0\% |

## NOTES TO FINANCICAL STATEMENTS <br> NOTE 5 - CONCENTRATION OF RISK (CONTINUED)

## Credit Risk of Debt Securities

The System's rated debt investments as of December 31, 2006 were rated by Moody's Investor Services (Moody's) and the ratings are presented using the Moody's rating scale. The System's policy to limit credit risk is that fixed income securities shall be limited to those with a Moody's rating of investment grade ( $\mathrm{BBB} / \mathrm{Baa}$ ) or better.

Rate Debt Instrument Value
Corporate bonds and debentures
Foreign government and Corporate obligations
United States Government Securities
Agency Securities

## Fair Quality Ratings

| AAA |  | AA2 |  | AA3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 8,812,604 | \$ | 1,456,566 | \$ | 693,485 |
| \$ | 76,689,414 | \$ | 4,701,876 |  |  |
| \$ | 8,022,651 |  |  |  |  |
| \$ | 2,346,562 |  |  |  |  |
| \$ | 95,871,231 | \$ | 6,158,442 | \$ | 693,485 |

Rate Debt Instrument Value
Corporate bonds and debentures
Foreign government and Corporate obligations
United States Government Securities
Agency Securities

|  | AA1 |  |  | A1 |  |
| :---: | :--- | :--- | :--- | :--- | :--- |
|  |  |  | A2 |  |  |

$\xlongequal{\overline{\$} \quad 633,387} \xlongequal{\$ \quad 551,279} \xlongequal{\$ 8889,206}$

Rate Debt Instrument Value
Corporate bonds and debentures
Foreign government and Corporate obligations
United States Government Securities
Agency Securities

Rate Debt Instrument Value
Corporate bonds and debentures
Foreign government and Corporate obligations
United States Government Securities
Agency Securities

| BAA1 |  | BAA2 |  | BAA3 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| \$ | 1,096,225 | \$ | 3,279,230 | \$ | 4,194,499 |
| \$ | 2,401,565 |  |  |  |  |


| \$ | 3,497,790 | \$ | 3,279,230 | \$ | 4,194,499 |
| :---: | :---: | :---: | :---: | :---: | :---: |


$\xlongequal{\$ \quad 3,401,926} \xlongequal{\$ \quad 2,515,985} \xlongequal{\$ 3,844,013}$

NOTES TO FINANCIAL STATEMENTS
NOTE 5 - CONCENTRATION OF RISK (CONTINUED)
Credit Risk of Debt Securities (Continued)

Corporate bonds and debentures
Foreign government and corporate obligations
United States Government Securities Agency Securities

Corporate bonds and debentures
Foreign government and corporate obligations
United States Government Securities Agency Securities

Corporate bonds and debentures
Foreign government and corporate obligations
United States Government Securities Agency Securities

$\frac{\mathrm{B} 1}{\$ 8,598,658} \frac{\mathrm{~B} 2}{\$ 13,332,134}$| B3 |
| :--- |
| $\$ 15,964,636$ |

\$ $82,640,687$

|  | CA | CAA1 | CAA2 |
| :---: | :---: | :---: | :---: |
|  | 262,008 | 8,377,844 | \$ 1,859,361 |

$\xlongequal{\text { \$ } 262,008} \xlongequal{\$ 8,377,844} \xlongequal{\$ 1,859,361}$

|  | CAA3 |  | Unrated |
| :---: | :---: | :---: | :---: |
| \$ | 610,875 | \$ | 8,558,717 |

$$
21,520,278
$$

| $\$ \quad 610,875$ |
| :--- |

## NOTES TO FINANCICAL STATEMENTS

## NOTE 5 - CONCENTRATION OF RISK (CONTINUED)

## Foreign Currency Risk

The System does not have a formal policy to limit foreign currency risk. Risk of loss arises from changes in currency exchange rates. The System's exposure to foreign currency risk is presented in the following table:

| Currency |  | hort-Term |  | Debt | Equity | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Euros |  |  | \$ | 65,930,734 | \$ 27,326,620 | \$ | 93,257,354 |
| Deutsch |  |  |  | 13,556,984 |  |  | 13,556,984 |
| Swedish Korena |  |  |  |  | 1,696,141 |  | 1,696,141 |
| Australian Dollar | \$ | 12 |  |  | 718,528 |  | 718,540 |
| Norwegian Krone |  |  |  | 3,936,263 | 877,904 |  | 4,814,167 |
| Mexican Peso |  | 183,893 |  | 3,404,719 |  |  | 3,588,612 |
| Swiss Franc |  |  |  |  | 2,597,461 |  | 2,597,461 |
| Indian Rupee |  |  |  |  | 786,092 |  | 786,092 |
| Japanese Yen |  | 104,915 |  | 4,835,068 | 4,818,489 |  | 9,758,472 |
| New Zealand Dollar |  | 18 |  |  |  |  | 18 |
| Korean Won |  |  |  |  | 2,299,137 |  | 2,299,137 |
| Hong Kong Dollar |  |  |  |  | 527,020 |  | 527,020 |
| Canadian Dollar |  |  |  |  | 3,001,477 |  | 3,001,477 |
| Bristish Pound |  | 4,180 |  |  | 1,916,635 |  | 1,920,815 |
| Pound Sterling |  |  |  | 4,887,592 | 8,937,994 |  | 13,825,586 |
| Various |  |  |  | 8,761,793 | 48,591 |  | 8,810,384 |
|  |  | 293,018 | \$ | 105,313,153 | \$ 55,552,089 | \$ | 161,158,260 |

## Interest Rate Risk

The System does not have a formal policy to limit interest rate risk. Risk of loss arises from changes in interest rates which have significant affects on fair values of investments.

