## 2010 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 has the fiduciary responsibility for the general administration and investment of PSRSSTL's assets. The St. Louis Public Schools Board of Education appoints four trustees; the members of the Public School Retirement System of the City of St. Louis (PSRSSTL) 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. Office term length is four years. At June 1, 2011, the following individuals served on the Board of Trustees.

Appointed by the Board of Education
Christina C. Bennett
Mona E. Lawton
Sarah Sise
Richard Sullivan
Elected by Retired Members
Joseph Clark
Helen Lynch

## Elected by Active Members

William R. Bury
Sheila P. Goodwin
Kathryn Lamb
Thaha Menkara
Stephen Warmack, Sr.

## 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 | John Henderson |
| 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 provided professional services to the Board of Trustees and PSRSSTL administrative staff during 2010.

| Legal Counsel | Jeffrey E. Hartnett |
| :--- | :--- |
|  | Bartley Goffstein, LLC |
| Investment Advisor | Michael Cairns |
|  | New England Pension Consultants |
| Independent Auditor | Thomas S. Helm |
| Huber, Ring, Helm \& Company |  |
| Actuarial Services | Gary Bayer |
|  | AON Consulting |
|  | Stephen Siepman |
| Buck Consultants |  |

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

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OFFICE OF THE
EXECUTIVE DIRECTOR
EXECUTIVE DIRECTOR
```

PHONE: (314) 534-7444
FAX: (314) 533-0531
June, 2011

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, 2010. 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 2010, we processed 318 new retirements and 85 applications for Supplemental Pension Benefits under the Sick Leave Conversion Program sponsored by St. Louis Public Schools. In addition, we processed more than 645 distributions for members who left PSRSSTL and added 675 new members.

## Financial Summary

PSRSSTL management is responsible for maintaining appropriate internal accounting and procedural controls. These controls help to protect PSRSSTL assets from loss due to unauthorized use or disposition, provide a reasonable assurance that PSRSSTL executes its financial transactions in accordance with proper authorization, and ensure 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, 2010. This Annual Report contains those audited financial statements in their entirety. A summary of the financial information follows.

Net Assets as of 12-31-2009
\$891,562,918
Additions
Employer Contributions 26,075,146
Employee Contributions 11,188,919
Net Investment Income 115,429,099
Rental Income
127,426
Deductions
Benefits Paid to Members
Refunds Paid to Members
Administrative Expenses
Net Assets as of 12-31-2010
(102,086,289)
$(3,203,714)$
$(1,499,302)$
\$937,594,203
Below is a graphic representation of the Additions and Deductions from the fund.


## Investment Performance

Proper asset allocation helps to control volatility and increases the probability of favorable long-term investment returns. The membership entrusts the Board of Trustees with fiduciary responsibility to properly allocate and diversify the Plan investments among different asset classes.

As of December 31, 2010, the asset allocation of the Fund's investments stood as follows.

| Equity | $\mathbf{4 8 . 3} \%$ |
| :--- | :---: |
| Emerging Markets | $5.3 \%$ |
| International Developed | $8.9 \%$ |
| Small Cap | $8.8 \%$ |
| Mid Cap | $3.3 \%$ |
| Large Cap | $22.0 \%$ |
| (Growth, Core, Value) |  |
|  |  |
| GTAA | $\mathbf{1 0 . 6} \%$ |
| Mellon/GMO | $10.6 \%$ |
|  |  |
| Fixed Income | $\mathbf{2 1 . 6} \%$ |
| Domestic Bonds | $8.5 \%$ |
| High Yield | $4.8 \%$ |
| Global Bonds | $5.8 \%$ |
| Credit Opportunities | $2.5 \%$ |
|  |  |
| Other | $\mathbf{1 9 . 5} \%$ |
| Real Estate | $5.2 \%$ |
| Hedge Funds | $5.0 \%$ |
| Market Neutral | $3.7 \%$ |
| Private Equity | $2.8 \%$ |
| Cash | $2.8 \%$ |
| Total | $\mathbf{1 0 0 . 0} \%$ |

The overall return on investments for PSRSSTL was $14.9 \%$ for fiscal year 2010 and $20.9 \%$ for fiscal year 2009. The positive investment returns in fiscal years 2010 and 2009 reflect the continued recovery of the financial markets. While predicting conditions in the marketplace remains challenging for financial experts, the Board of Trustees stands behind a sound Asset Allocation Policy by staying focused on active monitoring of its money managers and long-term investment objectives.
During 2010, the S\&P 500 Index increased $10.8 \%$ in the fourth quarter, capping off at $15.1 \%$ for the year. The Russell 2000 Growth Index was up $17.1 \%$ in the fourth quarter and finished at $29.1 \%$ for the year.

Financial markets posted positive results in the last quarter of 2010. For the year ending December 31, 2010, the Russell 3000 Domestic Equities Index increased 12.6\% for the fourth quarter and $19.4 \%$ for the year. PSRSSTL's total domestic bonds were up $11.9 \%$ for the year with a $6.8 \%$ return over the 5 -year period.
In comparison, for calendar year 2010, the Barclays Aggregate Bond Index rose $6.5 \%$ with a $5.8 \%$ return over the 5 -year period.
International stock markets performed satisfactorily for the year with the MSCI EAFE (developed global market equities) and MSCI Emerging Market Indices posting positive returns of $7.8 \%$ and $18.9 \%$ respectively for 2010. The Citigroup World Government Global Bond Index had an overall gain of $5.2 \%$ for the year.
Focusing on the long-term PSRSSTL investment horizon, for the five-year period ending December 31, 2010, the PSRSSTL investment portfolio earned $5.4 \%$, ranking it in the top $22 \%$ of similar plans.

Additional investment information is located 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 sponsoring employers should make to PSRSSTL during the upcoming year so sufficient assets are available for benefit payments in the future.

The annual valuation as of January 1, 2010 indicated PSRSSTL was $85.6 \%$ funded on an actuarial basis and $77.6 \%$ funded on a market value basis. Additional detail about the funding status of PSRSSTL is located in the Actuarial Section of this report.
In summary, as measured at January 1, 2010, PSRSSTL benefit obligations and the assets available to satisfy those obligations are set forth as follows:

Total Projected Benefit Obligations ............. $\$ 1,111,070,953$
Net Assets Available for Benefits
Actuarial Value of Assets $\qquad$
Market Value of Assets ........................ \$861,659,811
Funding Ratio (Assets $\div$ Obligations)
Actuarial Value Funding Ratio ...................... 85.6\%
Market Value Funding Ratio ........................... 77.6\%

## Letter of Transmittal



As indicated in the Financial and Investment Sections of this report, the market value of PSRSSTL net assets changed from $\$ 891,562,918$ at the end of 2009 to $\$ 937,594,203$ at the end of 2010.

It is the opinions of the independent actuary that PSRSSTL remains funded on a sound actuarial basis assuming payments of future contributions are paid as recommended.

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

## Acknowledgments \& Reflections

I would like to thank the members of the Board of Trustees for freely contributing their time and effort to ensure the stability and solvency of PSRSSTL. Although the investment markets continue to recover from the recent economic downturn it remains a challenging market environment in which to maximize returns while minimizing risk. The Board's commitment to maintaining the financial foundation of PSRSSTL through the downturns and upturns in the financial markets continues to assure that future benefits will be available to its members for years to come.

Thank you to our professional advisors who consistently provide PSRSSTL with the tools necessary for proper decision-making. I would also like to thank the staff for their dedication to the Fund. The staffs integrity and professionalism are the reasons that PSRSSTL operates efficiently on a day-to-day basis and greatly contribute to our strong and dependable pension organization.

In conclusion, thank you to our members and employers for their continued confidence and support. Your commitment to St. Louis public education provides hope for a prosperous future. Your financial contributions along with investment returns continue to help PSRSSTL thrive and are necessary for the stability of the Retirement System. As we complete our sixty-seventh year, I look forward to the continued opportunity to serve the membership.


Andrew Clark Executive Director

## 4

PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

FINANCIAL STATEMENTS

DECEMBER 31, 2010 AND 2009

## INDEX TO FINANCIAL STATEMENTS

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## INDEPENDENT AUDITOR'S REPORT



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Huber, Ring, Helm \& Co., P.C. CPAs • Advisors

## Independent Auditor's Report

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

We have audited the accompanying statements of plan net assets of the Public School Retirement System of the City of St. Louis (the "System") as of December 31, 2010 and 2009 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 $\$ 21,702,478$ and $\$ 20,064,801$ ( $2 \%$ in 2010 and 2009 of plan net assets) as of December 31, 2010 and 2009, 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, 2010 and 2009 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, 2010 and 2009 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 24 25 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, the schedules of funding progress and employer contributions, and the schedules of operating expenses found on pages $26-27$, 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, Ringistrlm + Co., P.C.

St. Louis, Missouri
April 11, 2011
*To clarify, a fen page references made in the auditor's report refer to the entire report of Audited Financial Statements prepared by the Auditor. Management has not altered the Independent Auditors Report to fit the format of this Annual Report for the sole purpose of preserving integrity.