| Investment Type | Fair Value | < 1 year | 1-5 years |
| :---: | :---: | :---: | :---: |
| Corporate bonds and debentures | \$ 91,593,979 | \$ 651,835 | \$ 26,879,195 |
| Foreign government and corporate obligations | 105,313,153 | 12,368,151 | 56,688,129 |
| United States Government Securities | 8,022,651 |  | 2,918,591 |
| Agency Securities | 25,900,414 |  |  |
|  | \$ 230,830,197 | \$ 13,019,986 | \$86,485,915 |
| Investment Type |  | 6-10 years | 10+ years |
| Corporate bonds and debentures |  | \$ 43,192,075 | \$ 20,870,874 |
| Foreign government and corporate obligations |  | 21,650,464 | 14,606,409 |
| United States Government |  |  |  |
| Securities |  | 5,052,561 | 51,499 |
| Agency Securities |  | 1,810,653 | 24,089,761 |
|  |  | \$ 71,705,753 | \$59,618,543 |

## Financial Statements

## NOTES TO FINANCIAL STATEMENTS

## NOTE 6 - PROPERTY AND BUILDING

On September 19, 2005, the Public School Retirement System of the City of St. Louis, (the owner), entered into a construction escrow agreement with Owen Financial Services, Inc., (the contractor), for the construction of a new office. The building was completed and on January 2, 2007 the System moved into the new office building. The building was treated as construction in progress until the System took occupancy at which time the building was placed in service and depreciated.

Property and building as of December 31, 2007 and 2006 consist of:

| Land | 2007 |  | 2006 |
| :---: | :---: | :---: | :---: |
|  | \$ | 229,451 |  |
| Building |  | 2,065,061 |  |
|  |  | 2,294,512 |  |
| Less accumulated depreciation |  | 51,627 |  |
|  |  | 2,242,885 |  |
| Construction in process |  |  | \$ 2,215,143 |
|  | \$ | 2,242,885 | \$ 2,215,143 |

SCHEDULE OF FUNDING PROGRESS (in millions)

| Actuarial Valuation Date January 1, | Actuarial Value of Assets <br> (a) | Actuarial Accrued Liability (AAL) Frozen Entry Age <br> (b) | $\begin{gathered} \text { Unfunded } \\ \text { AAL (UAAL) } \\ \text { (b-a) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| 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 |
| 2005 | 935.3 | 1,084.4 | 149.1 |
| 2006 | 983.8 | 1,122.6 | 138.8 |
| 2007 | 1,003.4 | 1,150.2 | 146.8 |
| Actuarial |  |  | UAAL |
| Valuation | Funded | Annual | as a \% of |
| Date | Ratio | Covered Payroll | Covered Payroll |
| January 1, | (a/b) | (c) | ( $\mathrm{b}-\mathrm{a}$ )/c) |
| 1993 | 86.3 | 194.6 | 37.3 |
| 1994 | 87.4 | 202.4 | 34.9 |
| 1995 | 88.3 | 207.1 | 33.3 |
| 1996 | 84.6 | 206.9 | 49.6 |
| 1997 | 83.5 | 210.2 | 56.2 |
| 1998 | 84.8 | 210.8 | 54.7 |
| 1999 | 82.0 | 215.6 | 70.8 |
| 2000 | 82.1 | 216.7 | 77.3 |
| 2001 | 81.0 | 235.1 | 82.5 |
| 2002 | 80.5 | 243.9 | 85.6 |
| 2003 | 82.1 | 283.9 | 66.9 |
| 2004 | 84.0 | 255.3 | 67.5 |
| 2005 | 86.3 | 240.2 | 62.1 |
| 2006 | 87.6 | 227.0 | 61.1 |
| 2007 | 87.2 | 222.4 | 66.0 |

See independent auditor's report on supplemental information.

## Financial Statements

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

| Employer Contributions |  |  |
| :---: | :---: | :---: |
| Year Ended <br> December 31, | Annual <br> Required <br> Contribution | Percent <br> Contributed |
| 1994 | $15,441,488$ | $99.2 \%$ |
| 1995 | $15,087,519$ | $99.6 \%$ |
| 1996 | $16,619,187$ | $100.1 \%$ |
| 1997 | $16,876,759$ | $100.2 \%$ |
| 1998 | $15,328,067$ | $111.1 \%$ |
| 1999 | $13,906,270$ | $124.5 \%$ |
| 2000 | $15,543,984$ | $111.9 \%$ |
| 2001 | $18,168,580$ | $100.2 \%$ |
| 2002 | $19,076,442$ | $100.6 \%$ |
| 2003 | $19,517,288$ | $101.2 \%$ |
| 2004 | $19,210,506$ | $132.0 \%$ |
| 2005 | $19,364,705$ | $121.4 \%$ |
| 2006 | $14,414,133$ | $114.9 \%$ |
| 2007 | $17,311,658$ | $*$ |

The information presented in the required supplemental schedules was determined as part of the actuarial valuation prepared by JP Morgan Chase \& Co. at January 1, 2007. Additional information related to the above actuarial valuation follows:

Actuarial cost method:
Rate of investment return:
Turnover or withdrawal rates:

Mortality or death rates:

Disability rates:

Rates of retirement between the ages of 55 and 70:
Rate of salary increases:

Asset valuation method:

Frozen entry age.
$8 \%$ for 2007 and 2006, net of expenses.
Various by age and year of membership based on actual experience of the System.

RP-2000 Combined Healthy Lives Mortality Tables for males and females is used for active and retired members and beneficiaries.

Various by age of active members based on actual experience of the System.

Various based on actual experience of the System.
Based on actual experience of the System, at the rate of $4.5 \%$ per year.
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, 2006, the UFAAL was re-determined. The UFAAL will be amortized over thirty (30) years.

See independent auditor's report on supplemental information.