STATEMENTS OF PLAN NET ASSETS
DECEMBER 31, 2010 AND 2009

| ASSETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2010 |  | 2009 |  |
| CASH | \$ | 12,255,231 | \$ | 12,186,319 |
| PROPERTY and BUILDING, net |  | 2,219,772 |  | 2,287,211 |
| RECEIVABLES |  |  |  |  |
| Accrued interest and dividends |  | 2,186,564 |  | 6,825,255 |
| Distributions receivable |  |  |  | 6,026,304 |
| INVESTMENTS, at fair value |  |  |  |  |
| Cash equivalents |  | 33,566,529 |  | 36,920,841 |
| Bonds |  |  |  |  |
| U.S. Government and agency issues |  | 48,690,369 |  | 37,624,541 |
| Corporate |  | 68,563,470 |  | 66,236,320 |
| Foreign investments (bonds and stocks) |  | 109,773,594 |  | 114,276,055 |
| Common and preferred stocks |  | 265,038,827 |  | 249,011,409 |
| Mutual finds |  | 303,286,315 |  | 279,655,937 |
| Real estate partnerships - insurance contracts |  | 47,890,147 |  | 40,811,416 |
| Credit opportunity investments |  | 23,406,472 |  | 20,591,527 |
|  |  | 900,215,723 |  | 845,128,046 |
| INVESTMENTS, at estimated fair value |  |  |  |  |
| Real estate loan |  |  |  | 4,068 |
| INVESTMENTS, at cost |  |  |  |  |
| Limited partnerships |  | 21,702,478 |  | 19,254,133 |
| Venture capital partnerships |  |  |  | 810,668 |
|  |  | 21,702,478 |  | 20,064,801 |
| Total investments |  | 921,918,201 |  | 865,196,915 |
| Total assets |  | 938,579,768 |  | 892,522,004 |

## LIABILITIES

## CURRENT LIABILITIES

Accounts payable and accrued expenses
985,565 959,086

NET ASSETS HELD IN TRUST FOR PENSION BENEFITS

$$
\xlongequal{\$ 937,594,203} \quad \$ 891,562,918
$$

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

STATEMENTS OF CHANGES IN PLAN NET ASSETS
DECEMBER 31, 2010 AND 2009

ADDITIONS
Employer contributions
St. Louis Public Schools
Charter Schools
Harris Stowe State University
Retirement System
Sick leave conversion
Employee contributions
St. Louis Public Schools
Charter Schools
Retirement System

Net appreciation (depreciation) in fair value of investments
Cash equivalents
Bonds
U.S. Government and agency issues

Corporate
Foreign investments
Common and preferred stock
Mutual funds
Real estate loan
Limited partnerships
Real estate partnerships
Venture capital partnerships
Credit opportunity investments

Less investment expense
Net investment income
Rental income
Net additions

| 2010 |  | 2009 |  |
| ---: | ---: | ---: | ---: |
|  | $16,790,176$ |  | $\$$ |
| $3,843,486$ |  | $19,274,150$ |  |
|  |  | $3,377,789$ |  |
|  |  | 6,746 |  |
| 48,617 |  | 51,995 |  |
| $5,392,867$ |  | $5,887,822$ |  |
|  |  |  |  |
| $9,297,577$ |  | $10,310,751$ |  |
| $1,861,472$ |  | $1,793,766$ |  |
| 29,870 |  | 27,462 |  |
| $37,264,065$ |  | $40,730,481$ |  |


| 145,293 | 278,440 |  |
| ---: | ---: | ---: |
|  |  |  |
| $2,368,569$ | $1,103,393$ |  |
| $12,430,607$ | $22,972,343$ |  |
| $7,791,564$ | $24,006,894$ |  |
| $51,328,791$ |  | $57,969,790$ |
| $32,145,348$ |  | $57,085,908$ |
| 233 |  | 1,054 |
| $3,592,479$ |  | $(3,386,553)$ |
| $7,435,595$ |  | $(10,620,556)$ |
| $(694,752)$ |  | $(233,032)$ |
| $2,904,651$ |  | 591,527 |
|  |  | $149,769,208$ |
| $4,448,378$ | $3,697,249$ |  |
| $115,429,099$ |  | $146,071,959$ |
| 127,426 |  | 71,391 |
| $152,820,590$ |  | $186,873,831$ |

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

STATEMENTS OF CHANGES IN PLAN NET ASSETS (CONTINUED)
YEARS ENDED DECEMBER 31, 2010 AND 2009

|  | 2010 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
| DEDUCTIONS |  |  |  |  |
| Benefits paid |  |  |  |  |
| Retirement and death benefits | \$ | 99,277,919 | \$ | 97,129,242 |
| Health care subsidies and supplemental payments |  | 2,808,370 |  | 2,794,544 |
|  |  | 102,086,289 |  | 99,923,786 |
| Operating expenses |  | 1,499,302 |  | 1,415,026 |
| Contribution refunds due to death or resignation |  | 3,203,714 |  | 3,765,085 |
| Total deductions |  | 106,789,305 |  | 105,103,897 |
| INCREASE IN PLAN NET ASSETS |  | 46,031,285 |  | 81,769,934 |
| NET ASSETS HELD IN TRUST FOR PENSION |  |  |  |  |
| BENEFITS BEGINNING OF YEAR |  | 891,562,918 |  | 809,792,984 |
| NET ASSETS HELD IN TRUST FOR PENSION |  |  |  |  |
| BENEFITS END OF YEAR | \$ | 937,594,203 | \$ | 891,562,918 |

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

## NOTES TO FINANCIAL STATEMENTS <br> 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, $2010$ | January 1, $2009$ |
| :---: | :---: | :---: |
| Active members | 4,825 | 5,085 |
| Inactive members | 1,896 | 1,543 |
| Total members not retired | 6,721 | 6,628 |
| Retired members |  |  |
| Service and survivors | 4,100 | 4,159 |
| Disability | 418 | 411 |
|  | 4,518 | 4,570 |
| Total Membership | 11,239 | $\underline{11,198}$ |

## Benefits

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

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

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

## NOTES TO FINANCIAL STATEMENTS NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

## Estimates

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

## Basis of Accounting

Plan member contributions of $5.0 \%$ of compensation, 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.

## Method Used to Value Investments

Unless otherwise noted, investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 7 for discussion of fair value measurements. 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.

At December 31, 2009, the investments in real estate loans have an effective interest rate of $15.5 \%$ and were stated at the outstanding principal balance, which approximated estimated fair value. The loans were paid in full during the year ended December 31, 2010.

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.
Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

## Furniture and Equipment

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

## Property and Improvements

The System records property, building, and related improvements at cost while expenditures for normal repairs and maintenance, which do not extend the useful life of the assets, are charged to operations as incurred. The System elected the straight-line method for the depreciation of the building over the estimated life of 40 years.

## Reclassifications

Certain reclassifications have been made to the prior year's amounts to make them consistent with the December 31, 2010 presentation.

## NOTES TO FINANCIAL STATEMENTS <br> NOTE 3 - INVESTMENTS

At December 31, 2010 and 2009, investments consisted of the following:

Cash equivalents
Bonds
U.S. Government and agency issues

Corporate
Foreign investments
Common and preferred stocks
Mutual funds
Real estate partnerships - insurance contracts
Credit opportunity investments

Limited partnerships

Cash equivalents
Bonds
U.S. Government and agency issues

Corporate
Foreign investments
Common and preferred stocks
Mutual funds
Real estate partnerships - insurance contracts
Credit opportunity investments

Real estate loan
Limited partnerships
Venture capital partnerships

| 2010 |  |
| :---: | :---: |
| Fair Value | Cost |
| \$ 33,566,529 | \$ 33,566,529 |
| 48,690,369 | 48,526,695 |
| 68,563,470 | 60,828,386 |
| 109,773,594 | 98,639,040 |
| 265,038,827 | 219,394,685 |
| 303,286,315 | 206,783,073 |
| 47,890,147 | 50,742,863 |
| 23,406,472 | 19,910,294 |
| 900,215,723 | 738,391,565 |

$\frac{21,702,478}{\$ 921,918,201}$$\xlongequal{\$ 760,094,043}$

| 2009 |  |
| :---: | :---: |
| Fair Value $\quad$ Cost |  |

\$ 36,920,841 \$ 36,920,841

| $37,624,541$ |  | $37,470,624$ |
| ---: | ---: | ---: |
| $66,236,320$ |  | $61,246,790$ |
| $114,276,055$ |  | $107,180,756$ |
| $249,011,409$ |  | $227,308,153$ |
| $279,655,937$ |  | $208,453,118$ |
| $40,811,416$ |  | $48,381,388$ |
| $20,591,527$ |  | $20,000,000$ |
| $845,128,046$ |  | $746,961,670$ |


| 4,068 | 4,068 |
| :---: | :---: |
| 19,254,133 | 19,254,133 |
| 810,668 | 810,668 |
| 20,068,869 | 20,068,869 |
| \$ 865,196,915 | \$ 767,030,539 |

## NOTES TO FINANCICAL STATEMENTS <br> NOTE 4 - OCCUPANCY EXPENSE

The System occupies offices in a building it owns. Occupancy expenses for the years ended December 31, 2010 and 2009 were $\$ 30,460$ and $\$ 21,046$, respectively.

On May 7, 2009, the System entered into an agreement to lease a portion of its building to an unrelated party. The initial lease term is five years with annual rent ranging from $\$ 125,579$ to $\$ 140,353$. There are also five one-year renewal options. Rental income received for the years ended December 31, 2010 and 2009 totaled $\$ 127,426$ and $\$ 71,391$, respectively.

## NOTE 5 - RISKS AND UNCERTAINTIES

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, 2010 and 2009, the System had approximately $\$ 12,745,000$ and $\$ 12,695,000$, respectively, in cash on deposit at US Bank. These balances were insured by the Federal Deposit Insurance Corporation ("FDIC") for $\$ 250,000$. The remaining balances are 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 $\$ 250,000$. The market value of the collateralized securities at December 31, 2010 was $\$ 12,767,456$. A significant portion of the System's investments is held in trust by US Bank of St. Louis, N.A.

On December 31, 2010, the System received $\$ 22,118,617$ from the St. Louis Board of Education for the 2010 St. Louis Public Schools' annual regular pension contribution and sick leave conversion contribution and held it in a cash equivalents account until investment allocations were implemented.

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, 2010, 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 Investments |
| :---: | :---: | :---: | :---: |
| The Bank of New York Mellon | \$ | 60,798,979 | 6.6\% |
| Grantham, Mayo, Van Otterloo \& Co. |  | 47,564,925 | 5.2\% |
| Real Estate Investments |  |  |  |
| UBS Global Asset Management |  | 47,890,147 | 5.2\% |

## NOTES TO FINANCIAL STATEMENTS <br> NOTE 5 - RISKS AND UNCERTAINTIES (CONTINUED)

## Credit Risk of Debt Securities

The System's rated debt investments as of December 31, 2010 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 the overall average quality of each high-grade domestic fixed income portfolio shall be AA or better and the average quality rating of securities held in a domestic high-yield portfolio shall be B or better. The overall average quality of each global fixed income portfolio shall be A or better. Non-rated issues are allowed as long as the quality is sufficient to maintain the overall average rating noted.

| Rate Debt InstrumentValue | Fair Quality Ratings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | AAA |  | AA1 |  | AA2 |  |
| Corporate bonds and debentures <br> Foreign government and corporate obligations <br> United States government securities | \$ | 7,603,526 | \$ | 773,631 | \$ | 1,035,714 |
|  |  | 19,722,700 |  | 141,859 |  | 17,166,119 |
|  |  | 22,434,759 |  |  |  |  |
|  | \$ | 49,760,985 | \$ | 915,490 | \$ | 18,201,833 |
|  |  | AA3 |  | A1 |  | A2 |
| Corporate bonds and debentures <br> Foreign government and corporate obligations <br> United States government securities | \$ | 1,249,680 | \$ | 2,074,908 | \$ | 2,791,784 |
|  |  | 1,274,627 |  | $\begin{array}{r} 1,275,312 \\ 52,370 \\ \hline \end{array}$ |  | 5,721,288 |
|  | \$ | 2,524,307 | \$ | 3,402,590 | \$ | 8,513,072 |
|  |  | A3 |  | BAA1 |  | BAA2 |
| Corporate bonds and debentures <br> Foreign government and corporate obligations <br> United States government securities | \$ | 1,780,028 | \$ | 1,713,270 | \$ | 4,817,698 |
|  |  | 915,752 |  | 1,971,766 |  | 1,626,164 |
|  | \$ | 2,695,780 | \$ | 3,685,036 | \$ | 6,443,862 |
|  |  | BAA3 |  | BA1 |  | BA2 |
| Corporate bonds and debentures <br> Foreign government and corporate obligations <br> United States government securities | \$ | 3,402,411 | \$ | 2,830,053 | \$ | 3,042,240 |
|  |  | 261,802 |  | 475,238 |  | 1,992,605 |
|  |  |  |  |  |  |  |
|  | \$ | 3,664,213 | \$ | 3,305,291 | \$ | 5,034,845 |

NOTES TO FINANCICAL STATEMENTS
NOTE 5 - RISKS AND UNCERTAINTIES (CONTINUED)
Credit Risk of Debt Securities (Continued)


## NOTES TO FINANCIAL STATEMENTS

## NOTE 5 - RISKS AND UNCERTAINTIES (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:

Cash

| Currency | Equivalents |  | Debt | Equity | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Euros | \$ | 3 | \$ 16,887,464 | \$ 21,692,268 | \$ 38,579,735 |
| Swedish Krona |  | 29,749 | 1,028,226 |  | 1,057,975 |
| Australian Dollar |  | 11,792 | 3,926,640 | 864,128 | 4,802,560 |
| Swiss Franc |  |  |  | 1,763,529 | 1,763,529 |
| Mexican Peso |  |  | 515,123 |  | 515,123 |
| New Zealand Dollar |  | 18 |  |  | 18 |
| Polish Zloty |  |  | 3,450,655 |  | 3,450,655 |
| Indonesian Rupiah |  |  | 262,705 |  | 262,705 |
| Japanese Yen |  | 51,230 | 14,747,828 | 7,459,658 | 22,258,716 |
| Korean Won |  |  |  | 1,480,125 | 1,480,125 |
| Hong Kong Dollar |  |  |  | 756,000 | 756,000 |
| Canadian Dollar |  |  |  | 1,113,019 | 1,113,019 |
| British Pound Sterling |  | 19 | 1,076,271 | 3,348,995 | 4,425,285 |
| Qatari Riyal |  |  | 865,100 |  | 865,100 |
| Various |  |  | 3,619,662 | 1,497,443 | 5,117,105 |
|  | \$ | 92,811 | \$ 46,379,674 | \$ 39,975,165 | \$ 86,447,650 |

## Interest Rate Risk

The System does not have a formal policy to limit interest rate risk on debt securities. 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 | \$ 68,563,470 | \$ 1,050,045 | \$ 17,377,008 |
| Foreign government and corporate obligations | 56,380,078 | 4,586,291 | 20,667,101 |
| United States government securities | 48,690,369 | 203,558 | 12,215,297 |
|  | \$ 173,633,917 | \$ 5,839,894 | \$ 50,259,406 |


| Investment Type |
| :--- |
| Corporate bonds and debentures |
| Foreign government and |
| $\quad$ corporate obligations |
| United States government |
| securities |


| 6-10 years | 10+ years |
| :---: | :---: |
| \$ 20,635,161 | \$ 29,501,256 |
| 21,721,264 | 9,405,422 |
| 8,641,668 | 27,629,846 |
| \$ 50,998,093 | \$ 66,536,524 |

## NOTES TO FINANCICAL STATEMENTS

## NOTE 6 - PROPERTY AND BUILDING

Property and Building as of December 31, 2010 and 2009 consist of:

|  | 2010 | 2009 |
| :---: | :---: | :---: |
| Land | \$ 229,451 | \$ 229,451 |
| Building | 2,065,061 | 2,065,061 |
| Tenant improvements | 158,120 | 158,120 |
|  | 2,452,632 | 2,452,632 |
| Less accumulated depreciation | 232,860 | 165,421 |
| Total Property and Building | \$2,219,772 | \$2,287,211 |

## NOTE 7 - FAIR VALUE MEASUREMENTS

Effective January 1, 2009 the System adopted Financial Accounting Standards Board (FASB) ASC 820 - Fair Value Measurements and Disclosures with respect to (i) all applicable financial assets and liabilities and (ii) nonfinancial assets and liabilities that are recognized or disclosed at fair value in the System's financial statements on a recurring basis (at least annually). FASB ASC 820 requires the System to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the System's market assumptions. These two types of inputs create the following fair value hierarchy:

Level 1 Valuations based on unadjusted quoted prices available for identical assets in active markets that the plan has the ability to access.

Level 2 Valuations based on quoted prices in markets which are not active, or for which all significant inputs are observable, either directly or indirectly, or derived principally from or corroborated by observable market data by correlation or other means.

Level 3 Valuations based on inputs that are unobservable.
Fair value is an exit price that represents the amount that would be received upon sale of an asset or paid to transfer a liability in an orderly transaction between market participants.

Except for the investments discussed below and in Note 3, the System does not have any financial instruments which are required to be measured at fair value on a recurring basis. Non-financial assets such as property and equipment are measured at fair value when there is an indicator of impairment and recorded at fair value only when impairment is recognized.

The carrying amounts of cash and cash equivalents, accrued interest and dividends, other receivables, accounts payable and accrued expenses approximate fair value because of the short-term maturity of these items.

The assets' fair value measurement levels within the fair value hierarchy are based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used should maximize the use of observable inputs and minimize the use of unobservable inputs. The inputs or methodology used for valuing securities are not necessarily an indication of the risks associated with investing in those securities.

## Financial Statements

## NOTES TO FINANCIAL STATEMENTS

## NOTE 7 - FAIR VALUE MEASUREMENTS (CONTINUED)

The following are descriptions of the valuation methodologies used for assets measured at fair value. There have been no changes in the methodologies used at December 31, 2010 and 2009.
U.S. Treasury obligations, other government obligations, common stocks, corporate and foreign bonds: Valued based upon the quoted market value as of the last business day of the year as determined by the System's independent investment custodians.

Mutual funds: Valued at quoted market prices based on the net asset value of shares held by the System at year end.

Money market accounts: Valued based on yields currently available on comparable securities of issuers with similar credit rating.

Limited partnerships: The investments in the limited partnerships are stated at cost as determined by the tax basis K-1s.
Real estate partnerships - Insurance Contracts: These investments are stated at fair value as determined by the insurance companies.

Real estate partnerships - Other: These investments are stated at cost based on contributions made and distributions received.

Joint ventures: These investments are stated at cost as determined by the tax basis K-1s received by the System.

Credit opportunity Investments: Valued at quoted market prices based on the net asset value of shares held by the System at year end.

The preceding methods described may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, although the System believes its valuation methods are appropriate and consistent with those of other market participants, the use of different methodologies or assumptions to determine fair values of certain instruments could result in a different fair value measurement at the reporting date.