## SCHEDULES OF OPERATING EXPENSES

YEARS ENDED DECEMBER 31, 2007 AND 2006

|  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: |
| Actuarial services | \$ | 119,650 | \$ | 119,715 |
| Accounting and auditing fees |  | 41,867 |  | 32,767 |
| Computer programming and consultation |  | 220,337 |  | 333,016 |
| Convention, conferences, seminars |  |  |  |  |
| Executive Director |  | 3,148 |  | 3,039 |
| Trustees |  | 39,262 |  | 29,859 |
| Depreciation expense |  | 51,627 |  |  |
| Dues and subscriptions |  | 93 |  | 10,067 |
| Employee benefits |  | 7,655 |  | 20,065 |
| Furniture and equipment |  | 18,385 |  | 20,601 |
| Insurance - group hospitalization |  | 43,392 |  | 44,665 |
| Insurance - casualty and bonding |  | 99,212 |  | 87,572 |
| Legal fees and expense |  | 59,504 |  | 55,043 |
| Medical fees |  | 2,311 |  | 1,215 |
| Office repairs and maintenance |  | 46,802 |  | 8,008 |
| Office supplies and expense |  | 17,360 |  | 13,713 |
| Postage |  | 84,689 |  | 59,171 |
| Pension contribution |  | 34,330 |  | 36,743 |
| Printing and publishing |  | 36,667 |  | 29,281 |
| Rent |  | 15,914 |  | 83,456 |
| Salaries - administrative and clerical |  | 486,638 |  | 496,082 |
| Special Project consultation |  | 18,972 |  | 33,039 |
| Taxes, Payroll |  | 37,228 |  | 38,018 |
| Taxes, Real Estate (Refund) |  | (236) |  | 3,019 |
| Telephone |  | 13,518 |  | 12,131 |
| Utilities |  | 25,809 |  |  |
| Miscellaneous expense |  | 34,740 |  | 13,679 |
| Total | \$ | 1,558,874 | \$ | 1,583,964 |

## 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:

|  | 2007 |  | 2006 |  |
| :---: | :---: | :---: | :---: | :---: |
| Transportation and registration | \$ | 9,860 | \$ | 6,936 |
| Lodging, meals, and miscellaneous |  | 29,402 |  | 22,923 |
| Other |  |  |  |  |
| Total | \$ | 39,262 | \$ | 29,859 |

See independent auditor's report on supplemental information.

## THE CAPITAL MARKET ENVIRONMENT

## Domestic Stocks

The S\&P Mid Cap 400 posted gains for calendar year 2007 , with a return of $8.0 \%$. Growth stocks contributed to gains in year 2007 as shown by the Russell 1000 Growth Index, up $11.8 \%$ whereas value stocks, indicated by the Russell 1000 Value Index were down $-0.2 \%$.

## Domestic Bonds

Fixed income markets posted gains in 2007. The Lehman Aggregate Index was up $7.0 \%$ with a fiveyear return of $4.4 \%$. MFC Global returned $6.4 \%$ and Mellon Bond was up $7.0 \%$.
Citigroup High Yield bonds were up $1.8 \%$ for the year with a 5 -year average return of $11.0 \%$.

## International Markets

The international equity markets performed well with the MSCI EAFE Index up $11.2 \%$ while emerging markets equities gained more than $39.4 \%$.

The Citigroup World Government Bond Index finished up 2007 on a positive note with a return of $10.9 \%$.

## INVESTMENT PERFORMANCE

## Investment Goals

PSRSSTL has a well-diversified investment portfolio with long-term goals of earning an $8.6 \%$ return. 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, 2007, the PSRSSTL financial investments gained $9.2 \%$, with a ranking of 30 within the Investment Consultants' Cooperative (ICC) Universe of Public Funds. For the five-year period ending December 31, 2007, PSRSSTL investment performance ranked in the upper $45 \%$ of the ICC Universe with a $12.7 \%$ return.

Investment performance by asset class for one-year and five-year periods ending December 31, 2007 is set forth below.

|  | One <br> Year | Five <br> Years |
| :---: | :---: | ---: |
| PSRS Total Portfolio | $9.8 \%$ | $12.9 \%$ |
| PSRS Domestic Equities | $6.3 \%$ | $14.5 \%$ |
| S\&P Mid Cap 400 | $8.0 \%$ | $10.3 \%$ |
| Median Public Fund | $5.4 \%$ | $15.1 \%$ |
| PSRS Domestic Bonds | $5.3 \%$ | $6.4 \%$ |
| Citigroup High Yield | $1.8 \%$ | $11.0 \%$ |
| Lehman Aggregate Index | $7.0 \%$ | $4.4 \%$ |
| MFC Global | $6.4 \%$ | $5.5 \%$ |
| Median Public Fund | $6.8 \%$ | $4.8 \%$ |
|  |  |  |
| PSRS International Equities | $21.3 \%$ | $23.6 \%$ |
| MSCI EAFE Index | $11.2 \%$ | $21.6 \%$ |
| MSCI Emerging Index | $39.4 \%$ | $37.0 \%$ |
| Global Equity Median | $10.5 \%$ | $19.2 \%$ |
| PSRS Global Bonds | $11.3 \%$ | $8.7 \%$ |
| Citigroup World Government | $10.9 \%$ | $6.8 \%$ |
| Global Bond Median | $9.6 \%$ | $7.2 \%$ |