The following table sets forth by level, within the fair value hierarchy, the System's assets that are measured at fair value as of December 31, 2010:

|  | Level 1 | Level 2 | Level 3 |
| :---: | :---: | :---: | :---: |
| Credit opportunity investments | \$ 23,406,472 |  |  |
| U.S. Trea sury and other government obligations |  | \$ 48,690,369 |  |
| Corporate bonds |  | 68,563,470 |  |
| Foreign investments |  | 109,773,594 |  |
| Common stocks | 265,038,827 |  |  |
| Mutual funds | 303,286,315 |  |  |
| Money market accounts |  | 33,566,529 |  |
| Real estate partnerships |  |  |  |
| - insurance contracts |  |  | \$ 47,890,147 |
| Limited partnerships |  |  | 21,702,478 |
|  | \$591,731,614 | \$260,593,962 | \$ 69,592,625 |

## NOTES TO FINANCICAL STATEMENTS

## NOTE 7 - FAIR VALUE MEASUREMENTS (CONTINUED)

The following table sets forth a summary of changes in the fair value or cost value of the System's Level 3 assets for the year ended December 31, 2010:

|  | Insurance Contracts |  | Limited <br> Partnerships <br> at cost |  |
| :---: | :---: | :---: | :---: | :---: |
| Balance, beginning of the year | \$ | 40,811,416 | \$ | 19,254,133 |
| Purchases, sales, issuances, and settlements (net) |  |  |  | $(1,144,134)$ |
| Investment income (net) |  | 2,704,538 |  |  |
| Realized gains |  | 13,801 |  | 3,592,479 |
| Unrealized gains relating to instruments still held at the reporting date |  | 4,717,256 |  |  |
| Management fees |  | $(356,864)$ |  |  |
| Balance, end of year | \$ | 47,890,147 |  | 21,702,478 |


|  | Venture Capital <br> Partnerships <br> at cost |  |
| :--- | ---: | ---: |
| Balance, beginning of the year | 810,668 <br> Purchases, sales, issuances, and settlements (net) | $(115,916)$ <br> 47,880 <br> Investment income (net) <br> Realized gains (losses) <br> Balance, end of year |

## NOTE 8 - SUBSEQUENT EVENT

The System has evaluated subsequent events through April 11, 2011, the date on which the financial statements were available to be issued.

## SCHEDULE OF FUNDING PROGRESS (in millions)

| Actuarial |  |  |
| :---: | :---: | :---: |
| Valuation <br> Date <br> January 1, |  | ctuarial Value of Assets <br> (a) |
| 1996 | \$ | 562.2 |
| 1997 |  | 598.6 |
| 1998 |  | 644.4 |
| 1999 |  | 694.3 |
| 2000 |  | 770.1 |
| 2001 |  | 828.1 |
| 2002 |  | 861.1 |
| 2003 |  | 873.3 |
| 2004 |  | 902.0 |
| 2005 |  | 935.3 |
| 2006 |  | 983.8 |
| 2007 |  | 1,003.4 |
| 2008 |  | 1,014.9 |
| 2009 |  | 963.9 |
| 2010 |  | 950.7 |

Actuarial
Valuation

| Date |
| :---: |
| January 1, |
| 1996 |

1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010

Funded
Ratio
$\frac{(\mathrm{a} / \mathrm{b})}{84.6}$
83.5
84.8
82.0
82.1
81.0
80.5
82.1
84.0
86.3
87.6
87.2
87.6
87.6
88.4

Actuarial Accrued
Liability (AAL) -
Frozen Entry Age
(b)
\$ 664.8
716.7
759.7
846.9
937.7

1,022.0
1,069.8
1,063.2
1,074.3
1,084.4
1,122.6
1,150.2
1,158.9
1,099.9
1,076.0

| Annual |
| :---: |
| Covered Payroll |
| (c) |
| $\$$ |
| 206.9 |
| 210.2 |
| 210.8 |
| 215.6 |
| 216.7 |
| 235.1 |
| 243.9 |
| 283.9 |
| 255.3 |
| 240.2 |
| 227.0 |
| 222.4 |
| 225.2 |
| 234.5 |
| 242.0 |

Unfunded
AAL (UAAL)
(b-a)
\$ 102.6
118.1
115.3
152.6
167.6
193.9
208.7
189.9
172.3
149.1
138.8
146.8
144.0
136.0
125.3

UAAL as a $\%$ of
Covered Payroll
((b-a)/c)
49.6 \%
56.2
54.7
70.8
77.3
82.5
85.6
66.9
67.5
62.1
61.1
66.0
63.9
58.0
51.8

## SCHEDULE OF EMPLOYER CONTRIBUTIONS

Employer Contributions


The information presented in the required supplemental schedules was determined as part of the actuarial valuation prepared by AON Consulting at January 1, 2010. 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.
$8.00 \%$ for 2010 and 2009, 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.

## Financial Statements

## SCHEDULES OF OPERATING EXPENSES

 YEARS ENDED DECEMBER 31, 2010 AND 2009|  | 2010 |  | 2009 |  |
| :---: | :---: | :---: | :---: | :---: |
| Actuarial services | \$ | 162,759 | \$ | 150,940 |
| Accounting and auditing fees |  | 47,961 |  | 55,382 |
| Computer programming and consultation |  | 54,208 |  | 56,658 |
| Convention, conferences, seminars |  |  |  |  |
| Executive Director |  | 4,410 |  | 4,274 |
| Trustees |  | 20,049 |  | 21,574 |
| Depreciation expense |  | 67,438 |  | 62,168 |
| Dues and subscriptions |  | 5,969 |  | 4,460 |
| Employee benefits |  | 2,987 |  | 4,353 |
| Furniture and equipment |  | 9,441 |  | 5,971 |
| Insurance - group hospitalization |  | 65,255 |  | 58,100 |
| Insurance - casualty and bonding |  | 82,861 |  | 81,685 |
| Legal fees and expense |  | 61,845 |  | 55,169 |
| Medical fees |  | 700 |  | 843 |
| Office repairs and maintenance |  | 51,409 |  | 29,074 |
| Office supplies and expense |  | 16,050 |  | 14,390 |
| Postage |  | 52,022 |  | 69,125 |
| Pension contribution |  | 48,617 |  | 51,995 |
| Printing and publishing |  | 51,039 |  | 44,299 |
| Occupancy Expense |  | 30,460 |  | 21,046 |
| Salaries - administrative and clerical |  | 530,177 |  | 491,883 |
| Special Project consultation |  | 37,944 |  | 37,944 |
| Taxes, Payroll |  | 40,558 |  | 37,629 |
| Taxes, Real Estate (Refund) |  | - |  | - |
| Telephone |  | 15,059 |  | 16,340 |
| Utilities |  | 29,007 |  | 18,884 |
| Miscellaneous expense |  | 11,077 |  | 20,840 |
| Total | \$ | 1,499,302 | \$ | 1,415,026 |

## 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:

|  | 2010 | 2009 |
| :---: | :---: | :---: |
| Transportation registration | \$ 8,837 | \$ 8,617 |
| Lodging, Meals, and miscellaneous | 11,212 | 12,957 |
| Totals | \$ 20,049 | \$ 21,574 |

## THE CAPITAL MARKET ENVIRONMENT

## Domestic Stocks

The S\&P Mid Cap 400 posted gains for calendar year 2010 , with a return of $26.6 \%$. Growth stocks contributed to increases in year 2010 as shown by the Russell 1000 Growth Index, up $16.7 \%$, whereas value stocks, indicated by the Russell 1000 Value Index were up $15.5 \%$.

## Domestic Bonds

Fixed income markets were positive in 2010. The Barclays Capital Aggregate was up $6.5 \%$ with a fiveyear average of $5.8 \%$. MFC Global rose $11.2 \%$, Mellon Bond $6.6 \%$ and Earnest Partners 7.3\%.

The Barclays Capital High Yield bond index rose $15.1 \%$ in 2010 and Loomis Sayles rose 15.8 \%, beating the index.

## International Markets

The international equity markets performance corresponded with the MSCI EAFE Index, which was up $7.8 \%$ while emerging markets equities were up $18.9 \%$.

The Citigroup World Government Bond Index finished 2010 on a positive note with a return of $5.2 \%$.

## INVESTMENT PERFORMANCE

## Investment Goals

PSRSSTL has a well-diversified investment portfolio with a long-term goal of earning an $8.6 \%$ annual return. Over the short-term (three to five years), the Board of Trustees has structured the PSRSSTL investment portfolio to mitigate volatility with a goal of ranking in the top half of a universe of similar public funds.

## Investment Performance

For the year ending December 31, 2010, the total PSRSSTL portfolio posted a gain of $14.9 \%$, ranking $30^{\text {th }}$ within the Investment Consultants' Cooperative (ICC) Universe of Public Funds. For the five-year period ending December 31, 2010, the total PSRSSTL portfolio ranked $22^{\text {nd }}$ with a $5.4 \%$ return.

Investment returns for the retirement system's portfolio, stocks and bonds relative to other public funds and market indices for the one-year and fiveyear periods ending December 31, 2010 are set forth below.

|  | One <br> Year | Five <br> Years |
| :---: | ---: | :---: |
| PSRS Total Portfolio | $14.9 \%$ | $5.4 \%$ |
| Median Public Fund | $13.4 \%$ | $4.8 \%$ |
|  |  |  |
| PSRS Domestic Equities | $21.4 \%$ | $3.7 \%$ |
| Russell 3000 Index | $19.4 \%$ | $3.4 \%$ |
| PSRS Domestic Bonds | $11.9 \%$ | $6.8 \%$ |
| Barclays Capital Aggregate | $6.5 \%$ | $5.8 \%$ |
| Barclays Capital High Yield | $15.1 \%$ | $8.9 \%$ |
| PSRS International Equities | $12.1 \%$ | $4.0 \%$ |
| MSCI EAFE Index | $7.8 \%$ | $2.5 \%$ |
| PSRS Emerging Market Equities | $21.7 \%$ | $14.0 \%$ |
| MSCI Emerging Index | $18.9 \%$ | $12.8 \%$ |
| PSRS Global Bonds |  |  |
| Citigroup World Government | $5.2 \%$ | $7.1 \%$ |

## 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 2010.

## Investment Information

## ASSET ALLOCATION AND INVESTMENT MANAGERS <br> AS OF DECEMBER 31, 2010 (000s omitted)

RELATIVE TO TOTAL PORTFOLIO

|  | MANAGEMENT | MARKET VALUE |  | TARGET VALUE |  | VARIANCE |  | MARKET VALUE |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | STYLE | Value | \% | Value | \% | Value | \% | Value | \% |
| LARGE CAP GROWTH DOMESTIC EQUITIES |  | 93,098 | 10.1\% | 83,367 | 9.0\% | 9,731 | 1.1\% |  |  |
| Buford, Dixon, Harper \& Sparrow | Large Cap Growth |  |  |  |  |  |  | 18,634 | 20.0\% |
| Intech | Large Cap Growth |  |  |  |  |  |  | 28,881 | 31.0\% |
| Monetary Management Group | Large Cap Growth |  |  |  |  |  |  | 45,583 | 49.0\% |
| LARGE CAP CORE DOMESTIC EQUITIES |  | 25,735 | 2.8\% | 27,789 | 3.0\% | $(2,054)$ | -0.2\% |  |  |
| Batterymarch Financial | Large Cap Core |  |  |  |  |  |  | 15,981 | 62.1\% |
| Mellon Equity Index | Large Cap Core |  |  |  |  |  |  | 9,754 | 37.9\% |
| LARGE CAP VALUE DOMESTIC EQUITIES |  | 84,755 | 9.1\% | 83,367 | 9.0\% | 1,388 | 0.1\% |  |  |
| Chicago Equity Partners | Large Cap Value |  |  |  |  |  |  | 53,199 | 62.8\% |
| The Edgar Lomax Company | Large Cap Value |  |  |  |  |  |  | 31,556 | 37.2\% |
| MID CAP GROWTH DOMESTIC EQUITIES |  | 30,973 | 3.3\% | 27,789 | 3.0\% | 3,184 | 0.3\% |  |  |
| New Amsterdam Partners | Mid Cap Growth |  |  |  |  |  |  | 30,973 | 100.0\% |
| SMALL/MICRO CAP DOMESTIC EQUITIES |  | 81,445 | 8.8\% | 64,841 | 7.0\% | 16,604 | 1.8\% |  |  |
| Westfield Capital Management | Small Cap Growth |  |  |  |  |  |  | 27,139 | 33.3\% |
| Systematic Financial Management | Small Cap Value |  |  |  |  |  |  | 29,850 | 36.7\% |
| Dimensional Fund Advisors | Small Cap Core |  |  |  |  |  |  | 24,456 | 30.0\% |
| GLOBAL TACTICAL ASSET ALLOCATION (GTAA) |  | 98,038 | 10.6\% | 111,156 | 12.0\% | $(13,118)$ | $-1.4 \%$ |  |  |
| GMO Global Balanced Asset Allocation |  |  |  |  |  |  |  | 47,565 | 48.5\% |
| Mellon Global Alpha I |  |  |  |  |  |  |  | 50,473 | 51.5\% |
| INTERNATIONAL EQUITIES |  | 131,680 | 14.2\% | 129,682 | 14.0\% | 1,998 | 0.2\% |  |  |
| Battermarch GL Emerging | Emerging Markets |  |  |  |  |  |  | 32,096 | 24.4\% |
| Causeway | International Equities |  |  |  |  |  |  | 41,157 | 31.3\% |
| Dimensional Fund Advisors | Emerging Markets |  |  |  |  |  |  | 17,028 |  |
| Pyramis | International Equities |  |  |  |  |  |  | 41,399 | 31.4\% |
| DOMESTIC BONDS |  | 78,320 | 8.5\% | 92,630 | 10.0\% | $(14,310)$ | $-1.5 \%$ |  |  |
| Earnest | Core Domestic Bonds |  |  |  |  |  |  | 20,182 | 25.8\% |
| Mellon Index Bond | Core Domestic Bonds |  |  |  |  |  |  | 572 | 0.7\% |
| MFC | Core Domestic Bonds |  |  |  |  |  |  | 57,566 | 73.5\% |
| HIGH YIELD DOMESTIC BONDS |  | 44,601 | 4.8\% | 46,315 | 5.0\% | $(1,714)$ | -0.2\% |  |  |
| Loomis Sayles | High Yield Bonds |  |  |  |  |  |  | 44,601 | 100.0\% |
| CREDIT OPPORTUNITIES |  | 23,406 | 2.5\% | 18,526 | 2.0\% | 4,880 | 0.5\% |  |  |
| Loomis Sayles | Credit Asset Trust |  |  |  |  |  |  | 23,406 | 100.0\% |
| GLOBAL BONDS |  | 53,972 | 5.8\% | 55,578 | 6.0\% | $(1,606)$ | -0.2\% |  |  |
| Mondrian | Global Bonds |  |  |  |  |  |  | 53,972 | 100.0\% |
| MARKET NEUTRAL STRATEGY |  | 33,972 | 3.7\% | 37,052 | 4.0\% | $(3,080)$ | -0.3\% |  |  |
| Blue Rock | Market Neutral |  |  |  |  |  |  | 33,972 | 100.0\% |
| HEDGED STRATEGIES |  | 45,985 | 5.0\% | 46,315 | 5.0\% | (330) | 0.0\% |  |  |
| K2 | Hedge Funds |  |  |  |  |  |  | 22,770 | 49.5\% |
| Mariner | Hedge Funds |  |  |  |  |  |  | 23,215 | 50.5\% |
| REAL ASSETS |  |  |  | 27,789 | 3.0\% |  |  |  |  |
| REAL ESTATE |  | 47,890 | 5.2\% | 46,315 | 5.0\% | 1,575 | 0.2\% |  |  |
| UBS Trumbull Property Funds | Real Estate |  |  |  |  |  |  | 47,890 | 100.0\% |
| ALTERNATIVE INVESTMENTS |  | 26,214 | 2.8\% | 27,789 | 3.0\% | $(1,575)$ | -0.2\% |  |  |
| Private Equity | Alternative Investments |  |  |  |  |  |  | 26,214 | 100.0\% |
| CASH (Does Not Include Managers' Residual Cash) |  | 26,214 | 2.8\% | 0 | 0.0\% | 26,214 | 2.8\% |  |  |
| PSRSSTL | Cash Accounts |  |  |  |  |  |  | 26,214 | 100.0\% |
| Mellon Money Market | TIF |  |  |  |  |  |  | 0 | 0.0\% |
| TOTAL |  | \$926,298 | 100.0\% | \$926,298 | 100.0\% |  |  |  |  |

The target values above represent the Asset Allocation Policy adopted by the Board of Trustees in late 2010. The policy includes a new real assets class; the Trustees should address this in 2011. The Board of Trustees expanded international equities by adding Dimensional Fund Advisors as an emerging markets money manager. The investment was funded by reallocating funds from other equity investments.

## DOMESTIC EQUITY INVESTMENTS

| 2010 Return | $21.4 \%$ |
| :--- | ---: |
| Average Market Capitalization | $\$ 67,863,000,000$ |
| P/E Ratio | 15.8 |
| Price/Book Ratio | 3.5 |
| Five Year Earnings Growth Rate | 6.9 |


| Ten Largest Domestic Equity Holdings |  |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :---: | :---: | :---: |
|  | Market | Percent of |  | Market | Percent of |  |
| $\underline{\text { Company }}$ | $\underline{\text { Value }}$ | $\underline{\text { Portfolio }}$ | $\underline{\text { Company }}$ | $\underline{\text { Value }}$ | $\underline{\text { Portfolio }}$ |  |
| EXXON MOBIL CORP | $14,127,918$ | $2.2 \%$ | JPMORGAN CHASE + CO | $8,427,041$ | $1.3 \%$ |  |
| APPLE INC | $13,457,318$ | $2.1 \%$ | AT+T INC | $8,174,372$ | $1.3 \%$ |  |
| CHEVRON CORP | $9,555,847$ | $1.5 \%$ | MICROSOFTCORP | $8,012,340$ | $1.2 \%$ |  |
| JOHNSON +JOHNSON | $9,460,518$ | $1.4 \%$ | GENERAL ELECTRIC CO | $7,620,376$ | $1.2 \%$ |  |
| INTL BUSINESS MACHINE | $8,553,971$ | $1.3 \%$ | PROCTER +GAMBLE CO | $7,482,265$ | $1.1 \%$ |  |


|  | Ten Best Performing Domestic Equity Holdings |  |  |
| :--- | :--- | :--- | :--- |
|  |  |  | $\underline{\text { Return }}$ |
| Company | $\underline{\text { Company }}$ | $185.8 \%$ |  |
| ANTE5 INC | $600.0 \%$ | PHARMATHENE INC | $183.9 \%$ |
| FLOTEK INDS INC DEL | $294.9 \%$ | BLOCKBUSTER INC | $180.3 \%$ |
| AMERICAN LEARNING CORP. | $284.6 \%$ | MACATAWA BK CORP | $167.3 \%$ |
| VALUEVISION INTL INC | $225.0 \%$ | INTERMUNEINC | $164.1 \%$ |


| Ten Worst Performing Domestic Equity Holdings |  |  |  |
| :--- | :--- | :--- | :--- |
|  | $\underline{\text { Return }}$ | $\underline{\text { Company }}$ | $\underline{\text { Return }}$ |
| Company | $-81.4 \%$ | INTEGRAL VISION | $-65.7 \%$ |
| COMARCO INC | $-80.2 \%$ | FIRST ST BANCORPORATION | $-65.5 \%$ |
| MOLECULAR INSIGHT PHARMCE | $-79.1 \%$ | BIODEL INC | $-65.5 \%$ |
| RAINIER PAC FINL GROUP IN | $-70.9 \%$ | UCBH HLDGSINC | $-65.0 \%$ |
| BANK FL CORP NAPLES | $-67.4 \%$ | MERCANTILE BANCORP INC IL | $-64.6 \%$ |
| TRANS LUX CORP |  |  |  |

## DOMESTIC BOND INVESTMENTS

PSRSSTL domestic bond investments had an average maturity of 8.1 years, a duration of 5.9 years and an average quality rating of Baa2. During 2010, the PSRSSTL domestic bond portfolio earned $11.9 \%$. Below are bond summary statistics for the period ending December 2010.