## 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 2007.

## INVESTMENTS AS OF DECEMBER 31, 2007 (000s omitted)

## ASSET ALLOCATION \& INVESTMENT MANAGERS

RELATIVE TO TOTAL PORTFOLIO

|  | MANAGEMENT | MARKET VALUE |  | TARGET VALUE |  | VARIANCE |  | MARKET VALUE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STYLE | Value | \% | Value | \% | Value | \% | Value | \% |
| LARGE CAP GROWTH DOMESTIC EQUITIES |  | 122,355 | 10.8\% | 113,594 | 10.0\% | 8,761 | 0.8\% |  |  |
| Buford, Dixon, Harper \& Sparrow | Large Cap Growth |  |  |  |  |  |  | 22,432 | 18.3\% |
| Intech | Large Cap Growth |  |  |  |  |  |  | 35,469 | 29.0\% |
| Monetary Management Group | Large Cap Growth |  |  |  |  |  |  | 64,454 | 52.7\% |
| LARGE CAP CORE DOMESTIC EQUITIES |  | 39,750 | 3.5\% | 68,157 | 6.0\% | $(28,407)$ | -2.5\% |  |  |
| Batterymarch Financial | Large Cap Core |  |  |  |  |  |  | 26,734 | 67.3\% |
| Mellon Equity Index | Large Cap Core |  |  |  |  |  |  | 13,016 | 32.7\% |
| LARGE CAP VALUE DOMESTIC EQUITIES |  | 93,772 | 8.3\% | 113,594 | 10.0\% | $(19,822)$ | -1.7\% |  |  |
| Chicago Equity Partners | Large Cap Value |  |  |  |  |  |  | 58,796 | 62.7\% |
| The Edgar Lomax Company | Large Cap Value |  |  |  |  |  |  | 34,976 | 37.3\% |
| MID CAP GROWTH DOMESTIC EQUITIES |  | 33,400 | 2.9\% | 34,078 | 3.0\% | (678) | -0.1\% |  |  |
| New Amsterdam Partners | Mid Cap Growth |  |  |  |  |  |  | 33,400 | 100.0\% |
| SMALL/MICRO CAP DOMESTIC EQUITIES |  | 91,781 | 8.1\% | 90,875 | 8.0\% | 906 | 0.1\% |  |  |
| Westfield Capital Management | Small Cap Growth |  |  |  |  |  |  | 33,637 | 36.6\% |
| Systematic Financial Management | Small Cap Value |  |  |  |  |  |  | 32,084 | 35.0\% |
| Dimensional Fund Advisors | Small Cap Core |  |  |  |  |  |  | 26,060 | 28.4\% |
| GLOBAL ASSET ALLOCATION |  | 105,114 | 9.3\% | 113,594 | 10.0\% | $(8,480)$ | -0.7\% |  |  |
| GMO Global Balanced AA |  |  |  |  |  |  |  | 53,419 | 50.8\% |
| Mellon GA |  |  |  |  |  |  |  | 51,694 | 49.2\% |
| INTERNATIONAL EQUITIES |  | 169,475 | 14.9\% | 147,673 | 13.0\% | 21,803 | 1.9\% |  |  |
| Battermarch GI Emerging | Emerging Markets |  |  |  |  |  |  | 53,961 | 31.8\% |
| Causway | International Equities |  |  |  |  |  |  | 57,337 | 33.8\% |
| Pyramis | International Equities |  |  |  |  |  |  | 58,178 | 34.3\% |
| DOMESTIC BONDS |  | 107,319 | 9.4\% | 113,594 | 10.0\% | $(6,275)$ | -0.6\% |  |  |
| Mellon Index Bond | Core Domestic Bonds |  |  |  |  |  |  | 35,858 | 33.4\% |
| MFC | Core Domestic Bonds |  |  |  |  |  |  | 71,462 | 66.6\% |
| HIGH YIELD DOMESTIC BONDS |  | 58,001 | 5.1\% | 56,797 | 5.0\% | 1,203 | 0.1\% |  |  |
| HSBC | High Yield Bonds |  |  |  |  |  |  | 58,001 | 100.0\% |
| GLOBAL BONDS |  | 106,131 | 9.3\% | 90,875 | 8.0\% | 15,256 | 1.3\% |  |  |
| Mondrian | Global Bonds |  |  |  |  |  |  | 106,131 | 100.0\% |
| MARKET NEUTRAL STRATEGY |  | 49,777 | 4.4\% | 45,438 | 4.0\% | 4,339 | 0.4\% |  |  |
| Blue Rock | Market Neutral |  |  |  |  |  |  | 49,777 | 100.0\% |
| HEDGED STRATEGIES |  | 63,741 | 5.6\% | 56,797 | 5.0\% | 6,944 | 0.6\% |  |  |
| K2 | Hedge Funds |  |  |  |  |  |  | 33,627 | 52.8\% |
| Mariner | Hedge Funds |  |  |  |  |  |  | 30,114 | 47.2\% |
| REAL ESTATE |  | 55,314 | 4.9\% | 56,797 | 5.0\% | $(1,483)$ | -0.1\% |  |  |
| Seven Funds \& Residential Mortgages | Real Estate |  |  |  |  |  |  | 55,314 | 100.0\% |
| ALTERNATIVE INVESTMENTS |  | 12,235 | 1.1\% | 34,078 | 3.0\% | $(21,843)$ | -1.9\% |  |  |
| Partnerships | Alternative Investments |  |  |  |  |  |  | 12,235 | 100.0\% |
| CASH (Does Not Include Managers' Residual Casb) | STIF | 27,776 | 2.4\% | 0 | 0.0\% | 27,776 | 2.4\% |  |  |
| PSRSSTL | Cash |  |  |  |  |  |  | 23,520 | 84.7\% |
| Mellon Money Market | Cash |  |  |  |  |  |  | 4,096 | 0.6\% |
| Chrisken - Cash | Cash |  |  |  |  |  |  | 160 | 0.0\% |
| TOTAL |  | \$1,135,943 | 100.0\% | \$1,135,943 | 100.0\% |  |  |  |  |

The target values shown above represent the Asset Allocation Policy adopted in 2006.

## DOMESTIC EQUITY INVESTMENTS

| 2007 Return | $6.3 \%$ |
| :--- | ---: |
| Average Market Capitalization | $\$ 67,420,200$ |
| P/E Ratio | 16.62 |
| Price/Book Ratio | 4.70 |
| Five Year Earnings Growth Rate | 26.05 |


| Ten Largest Domestic Equity Holdings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Company | Dollar <br> Value | Percent of Portfolio | Company | Dollar <br> Value | Percent of <br> Portfolio |
| Exxon Mobil Corp. | 8,279,909 | 2.2\% | Microsoft | 4,390,167 | 1.2\% |
| AT \& T Inc. | 6,618,667 | 1.8\% | Chevron Corp. | 4,283,862 | 1.1\% |
| Apple Inc. | 5,543,353 | 1.5\% | Pfizer Inc. | 4,028,870 | 1.1\% |
| Genereal Electric Co. | 5,432,514 | 1.4\% | Altria Group Inc. | 3,912,903 | 1.0\% |
| J. P. Morgan Chase | 4,543,021 | 1.2\% | Cisco Systems Inc. | 3,647,096 | 1.0\% |