| Bond Portfolio <br> Yield to Maturity | Percent of Portfolio |
| :---: | :---: |
| $0.0-5.0$ | $41.8 \%$ |
| $5.0-7.0$ | $18.7 \%$ |
| $7.0-9.0$ | $21.2 \%$ |
| $9.0-11.0$ | $5.9 \%$ |
| $11.0-13.0$ | $2.2 \%$ |
| $13+$ | $2.7 \%$ |
| Unclassified | $7.6 \%$ |


| Bond Portfolio <br> Average Life | Percent of Portfolio |
| :---: | :---: |
| $0.0-1.0$ | $6.0 \%$ |
| $1.0-3.0$ | $9.8 \%$ |
| $3.0-5.0$ | $21.0 \%$ |
| $5.0-10.0$ | $35.5 \%$ |
| $10.0-20.0$ | $13.7 \%$ |
| $20.0+$ | $7.2 \%$ |
| Unclassified | $6.9 \%$ |


| Bond Portfolio <br> Quality Rating | Percent of Portfolio |
| :--- | :---: |
| TREASURY | $2.9 \%$ |
| AGENCY | $18.1 \%$ |
| AAA | $6.3 \%$ |
| AA-1 TO AA-3 | $2.8 \%$ |
| A-1 TO A-3 | $4.7 \%$ |
| BAA-1 TO BAA-3 | $12.6 \%$ |
| BA-1 TO BA-3 | $10.9 \%$ |
| B-1 TO B-3 | $15.3 \%$ |
| CAA TO C | $5.9 \%$ |
| NOT RATED | $2.3 \%$ |
| UNCLASSIFIED | $18.2 \%$ |

## BROKERAGE FEES

Company<br>Abel Noser<br>Aqua Securities<br>Avondale Partners<br>Baird \& Company<br>Barclays Capital<br>Blaylock \& Co.<br>Bloomberg Tradebook<br>BMO Capital Markets<br>BNP Paribas<br>BNY Convergex<br>BOE Securities<br>Brean, Murray, Carret \& Co<br>Broadcort Cap Corp<br>BTIG, LLC<br>Buckingham Research Group<br>Cabrera Capital Markets<br>Calyon Securities<br>Canaccord Adams Inc.<br>Canadian Imperial Bank<br>Cantor Fitzgerald<br>Cap Institutional Services<br>Caris and Company<br>Cheevers \& Co., Inc.<br>Cheuvreux Devirieu<br>Citigroup

| Commission Paid | Company |
| ---: | :--- | :--- |
| $\$ 6,521.70$ | First Clearing |
| 125.00 | Friedman Billings \& Ramsey |
| 12.00 | Goldman Sachs |
| $2,667.44$ | Guzman \& Company |
| $7,606.58$ | Heflin \& Co. |
| 590.00 | Instinet |
| $3,213.00$ | Investment Techonology Group |
| 310.00 | ISI Group Inc. |
| 322.76 | Ivy Securities Inc. |
| $35,584.42$ | J P Morgan |
| 288.00 | Jackson Partners |
| 80.00 | Jackson Securities |
| $21,941.41$ | Janney Securities |
| 72.00 | Jeffries \& Co. |
| 516.00 | JMP Securities |
| $1,818.00$ | JNK Securities |
| 219.49 | Jones Trading Institutional |
| $1,112.00$ | Kaufman Brothers |
| 706.84 | Keefe Bruyette \& Woods |
| $2,166.50$ | Kepler |
| $14,655.07$ | Kellogg Partners |
| 236.00 | Keybanc Capital Markets |
| 418.00 | King CL \& Associates |
| 2.34 | Knight Clearing Servicies |
| $5,656.09$ | Knight Direct |
| 224.00 | Knight Equity Markets |
| 100.00 | Labranche Financial |
| 973.00 | Leerink Swann \& Co. |
| 321.00 | Liquidnet Inc. |
| $1,258.04$ | Longbow Securities LLc |
| $13,621.32$ | Loop Capital Markets |
| 68.00 | Macquarie Securites |
| 436.00 | Merrill Lynch |
| 237.71 | Merriman Curhan Ford \& Co. |
| $6,694.80$ | Miller Tabak \& Co. |
| $1,012.68$ | Mitsubishi |
| 403.14 | Mizuho Securities USA |
|  |  |

Commission Paid Company
\$12,792.14 Morgan Keggan \& Co.
2,430.00 Morgan Stanley
6,797.38 Needham \& Company
1,694.48 Noble International
33.00 Nomura Securities

13,634.63 NY Fix Transaction Services
25,547.86 Oppenheimer \& Co.
1,256.20 Pacific American Securities
1,309.00 Pacific Crest Seurities
7,967.72 Penson Financial Services
723.00 Pershing

1,208.00 Pipeline Trading Services
504.00 Piper Jaffray 184.00 Raymond James 314.00 212.00 RBC Capital Markets 2,375.25 360.00 RBS Securities 279.32
60.00 Rochdale Securities 315.00
756.06 Rosenblatt Securities $\quad 1,990.15$
183.91 Samsung 135.23

3,446.00 Sandler O'Neill \& Partners $\quad 387.00$
812.00 Sanford C. Bernstein \& Co 4,547.87

1,197.00 Santander Investment Sec 10.50
132.00 Societe General $1,284.25$

1,784.80 State Street $\quad 64,281.74$
3,192.08 Stephens Inc. 208.00 747.60 Sterne Agee Leach Inc 434.00 833.40 Stifel Nicolaus \& Co. 4,621.20

28,169.89 Svenska 107.36
1,524.00 Thinkpanmure LLC 129.80 21.00 UBS 14,350.95

1,955.52 Wedbush Morgan Securities 610.00
11,981.92 Weeden \& Co. 3,091.33 345.00 Wells Fargo Securities 891.00
112.00 William Blair \& Co. 472.00
764.31 Williams Capital Group $\quad 1,388.00$ 490.46

## MARKET VALUE OF ASSETS

| Investment Category | As of December 31, 2008 |  | As of December 31, 2009 |  | As of December 31, 2010 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value | \% of <br> Total | Market Value | $\%$ of <br> Total | Market Value | \% of <br> Total |
| Cash, Receivables, Cash Equivalents | \$56,938,756 | 7.0\% | \$61,958,719 | 6.9\% | \$48,008,324 | 5.1\% |
| Property and Building | 2,191,259 | 0.3\% | 2,287,211 | 0.3\% | 2,219,772 | 0.2\% |
| U.S. Government and Agency Issued Bonds | 39,874,724 | 4.9\% | 37,624,541 | 4.2\% | 48,690,369 | 5.2\% |
| Corporate Bonds | 67,306,306 | 8.3\% | 66,236,320 | 7.4\% | 68,563,470 | 7.3\% |
| Foreign Investments (bonds and stocks) | 127,345,590 | 15.7\% | 114,276,055 | 12.8\% | 109,773,594 | 11.7\% |
| Common and Preferred Stocks | 199,212,221 | 24.6\% | 249,011,409 | 27.9\% | 265,038,827 | 28.2\% |
| Mutual Funds | 242,606,336 | 29.9\% | 279,655,937 | 31.3\% | 303,286,315 | 32.3\% |
| Real Estate - Insurance Contracts | 51,997,538 | 6.4\% | 40,811,416 | 4.6\% | 47,890,147 | 5.1\% |
| Mortgages | 9,808 | 0.0\% | 4,068 | 0.0\% | 0 | 0.0\% |
| Credit opportunity Investments | 0 | 0.0\% | 20,591,527 | 2.3\% | 23,406,472 | 2.5\% |
| Alternative Investments * | 23,149,131 | 2.9\% | 20,064,801 | 2.2\% | 21,702,478 | 2.3\% |
| Total | \$810,631,669 | 100.0\% | \$892,522,004 | 100.0\% | \$938,579,768 | 100.0\% |

[^0]
# PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS 

ACTUARIAL REPORT
AS OF JANUARY 1, 2010

## PURPOSE OF THE REPORT

This report is submitted in accordance with Section 169.45015 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 and the retirement system; and (2) to develop information to measure the relative financial condition of the system.
The required contribution to the retirement system from the board of education, the retirement system, and the charter schools 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. Descriptions of the actuarial cost method and assumptions appear in sections 2 and 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 by considering each of these in measures in relation to the others. In doing so, recognition of changes in funding levels and requirements need to also take into account changes in benefit provisions. The measure that often receives the most focus is the magnitude and stability of the contribution rate. A stable rate normally indicates that consistent progress is being made in the funding of the system's liabilities. The contribution adequacy is directly measured through the prioritized solvency test. The actuarial balance sheet also provides an indication of the financial condition of the plan by comparing the sources of both the system assets liabilities and the system liabilities.