|  | Ten Best Performing Domestic Equity Holdings |  |  |
| :--- | :--- | :--- | :--- |
| Company | $\underline{R e t u r n}$ | Company |  |
| Questcor Pharmaceuticals | $830.1 \%$ | First Solar Inc. Com | $\underline{\text { Return }}$ |
| Rigel Pharmaceuticals | $169.3 \%$ | Accelr8 Technology | $126.9 \%$ |
| Coley Pharmaceuticals | $154.8 \%$ | Restoration Hardware | $120.5 \%$ |
| Zixit Corp. | $139.6 \%$ | Omtool Ltd. Com New | $99.7 \%$ |
| National Coal Corp. | $131.4 \%$ | Data I O Corp. Com | $97.6 \%$ |


| Ten Worst Performing Domestic Equity Holdings |  |  |  |
| :---: | :---: | :---: | :---: |
| Company | Return | Company | $\underline{\text { Return }}$ |
| Wellman Inc. Com | -95.0\% | Dominion Homes Inc. | -82.7\% |
| Broadcaster Inc. Com | -93.0\% | Adventrx Pharmaceuticals | -82.5\% |
| Occulogic Inc. Com | -86.7\% | Varsity Group Inc. | -80.6\% |
| Thinkengine Network | -85.6\% | Atherogenics Inc. | -77.1\% |
| Franklin Cr Mgmt | -82.9\% | Merge Technologies | -72.9\% |

## DOMESTIC BOND INVESTMENTS

PSRSSTL domestic bond investments had an average life of 6.70 years, a duration of 4.73 years, and an average quality rating of 6.38 . During 2007, the PSRSSTL domestic bond portfolio earned $5.3 \%$. Below are bond summary statistics for the quarter ending December 2007.

| Bond Portfolio <br> Yield to Maturity | Percent of Portfolio |
| :---: | :---: |
| $0.0-5.0$ | $40.2 \%$ |
| $5.0-7.0$ | $17.2 \%$ |
| $7.0-9.0$ | $17.9 \%$ |
| $9.0-11.0$ | $11.2 \%$ |
| $11.0-13.0$ | $5.0 \%$ |
| $13+$ | $2.4 \%$ |
| Unclassified | $6.1 \%$ |


| Bond Portfolio <br> Average Life | Percent of Portfolio |
| :---: | :---: |
| $0.0-1.0$ | $0.3 \%$ |
| $1.0-3.0$ | $6.0 \%$ |
| $3.0-5.0$ | $16.2 \%$ |
| $5.0-10.0$ | $68.8 \%$ |
| $10.0-20.0$ | $1.1 \%$ |
| $20.0+$ | $1.6 \%$ |
| Unclassified | $6.1 \%$ |


| Bond Portfolio <br> Quality Rating | Percent of Portfolio |
| :--- | :---: |
| Government (10) | $12.5 \%$ |
| Aaa(10) | $4.3 \%$ |
| $\mathrm{Aa}(9)$ | $1.4 \%$ |
| $\mathrm{~A}(8)$ | $1.4 \%$ |
| Baa(7) | $5.5 \%$ |
| Below Baa(6-1) | $38.9 \%$ |
| Other | $35.5 \%$ |

## Investment Information

## BROKERAGE FEES

Company
Abel Noser
Access Securities
Avondale Partners
B Trade Services LLC
Baird \& Company
Bank of America Securities LLC
Bear Stearns \& Co.
Bear Stearns Securities Corp.
Bluefin Research Partner
BMO Capital Markets BNY Convergex
Brean Murray Foster
Broadcort Cap Corp
Buckingham Research Group
CE Unterberg Towbin
Cabera Capital Markets
Cantor Fitzgerald
Capital Institution Services
Chapdelaine Institutional
Cheevers \& Co., Inc.
CIBC World Markets
Citigroup World Markets
Cowen \& Co.
Craig Hallum
Credit Suisse Securities USA
Deutsche Bank Securities
Direct Trading Institutional
Dougherty Co.
FIMAT Preferred LLc
First Clearing
Fox Pitt Kelton Inc.
Friedman Billings \& Ramsey
Global Trading
Goldman Sachs

Commission Paid
$\$ 10,740.68$
912.18
912.18

Guzman \& Company
1,036.00 Investment Techonology Group
1,273.25 ISI Group Inc.
5,827.17 Ivy Securities Inc.
6,959.91 J P Morgan
7,070.04 Jackson Partners
168.00 Jackson Securities
918.50 Jeffries \& Company

12,536.97 Jefferies High Yield Trading
252.00 JMP Securities

34,550.50 Jones Trading Institutional
506.25 Keefe Bruyette \& Woods
855.00 Keybanc Capital
140.00 King C L \& Associates

7,414.31 Knight Equity Markets
10,584.49 LaBranche Financial
522.18 Lazard Capital Markets

1,324.00 Leerink Swann \& Co.
1,071.40 Lehman Brothers
5,574.12 Liquidnet Inc.
853.50 Longbow Securities LLc
316.00 Loop Capital Markets

10,413.66 Magna Securities
7,220.92 Merrill Lynch Pierce Fenner
2,158.01 Merriman Curhan Ford \& Co.
57.40 Midwest Research
255.46 Miletus Trading LLC