## COMMENTS

This actuarial valuation is based on the same actuarial assumptions and methods as those used in the prior actuarial valuation. As a data refinement and to be consistent with the valuation treatment of other employees, compensation for new hires with the Charter schools during 2009 was annualized to reflect a full year's pay.
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. Since actuarial gains (or losses) reflect short term deviations between actual and expected experience, annual gains (or losses) should be expected.
For 2010, the annual normal cost rate increased from $2.75 \%$ to $4.85 \%$ due to actuarial losses of approximately
$\$ 41$ million. $\$ 24$ million of the loss is attributable to the System's actuarial rate of return on assets which was $5.5 \%, 2.5 \%$ less than the assumed rate of return of $8.00 \%$. By comparison, the rate of return on the market value of assets was $18.8 \%$. The difference in these returns is because the actuarial value of assets has not yet fully recognized the asset losses that occurred during 2008. At January 1, 2010, the actuarial value of assets at $\$ 951$ million remains above market value of assets by approximately $\$ 60$ million. The remainder of the $\$ 41$ million loss is attributable to demographic changes.
The normal cost is determined annually and equals the product of the normal cost rate times covered payroll. For 2010, the annual normal cost due December 31, 2010 is $\$ 12,673,767$, as compared to $\$ 6,967,095$ for 2009, primarily due to the aforementioned increase in the normal cost accrual rate. Covered payroll increased slightly from $\$ 234.6$ million to $\$ 242.0$ million with all of the growth attributable to payroll growth at the Charter schools.
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 from January 1, 2006, when the Board of Trustees acted to redetermine the UFAAL. This portion of the contribution only changes to reflect changes in benefits, changes in actuarial assumptions and methods, and variations in the remaining UFAAL due to deviations between actual and expected contributions. Employer contributions for 2009 were $\$ 7.2$ million more than the annual required contribution, which reduced the UFAAL more than expected. As a result, the amortization payment is reduced from $\$ 12,440,627$ to $\$ 11,590,415$. In addition, it is being spread over a slightly larger payroll base so that the amortization payment component of the contribution rate drops from $5.3 \%$ to $4.8 \%$, partially offsetting the increase in Normal Cost due to the experience loss.
As a part of the package to increase benefits in 2001, the board of education agreed to fix the employer contribution at $8.00 \%$ for 2001 and institute a one year lag for future years. Therefore, this actuarial valuation is used to determine the actual contribution rate for 2011. The dollar amount of the actual contribution increased to $\$ 24,264,182$ for 2011 from $\$ 19,407,727$ for 2010. As a percentage of covered compensation, the contribution rate for 2011 increased to $10.03 \%$ from $8.27 \%$ for 2010.
The undersigned collectively meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.
AON Consulting


SUMMARY OF PRINCIPAL RESULTS OF THE
ACTUARIAL VALUATION AS OF JANUARY 1, 2010

## ANNUAL REQUIRED CONTRIBUTION

|  | Board of <br> Education | Retirement <br> System | Charter <br> Schools | Total |
| :--- | ---: | :---: | :---: | :---: |
| $\mathbf{2 0 1 0}$ | $10,411,884$ | 30,276 | $2,231,607$ | $12,673,767$ |
| Normal cost contribution | $9,521,877$ | 27,688 | $2,040,850$ | $11,590,415$ |
| Actuarial accrued liability <br> contribution | $19,933,761$ | 57,964 | $4,272,457$ | $24,264,182$ |
| Annual required <br> contribution | $198,775,945$ | 578,006 | $42,604,182$ | $241,958,133$ |
| Covered payroll | $10.03 \%$ | $10.03 \%$ | $10.03 \%$ | $10.03 \%$ |
| ARC as \% of covered <br> payroll |  |  |  |  |

2009*

| Normal cost contribution | $6,027,433$ | 17,453 | 922,209 | $6,967,095$ |
| :--- | ---: | ---: | ---: | ---: |
| Actuarial accrued liability <br> contribution | $10,762,743$ | 31,164 | $1,646,720$ | $12,440,627$ |
| Annual required <br> contribution | $16,790,176$ | 48,617 | $2,568,929$ | $19,407,727$ |
| Covered payroll | $202,943,889$ | 587,637 | $31,050,800$ | $234,582,326$ |
| ARC as \% of covered <br> payroll | $8.27 \%$ | $8.27 \%$ | $8.27 \%$ | $8.27 \%$ |


| System Assets | January 1, 2010 | January 1, 2009 |
| :--- | ---: | ---: |
| Expense and contingency reserve | $\$ 29,903,107$ | $\$$ |
| Market value, excluding expense \& contingency <br> reserve | $80,553,388$ |  |
| Actuarial value | $950,709,944$ | $779,237,596$ |
| System liabilities | $\$ 125,292,126$ | $963,851,408$ |
| Unfunded actuarial accrued liability | $\$ 1,111,070,953$ | $\$ 136,040,308$ |
| Actuarial present value of projected accrued |  | $\$ 1,093,606,648$ |
| benefits |  |  |
| Funding Ratio | $85.6 \%$ | $87.6 \%$ |

[^1]
## 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 and the actuarial accrued liability. The normal cost is the portion of costs which are assigned to the current year. The actuarial accrued liability represents the accumulation of normal costs that have theoretically been assigned to periods prior to the valuation date.

## ACTUARIAL ASSUMPTIONS

The true cost of a participant'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 approximately 75 years. Since provisions for this cost must be made prior to the exact determination, a model is created to 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. The suitability of actuarial assumptions is measured by how closely the experience of the system, on a long term basis, conforms to projected results.

While care is taken in the selection of actuarial assumptions, actual experience is expected to deviate
from these assumptions over the short term. 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 tend to predominate over a number of valuations, then it is possible that one or more of the actuarial assumptions is no longer appropriate. Thus, actuarial assumptions are continually monitored for reasonableness and subsequent cost estimates may be modified, as it becomes appropriate. While individual assumptions are intended to be representative, it is the aggregate effect of all actuarial assumptions working together that determines the prevalence of gains and losses.

A formal 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 probabilities of future events occurring that establish benefit payments are forecast utilizing the actuarial assumptions. Second, based on System provisions and current participant data, the amounts of benefits to be paid upon the occurrence of those events are projected. Next, assumptions for survival among retired participants 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. Finally, these discounted payments are 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 current assets, valued on an actuarial basis (the actuarial value of assets), 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 assets is determined using the assumed yield method of valuing assets. 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 less the expense and contingency reserve, 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.

## 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 participants 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, participant 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 participant 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, participant data and assets. However, the actuarial cost method has a direct impact on the incidence of the funding requirements.

The actuarial cost method used by the system is the "frozen entry age actuarial cost method." Under this method, on the initial actuarial valuation date for which
the cost method is used, the annual cost accruals (individual normal costs for each participant) are determined as a level percentage of pay for each year from entry age until retirement or termination. The UFAAL was originally determined as of January 1, 1981. Entry age is determined at the date each participant would have entered the system. The sum of these individual normal costs for all active participants 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 establishes the initial Unfunded Frozen Actuarial Accrued Liability (UFAAL).

In subsequent years, the UFAAL is only frozen in that it is not adjusted due to experience gains and losses. Instead, gains and losses are reflected through changes in the normal cost accrual rate. However the UFAAL, does change, increasing due to the addition of interest and additional normal costs, and decreasing due to contributions. Also supplements to the UFAAL occur if there are 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.

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 current assets and the remaining UFAAL.

Effective January 1, 2006, UFAAL was reestablished to better reflect an appropriate relationship between the normal cost and the actuarial accrued liability.

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, the date that it was reestablished.

## 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:

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.

Retiree Insurance - It is assumed that $80 \%$ of retirees enroll in the system's retiree healthcare insurance and that the monthly subsidy will remain at $\$ 89.10$ per month.

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

ACTUARIAL ASSUMPTIONS

ACTIVE MEMBER RATES OF DECREMENT

| Attained <br> Age | Withdrawal Rates |  | Disability Rates |  | RetirementRate |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 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 |
| . 000444 | 30 | . 000264 | . 037834 | 75 | . 028106 |
| . 000773 | 35 | . 000475 | . 064368 | 80 | . 045879 |
| . 001079 | 40 | . 000706 | . 110757 | 85 | . 077446 |
| . 001508 | 45 | . 001124 | . 183408 | 90 | . 131682 |
| . 002138 | 50 | . 001679 | . 267491 | 95 | . 194509 |
| . 003624 | 55 | . 002717 | . 344556 | 100 | . 237467 |
| . 006747 | 60 | . 005055 | . 397886 | 105 | . 293116 |
| . 012737 | 65 | . 009706 | . 400000 | 110 | . 364617 |
| . 022206 | 70 | . 016742 | . 400000 | 115 | . 400000 |

DISABLED LIFE MORTALITY RATES

| Death Rate |  |  |
| :--- | :---: | :---: |
| Male | Age | Female |
|  | .000773 | 30 |
| .001079 | 35 | .000475 |
| .001508 | 40 | .000706 |
| .002138 | 45 | .001124 |
| .003624 | 50 | .002717 |
| .006747 | 55 | .005055 |
| .012737 | 60 | .009706 |
| .022206 | 65 | .016742 |
| .037834 | 70 | .028106 |

## ACTUARIAL BALANCE SHEET AS OF JANUARY 1, 2010

## Actuarial Assets

| Actuarial value of present assets | $\$ 950,709,944$ |
| :--- | ---: |
| Actuarial present value of future member contributions | $98,168,720$ |
| Actuarial present value of future employer contributions for: |  |
| $\quad$ Normal Costs | $95,288,730$ |
| $\quad$ Actuarial Accrued Liability | $125,292,126$ |
| Total present and future assets | $\$ 1,269,459,520$ |

## Actuarial Liabilities

Actuarial present value of benefits now payable \$ 768,168,279
Actuarial present value of benefits payable in the future
Active members - New Plan \$461,600,944
Active members -- Old Plan 2,027,284
Active members -- DROP
0
Members on leave of absence without pay
5,770,229
Terminated members 31,892,784
Total payable in the future
Total liabilities for benefits

501,291,241
\$ 1,269,459,520

## PROJECTED BENEFIT OBLIGATION FUNDING STATUS

## Projected Benefit Obligation at January 1, 2010:

Retired members and beneficiaries currently receiving benefits and terminated members not yet receiving benefits
\$ 805,831,292
Current active members:
Accumulated member contributions, including interest
Employer-financed vested benefits 177,678,571
Employer-financed non-vested benefits 17,506,580
Total Projected Benefit Obligation
\$1,111,070,953
At January 1, 2010, the Projected Benefit Obligation was funded as follows:
Net assets available for benefits at actuarial value \$ 950,709,944
Unfunded Projected Benefit Obligation 160,361,009
$\begin{array}{ll}\text { Actuarial value funding ratio } & 85.6 \%\end{array}$
Net assets available for benefits at market value $\$ 861,659,811$
Unfunded Projected Benefit Obligation 249,411,142
Market value funding ratio $\quad 77.6 \%$

## 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 participant accumulated contributions (liability 1) and the liabilities for future benefits to inactive participants and beneficiaries (liability 2) will be fully covered by assets (except in unusual circumstances). In addition, the liabilities for service already rendered by active participants (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 Asset Valuation Method is discussed on page 33 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 the policy adopted by the Board of Trustees. The history of the Reserve is presented on page 40 of this Report.