16,788.50 Monness Crespi Hardt
288.10 Morgan Stanley

1,593.76 Needham \& Company
69,967.58 NYFix Transaction Services

| Commission Paid |
| ---: |
| 8.00 |
| $7,447.95$ |
| $9,239.66$ |
| $16,574.77$ |
| 521.66 |
| 100.00 |
| $2,359.25$ |
| 78.00 |
| 756.00 |
| $6,024.19$ |
| 18.75 |
| 76.00 |
| $3,397.12$ |
| 379.94 |
| 24.40 |
| 21.00 |
| 444.90 |
| 522.50 |
| $\$ 334.82$ |
| 239.78 |
| $8,199.54$ |
| $24,070.39$ |
| 356.00 |
| 300.00 |
| 188.00 |
| $4,459.98$ |
| 810.00 |
| 344.00 |
| 57.75 |
| 110.96 |
| $13,372.77$ |
| $1,524.25$ |
| $1,962.00$ |
| $\$ 104,324.33$ |


| Company | Commission Paid |
| :--- | ---: |
| Pacific American Securities | 244.00 |
| Penson Financial Services | 440.00 |
| Pipeline Trading Services | $1,226.00$ |
| Piper Jaffray | $1,384.93$ |
| Prudential Equity Group | 471.03 |
| Pulse Trading | 135.58 |
| Raymond James | 834.25 |
| RBC Capital Markets | $1,248.00$ |
| Ridge Clearing | 16.65 |
| Robert Van Securities | 248.00 |
| Rochdale Securities | 63.00 |
| Rosenblatt Securities Inc | $2,037.07$ |
| Sandler O Neill | $1,022.00$ |
| Sanford C. Bernstein \& Co. | $3,514.10$ |
| Schonefield Securities | $1,224.00$ |
| Scott \& Stringfellow | 468.75 |
| Simmons \& Company | 60.00 |
| SMF Trading Inc. | 417.78 |
| Stanford Group | 108.00 |
| State Street | $50,308.54$ |
| Stephen M Ferretti Inc. | 459.54 |
| Stifel Nicolaus | 689.00 |
| Suntrust Capital Markets | 592.50 |
| Think Equity Partners LLC | 40.00 |
| Thomas Weisel Partners | $1,568.68$ |
| UBS | $5,905.73$ |
| Wachovia Capital | $2,117.23$ |
| Wedbush Morgan Securities | 410.27 |
| Weeden \& Co. | $3,181.95$ |
| Westminster Research | 56.00 |
| White Cap Trading LLC | 77.89 |
| William Blair \& Co. | 708.00 |
| Williams Capital Group | $1,137.52$ |
|  |  |
| 2007 Total Commissions | $\$ 82,415.99$ |
|  |  |

## MARKET VALUE OF ASSETS

| Investment Category | As of December 31, 2005 |  | As of December 31, 2006 |  | As of December 31, 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value | \% of <br> Total | Market Value | \% of Total | Market Value | \% of Total |
| Cash, Receivables, Cash Equivalents | \$50,990,647 | 4.8\% | \$56,466,731 | 5.0\% | \$52,532,462 | 4.7\% |
| Building Project | 2,205,134 | 0.2\% | 2,215,143 | 0.2\% | 2,242,885 | 0.2\% |
| U.S. Bonds, Bills and Mortgages | 66,801,915 | 6.3\% | 44,981,780 | 4.0\% | 33,923,065 | 3.0\% |
| Corporate Bonds | 80,801,056 | 7.6\% | 92,714,940 | 8.2\% | 91,593,979 | 8.1\% |
| Foreign Corporate \& Government Bonds | 152,101,236 | 14.3\% | 169,014,610 | 33.1\% | 161,158,260 | 33.1\% |
| Common Stocks | 360,444,537 | 33.9\% | 313,606,346 | 33.1\% | 336,024,232 | 33.1\% |
| Mutual Funds | 291,258,639 | 27.4\% | 385,706,954 | 34.3\% | 405,583,124 | 36.0\% |
| Real Estate - Insurance Contracts | 42,604,405 | 4.0\% | 49,214,004 | 4.4\% | 55,314,250 | 4.9\% |
| Mortgages | 63,304 | 0.0\% | 47,625 | 0.0\% | 16,340 | 0.0\% |
| Alternative Investments * | 15,243,782 | 1.4\% | 11,623,301 | 1.0\% | 13,781,497 | 1.2\% |
| Total | \$1,062,514,655 | 100.0\% | \$1,125,591,434 | 100.0\% | \$1,152,170,094 | 100.0\% |

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# PUBLIC SCHOOL RETIREMENT SYSTEM 

OF THE CITY OF ST. LOUIS

ACTUARIAL VALUATION
AS OF JANUARY 1, 2007

## January

2008

## 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 methods from those used in the prior actuarial valuation. Overall, the System had unfavorable demographic experience for 2006, whichmore than offset the moderately favorable investment expense. The System's actuarial rate of return was $8.47 \%$ which is $0.47 \%$ more than the assumed rate of return of $8.00 \%$. The rate of return reflects and addition of $\$ 5,616,534$ to the Investment Contingency Reserve, increasing the margin to offset future adverse investment experience. The net effect was to increase the Annual Required Contribution rate from $7.63 \%$ to $9.45 \%$.

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 oneyear lag for future years. Therefore, this actuarial valuation is used to determine the actual contribution rate for 2008 . The dollar amount of the actual contribution increased to $\$ 21,021,316$ for 2008 from $\$ 17,311,658$ for 2007. As a percentage of covered compensation the contribution rate for 2008 increased to $9.45 \%$ from $7.63 \%$ for 2007.

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 2008, the annual normal cost is $\$ 7,862,236$ or $3.53 \%$ of the covered payroll of \$222,387,289.

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, 2006. This portion of the contribution only changes to reflect changes in benefits or changes in actuarial assumptions and methods. The UFAAL amortization payment for 2008 is $\$ 13,159,080$ or $5.92 \%$ of the covered payroll.
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,


SUMMARY OF PRINCIPAL RESULTS OF THE
ACTUARIAL VALUATION AS OF JANUARY 1, 2007

## ANNUAL REQUIRED CONTRIBUTION



## 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, 2005 was performed. On the basis of that analysis, several actuarial assumptions were changed effective with the January 1, 2006 valuation. The next scheduled experience analysis is for the five-year period ending December 31, 2010.

## 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.

## ACTUARIAL METHODOLOGY

## ASSET VALUATION METHOD

The actuarial value of other assets is determined using the assumed yield method of valuing assets, less the Expense and Contingency Reserve. Under the assumed yield asset valuation method, the prior year's actuarial value is increased at the assumed rate of return with appropriate adjustments for contributions and disbursements to produce an expected actuarial value of assets at the end of the year. The expected actuarial value is compared to the market value of assets, and $20 \%$ of the difference is added to the expected actuarial value. The actuarial value of assets was "fresh-started" as of January 1, 2006 and set equal to the market value of assets as of that date. 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 Frozen 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, 2006, UFAAL was redetermined.

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, from January 1, 2006.

## 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 RP-2000 Combined Healthy Lives Mortality Table for males and females is used for active members, retired members and beneficiaries.

Disability Mortality - The RP-2000 Combined Healthy Lives Mortality Table for males and females is used for active members, with ages set up five years.

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

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

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

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

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

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

Retirement - Retirements are assumed to occur at rates based on the actual experience of the Retirement System. For those eligible to retire under the Rule of 85 , it is assumed that $25 \%$ will retire when first eligible for unreduced benefits unless the age-related rate is greater, but not prior to 30 years of Credited Service.

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

ACTUARIAL ASSUMPTIONS (continued)

ACTIVE MEMBER RATES OF DECREMENT

| Attained Age | Withdrawal Rates |  | Disability Rates |  | Retirement$\qquad$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males | Females | Males | Females |  |
| 20 | 15.00\% | 15.00\% | .000\% | .000\% | 0.00\% |
| 25 | 12.50\% | 12.50\% | .000\% | .000\% | 0.00\% |
| 30 | 9.00\% | 9.00\% | . $040 \%$ | . $040 \%$ | 0.00\% |
| 35 | 7.00\% | 7.00\% | . $040 \%$ | .040\% | 0.00\% |
| 40 | 6.00\% | 6.00\% | .080\% | .075\% | 0.00\% |
| 45 | 3.00\% | 3.00\% | . $150 \%$ | .100\% | 0.00\% |
| 50 | 2.00\% | 2.00\% | . $200 \%$ | .150\% | 0.00\% |
| 55 | 1.50\% | 1.50\% | . $450 \%$ | . $250 \%$ | 5.00\% |
| 60 | 1.00\% | 1.00\% | . $550 \%$ | . $325 \%$ | 7.50\% |
| 65 | 0.00\% | 0.00\% | . $000 \%$ | .000\% | 35.00\% |
| 70 | 0.00\% | 0.00\% | .000\% | .000\% | 100.00\% |

NON-DISABLED LIFE MORTALITY RATES

| Death Rate |  |  | Death Rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male | Age | Female | Male | Age | Female |
| . 000773 | 35 | . 000475 | . 037834 | 75 | . 028106 |
| . 001079 | 40 | . 000706 | . 064368 | 80 | . 045879 |
| . 001508 | 45 | . 001124 | . 110757 | 85 | . 077446 |
| . 002138 | 50 | . 001679 | . 183408 | 90 | . 131682 |
| . 003624 | 55 | . 002717 | . 267491 | 95 | . 194509 |
| . 006747 | 60 | . 005055 | . 344556 | 100 | . 237467 |
| . 012737 | 65 | . 009706 | . 397886 | 105 | . 293116 |
| . 022206 | 70 | . 016742 | . 400000 | 110 | . 364617 |

DISABLED LIFE MORTALITY RATES

| Death Rate |  |  | Death Rate |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Male | Age | Female | Male | Age | Female |
| . 000773 | 30 | . 000475 | . 064368 | 75 | . 045879 |
| . 001079 | 35 | . 000706 | . 110757 | 80 | . 077446 |
| . 001508 | 40 | . 001124 | . 183408 | 85 | . 131682 |
| . 002138 | 45 | . 001679 | . 267491 | 90 | . 194509 |
| . 003624 | 50 | . 002717 | . 344556 | 95 | . 237467 |
| . 006747 | 55 | . 005055 | . 397886 | 100 | . 293116 |
| . 012737 | 60 | . 009706 | . 397886 | 105 | . 364617 |
| . 022206 | 65 | . 016742 | . 400000 | 110 | . 400000 |
| . 037834 | 70 | . 028106 | 1.000000 | 115 | 1.000000 |

## ACTUARIAL BALANCE SHEET (At January 1, 2007)

## Actuarial Assets

| Actuarial value of present assets | $\$ 1,003,428,983$ |
| :--- | ---: |
| Actuarial present value of future member contributions | $87,235,660$ |
| Actuarial present value of future employer contributions for: | $57,481,790$ |
| $\quad$ Normal Costs | $146,834,356$ |
| $\quad$ Actuarial Accrued Liability | $\$ 1,294,980,789$ |

## Actuarial Liabilities

Actuarial present value of benefits now payable
Actuarial present value of benefits payable in the future
Active members - New Plan
Active members -- Old Plan
Active members -- DROP
Members on leave of absence without pay
Terminated members
Total payable in the future
Total liabilities for benefits
\$ 673,850,175

451,854,736
1,601,784
130,658,681
8,572,570
30,044,627
622,732,398
\$ 1,296,582,573

## PROJECTED BENEFIT OBLIGATION FUNDING STATUS

Projected Benefit Obligation at January 1, 2007:
Retired members and beneficiaries currently receiving benefits and terminated members not yet receiving benefits
$\$ 712,467,372$
Current active members:
Accumulated member contributions, including interest
96,223,413
Employer-financed vested benefits
302,927,942
Employer-financed non-vested benefits
2,481,882
Total Projected Benefit Obligation
$\$ 1,114,100,609$
At January 1, 2007, the Projected Benefit Obligation was funded as follows:
Net assets available for benefits at actuarial value
\$ 1,003,428,983
Unfunded Projected Benefit Obligation
Actuarial value funding ratio
110,671,626
90.1\%

Net assets available for benefits at market value
Unfunded Projected Benefit Obligation
\$ 1,049,484,561

Market value funding ratio
64,616,048
94.2\%

## 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


## 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 page 31 of this Report and 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 37 of this Report.