As shown on page 41 of this Report, the fund had a rate of return of $5.49 \%$ on an actuarial value basis, which is $2.51 \%$ below the assumed rate of return of
$8.00 \%$ for 2009. Normally, in accordance with system policy, amounts would have been transferred from the investment contingency portion of the reserve, because the preliminary actuarial rate of return would have been less than the assumed rate of return by more than $1 \%$. However, the contingency reserve was exhausted at January 1, 2009, so no additional amounts are available.

The rate of return on an actuarial value basis is intended to be a more stable rate of return and fluctuate less than rates of return on a market value basis. Thus, the rate of return on an actuarial basis is not always a fair measure of the annual investment performance of the fund. Another indicator of actual performance during the year is the rate of return on a market value basis of $18.79 \%$, also presented on page 41 of this Report.

## DEVELOPMENT OF THE ACTUARIAL VALUE OF ASSETS

(1) Actuarial value of assets as of January 1, 2009

$$
\$ 963,948,861
$$

(2) Member contributions

$$
12,131,979
$$

(3) Employer contributions 28,598,502
(4) Benefit payments and expenses 105,103,897
(5) Investment increment at $8.0 \%, 8 \% \times\{(1)+.5 \times[(2)-(4)]\}$ 73,397,032
(6) Expected actuarial value on January 1, 2010:
$(1)+(2)+(3)-(4)+(5) \quad 972,972,477$
(7) Market value of assets on January 1, 2010 891,562,918
(8) Expense and Contingency Reserve on January 1, 2010 29,903,107
(9) Adjustment to the Contingency Reserve on January 1, 2010

0
(10) Excess of market value over expected actuarial value: (7) - (8) - (6)
(11) Market value adjustment: $20 \%$ x (10) $(22,262,533)$
(12) Actuarial Value of Assets as of January 1, 2010: (6) + (11) 950,709,944

## Actuarial Information

## EXPENSE AND CONTINGENCY RESERVE

Effective January 1, 1996, the Board of Trustees revised what has become the Expense and Contingency Reserve Policy (the "policy"), 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 help cover significant shortfalls in the actuarial rate of return. When a shortfall of more than $1 \%$ occurs, a portion of the reserve is released equal to one half of the amount of the shortfall up to $2 \%$ plus any remaining shortfall. When the rate of return exceeds the assumed rate of return by more than $1 \%$, the reserve is increased subject to a maximum reserve of $5 \%$ of the market value of the Retirement Fund. The addition equals one half of the amount of the excess up to $2 \%$ plus any remaining excess.

Since the actuarial return on assets was less than $7 \%$ during 2009, a portion of the reserve would normally be released. However, since the entire contingency reserve was released last year, nothing further is available to be released.

Below is a history of the Expense and Contingency Reserve:

| January 1 | Expense Reserve | Investment Contingency <br> 1996 | $\$ 33,702,346$ |
| :---: | :---: | :---: | :---: |$\quad$| Reserve |
| :---: |
| 1997 |

## 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, $2009 \quad \$ 809,792,984$
(ii) $\quad \mathrm{B}=$ Market Value of Assets as of January 1, $2010 \quad 891,562,918$
(iii) $\quad C=$ Contributions during the period 40,730,481
(iv) $\mathrm{D}=\mathrm{Disbursements} \mathrm{during} \mathrm{the} \mathrm{period} \quad 105,103,897$
(v) Rate of Return:
$\frac{B-A+D-C}{A+1 / 2(C-D)}$
$18.79 \%$
(vi) Actuarial Assumed Rate of Return for 2009
8.00\%
(vii) Difference between actual and assumed rates of return: (v) - (vi)
$10.79 \%$

## (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) $\quad \mathrm{A}=$ Actuarial Value of Assets as of January 1, $2009 \quad \$ 963,948,861$
(ii) $\quad \mathrm{B}=$ Actuarial Value of Assets as of January 1, 2010 950,709,944
(iii) $\quad \mathrm{C}=$ Contributions during the period $40,730,481$
(iv) $\mathrm{D}=\mathrm{Disbursements} \mathrm{during} \mathrm{the} \mathrm{period}$

105,103,897
(v) Rate of Return:
$\underline{B-A+D-C}$
A $+1 / 2(\mathrm{C}-\mathrm{D}) \quad 5.49 \%$
(vi) Actuarial Assumed Rate of Return for $2009 \quad 8.00 \%$
(vii) Difference between actual and assumed rates of return: (v) - (vi) (2.51) \%

## MEMBERSHIP AND BENEFITS PAID AS OF JANUARY 1, 2009

|  | Males | Females | Total |
| :---: | :---: | :---: | :---: |
| Active Members |  |  |  |
| Total Active Members | 1,219 | 3,606 | 4825 |
| Inactive Members (Terminated or Leave of Absence without Pay) | 645 | 1,251 | 1896 |
| Total Members Not Retired | 1864 | 4,857 | 6,721 |
| Retired Members and Beneficiaries |  |  |  |
| Retired Members and Contingent Annuitants | 1,028 | 2,786 | 3,814 |
| Survivors | 51 | 235 | 286 |
| Disabled Members | 73 | 197 | 270 |
| Benefit depleted | 37 | 111 | 148 |
| Total Retired Participants and Beneficiaries | 1,189 | 3,329 | 4,518 |
| Total Membership | 3,053 | 8,186 | 11,239 |


| Option | NUMBER OF RETIRED MEMBERS AND BENEFICIARIES |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Service Benefit |  | Disability Benefit |  | Survivor Benefit |  | Totals |
| 0 |  | 3,227 |  | 225 |  | 286 |  | 3,738 |
| 1 |  | 147 |  | 15 |  | - |  | 162 |
| 2 |  | 88 |  | 4 |  | - |  | 92 |
| 3 |  | 170 |  | 13 |  | - |  | 183 |
| 4 |  | 159 |  | 5 |  | - |  | 164 |
| 5 |  | 13 |  | 4 |  | - |  | 17 |
| 6 |  | 9 |  | 4 |  | - |  | 13 |
| 7 |  | 1 |  | - |  | - |  | 1 |
| Total |  | 3,814 |  | 270 |  | 286 |  | 4,370 |
|  | AMOUNT OF ANNUAL BENEFIT |  |  |  |  |  |  |  |
| Option |  | Service Benefit |  | Disability Benefit |  | Survivor Benefit |  | Totals |
| 0 | \$ | 73,517,064 | \$ | 2,593,692 | \$ | 2,798,232 | \$ | 78,908,988 |
| 1 |  | 2,677,716 |  | 197,772 |  | - |  | 2,875,488 |
| 2 |  | 1,936,104 |  | 70,524 |  | - |  | 2,006,628 |
| 3 |  | 3,363,864 |  | 127,320 |  | - |  | 3,491,184 |
| 4 |  | 3,883,212 |  | 97,416 |  | - |  | 3,980,628 |
| 5 |  | 336,076 |  | 29,485 |  | - |  | 365,561 |
| 6 |  | 197,196 |  | 21,275 |  | - |  | 218,471 |
| 7 |  | 44,580 |  | - |  | - |  | 44,580 |
| Total | \$ | 85,955,812 | \$ | 3,137,484 | \$ | 2,798,232 | \$ | 91,891,528 |

## 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 July 1, 2010 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.

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
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.

Depending on whether or not the retiree selected a benefit payment option, a surviving spouse of a deceased retired member may be eligible to continue 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

The Plan does not provide retired members with a scheduled COLA. The Board of Trustees and Board of Education may at times grant ad hoc increases in monthly pension benefits to retired members and their beneficiaries.

## General Information

The information presented below shows the growth of the Fund's assets, contributions and investments since 1944.



INVESTMENT GROWTH
(000'S OMITTED)


"Investing Your Money For Lifetime Securtiy" PSRSSTL


[^0]:    * Carried at Cost Value

[^1]:    *Prior year shown for comparison purposes only.