As shown on page 38 of this Report, the fund had a rate of return of $8.47 \%$ on an actuarial value basis, $0.47 \%$ above the assumed rate of return of $8.0 \%$ for 2006. Prior to the adjustment for a transfer to the

Investment Contingency Reserve, the rate of return on an actuarial value basis would have been $9.07 \%$. $1.07 \%$ above the assumed rate of $8.0 \%$. In accordance with Rule X, \$5, 616,534 was added to the investment contingency portion of the Reserve, because the preliminary actuarial rate of return would not have exceeded the assumed rate of return by more than $1 \%$.

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 $12.52 \%$, also presented on page 38 of this Report.

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1) Actuarial value of assets as of January 1, 2005
\$ 983,828,243
(2) Member contributions
(3) Employer contributions
(4) Benefit payments and expenses
(5) Investment increment at $8.0 \%$
(6) Expected actuarial value on January 1, 2006:
$(1)+(2)+(3)-(4)+(5)$ 993,319,222
(7) Market value of assets on January 1, 2006
(8) Expense and Contingency Reserve on January 1, 2006 1,124,465,383

74,980,822
(9) Adjustment to the Contingency Reserve on January 1, 2006 5,616,534
(10) Excess of market value over expected actuarial value: (7) - (8) - (6) 50,548,805
(11) Market value adjustment: $100 \% \times(10)$ 10,109,761
(12) Actuarial Value of Assets as of January 1, 2006: (6) + (11) $1,003,428,983$

## 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 X .

Below is a history of the Expense and Contingency Reserve:

| January 1 | Expense Reserve | Investment Contingency <br> Reserve | Total Expense and <br> 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 | $26,028,780$ | $37,759,976$ | $63,788,756$ |
| 2005 | $27,170,188$ | $45,115,876$ | $72,286,064$ |
| 2006 | $32,534,770$ | $45,115,876$ | $77,650,646$ |
| 2007 | $29,864,946$ | $50,732,410$ | $80,597,356$ |

## 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) $\quad \mathrm{A}=$ Market Value of Assets as of January 1, $2006 \quad \$ 1,061,478,889$
(ii) $\quad \mathrm{B}=$ Market Value of Assets as of January 1, $2007 \quad 1,124,465,383$
(iii) $\mathrm{C}=$ Contributions during the period 30,399,169
(iv) $\mathrm{D}=$ Disbursements during the period $96,187,405$
(v) Rate of Return:
$\frac{B-A+D-C}{A+1 /(C-D)}$
$\mathrm{A}+1 / 2(\mathrm{C}-\mathrm{D}) \quad 12.52 \%$
(vi) Actuarial Assumed Rate of Return for $2006 \quad 8.00 \%$
(vii) Difference between actual and assumed rates of return: (v) - (vi) 4.52\%

## (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) $\mathrm{A}=$ Actuarial Value of Assets as of January 1, $2006 \quad \$ 983,828,243$
(ii) I = Income Allocated as of January 1, $2007 \quad 79,772,442$
(iii) $\mathrm{C}=$ Contributions during the period, time-weighted 5,699,638
(iv) $\quad \mathrm{D}=\mathrm{Disbursements} \mathrm{during} \mathrm{the} \mathrm{period}, \mathrm{time-weighted} \mathrm{48,093,703}$
(v) Rate of Return:
$\frac{I}{A+C-D}$
8.47\%
(vi) Actuarial Assumed Rate of Return for $2006 \quad 8.00 \%$
(vii) Difference between actual and assumed rates of return: (v) - (vi) $0.47 \%$

MEMBERSHIP AND BENEFITS PAID AS OF JANUARY 1, 2007

|  | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| Active Members |  |  |  |
| Regular Active Members | 1,150 | 3,560 | 4,710 |
| DROP | 54 | $\underline{246}$ | 300 |
| Total Active Members | 1,204 | 3,806 | 5,010 |
| Inactive Members (Terminated or Leave of Absence |  |  |  |
| without Pay) | 497 | 991 | 1488 |
| Total Members Not Retired | 1,701 | 4,797 | 6,498 |
| Retired Members and Beneficiaries |  |  |  |
| Retired Members and Contingent Annuitants | 970 | 2526 | 3,496 |
| Survivors | 50 | 274 | 324 |
| Disabled Members | 56 | 208 | 264 |
| Total Retired Members and Beneficiaries | 1,076 | 3,008 | 4,084 |
| Total Membership | 2,777 | 7,805 | 10,582 |


| NUMBER OF RETIRED MEMBERS AND BENEFICIARIES |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Option | Service Benefit | Disability Benefit | Survivor Benefit | Totals |
| 0 | 2,974 | 221 | 324 | 3,519 |
| 1 | 127 | 17 | - | 145 |
| 2 | 81 | 4 | - | 87 |
| 3 | 146 | 11 | - | 160 |
| 4 | 156 | 4 | - | 164 |
| 5 | 7 | 4 | - | 16 |
| 6 | 5 | 3 | - | 14 |
| Total | 3,496 | 264 | 324 | 4,084 |

AMOUNT OF ANNUAL BENEFIT

| Option |  | Service Benefit |  | ity Benefit |  | vor Benefit |  | Totals |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | \$ | 60,112,220 | \$ | 2,237,206 | \$ | 2,840,066 | \$ | 65,189,492 |
| 1 |  | 2,072,196 |  | 232,159 |  | - |  | 2,304,356 |
| 2 |  | 1,603,960 |  | 70,513 |  | - |  | 1,674,475 |
| 3 |  | 2,774,521 |  | 113,645 |  | - |  | 2,888,169 |
| 4 |  | 3,662,969 |  | 69,382 |  | - |  | 3,732,355 |
| 5 |  | 154,826 |  | 42,846 |  | - |  | 197,677 |
| 6 |  | 88,635 |  | 14,201 |  | - |  | 102,842 |
| Total | \$ | 70,469,327 | \$ | 2,779,952 | \$ | 2,840,066 | \$ | 76,089,345 |

## 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, 2006 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 the determination of 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) onefourth $(1 / 4)$ 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, onehalf $(1 / 2)$ 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 where applicable.

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.


## GROWTH OF ASSETS

(000's omitted)



Celebrating Excellence! PSRSSTL


[^0]:    * Carried at Cost Value

