


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

A Pension Trust Fund for Public School Employees

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St. Louis, Missouri 63108-3601
(314) 534-7444
www.psrsstl.org

Comprehensive Annual Financial Report Fiscal Year Ended December 31, 2011

Prepared by:<br>Andrew Clark<br>Executive Director

## Mission Statement

The mission of the Public School Retirement System of the City of St. Louis is to enhance the well-being and financial security of its members, retirees and beneficiaries through benefit programs and services which are soundly financed and prudently administered in an effective and efficient manner.

## Mission Statement Principles

The Retirement System adopts the following principles advocated by the National Council on Teacher Retirement, and with respect to such principles hereby pledges as follows:

1. Courteous Service. To give members prompt and courteous service and provide complete and accurate information.
2. Member Statements. To provide each active member with an annual statement that includes the member's accrued service credit, employee contributions, and other related information.
3. Information. To provide new participants in the system a summary plan description that clearly and simply summarizes the benefit provisions of the plan. The System will make available information on changes made in benefits.
4. Annual Reports. Full disclosure of financial, actuarial, and investment information in a detailed annual report that will be available for members, elected officials, and the public.
5. Financial Audits. To prepare or cause to be prepared an annual financial statement in accordance with generally accepted accounting principles and have an annual audit of the System's financial statement in accordance with generally accepted auditing standards.
6. Actuarial Studies. To have an annual or biennial actuarial valuation performed by an enrolled actuary in accordance with actuarial standards and an actuarial experience study at least every five years.
7. Adequate Funding. To work or obtain adequate funding of all promised benefits and to ensure the financial integrity of this System.
8. Independence of Retirement Systems. To work for a retirement system which functions as an independent trust, separate from state and local government. Such independence includes the power of trustees to set actuarial assumptions, appoint professionals such as actuaries and attorneys on whom they must rely to carry out their responsibilities, and to establish a budget for the System which ensures the delivery of high quality, cost-effective service to their members.
9. Exclusive Benefit. To act for the exclusive benefit of the members as fiduciaries entrusted with the management and payment of retirement benefits.
10. Prudent Investments. To adopt comprehensive objectives, methods for evaluation of performance, and policies which ensure both the prudent investment of plan assets and the achievement of the highest possible investment return.
11.Ethical Conduct. To adhere to the highest standards of conduct set out in the terms of the trust, state statute or other law.
11. State and Local Government Authority. To support the continuation of state and local pension plan oversight by the respective state or local government to ensure that decisions are made at the appropriate level of government.

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"The mission of the Public School Retirement System of the City of St. Louis is....

# Public School Retirement System of the City of St. Louis <br> Comprehensive Annual Financial Report <br> Year Ended December 31, 2011 

## Board of Trustees

An eleven-member Board of Trustees is responsible for general administration of the Retirement System as well as the investment of the System's assets. Active Retirement System members elect five trustees: one administrator, two teachers, and two nonteachers. Retired members elect two trustees: one retired teacher and one retired nonteacher. The St. Louis Public School ("SLPS") Board of Education appoints four trustees. Length of term of office is four years. The following individuals serve on the Public School Retirement System of the City of St. Louis Board of Trustees.

| Elected by Active Members | Term Ends | Trustee Representation |
| :---: | :---: | :---: |
| Sheila P. Goodwin | 12-31-2012 | Active Teacher |
| Thaha Menkara | 12-31-2013 | Active Non-teacher |
| Eural R. Thomas | 12-31-2014 | Active Non-teacher |
| Yvette A. Levy | 12-31-2015 | Active Teacher |
| Vacant | 12-31-2015 | Active Administrator |
| Elected by Retired Members | Term Ends | Trustee Representation |
| Joseph Clark | 09-30-2013 | Retired Non-Teacher |
| Charles L. Shelton, Jr. | 09-30-2015 | Retired Teacher |
| SLPS Board Appointed | Term Ends | Trustee Representation |
| Sarah Sise | 12-31-2012 | SLPS Board of Education |
| Mona E. Lawton | 12-31-2013 | SLPS Board of Education |
| Christina C. Bennett | 12-31-2014 | SLPS Board of Education |
| Richard Sullivan | 12-31-2015 | SLPS Board of Education |

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

office of the
PHONE: (314) 534-7444
EXECUTIVE DIRECTOR
FAX: (314) 533-0531

## June 1, 2012

## To the Board of Trustees and Members of the Retirement System:

I am pleased to present the Comprehensive Annual Financial Report (CAFR) of the Public School Retirement System of the City of St. Louis ("the System" or "the plan") for the year ended December 31, 2011. Management of the System is responsible for the contents and presentation of material in this report. To the best of my knowledge, I believe the information in this report is accurate in all material respects and presented in a manner that is a fair portrayal of the financial position and operations of the plan as of December 31, 2011.

## Overview of the Retirement System

The Public School Retirement System of the City of St. Louis was established January 1, 1944. Through acts of the Missouri Legislature, the System provides retirement benefits to employees of the St. Louis Public School District, the System, a number of Charter Schools located in the St. Louis Public School District, and certain past employees of Harris-Stowe State College. The System's members are covered by Social Security and eligible for Social Security benefits in addition to retirement benefits provided by the plan.

## Financial Information

An independent certified accounting firm performs a financial audit each year. The financial statements of the System are prepared in conformity with accounting principles generally accepted in the U.S.A. (GAAP) within guidelines established by the Governmental Accounting Standards Board (GASB). A system of internal controls is in place to help management with safeguarding and monitoring assets while promoting efficient operations. These internal controls are designed to protect the System's assets from loss due to unauthorized use or disposition and provide a reasonable assurance that the System executes its financial transactions in accordance with proper authorization.

Please refer to the Management Discussion and Analysis on pages 13 through 16 for an overview of additions and deductions from the plan during 2011.

## Investment Activities

The overall investment return for the plan during 2011 was (0.1)\%. This investment return was below both the asset allocation policy objective of $8.6 \%$ and the actuarial assumption of $8.0 \%$. Thus, the investment managers added no value to the fund for the year. In comparison to other similar public plans, the System's investment return for year 2011 ranked in the top $71 \%$ of this universe of public funds while maintaining similar risk as the peer group.

The Board of Trustees governs investments of the System through the adoption of investment policies and guidelines, amended as needed, that define the plan's objectives, monitoring procedures and performance measures. The Investment Policies and Operating Guidelines lay out specific parameters for performance expectations, eligible investments and portfolio characteristics. Key to the success of this governance is the determination of an Asset Allocation Policy. This is a critical decision made by the Board of Trustees at least annually to maximize returns while minimizing risk within the accepted investment guidelines of the System. Through advice from the Investment Consultant, management and staff are primarily responsible for implementing and monitoring the Asset Allocation Policy adopted by the Board of Trustees.

Detailed information regarding investments can be found in the Investment Section.

## Funding Status and Valuation Results

The System is a defined benefit plan, which means that certain benefit provisions are used in a formula to determine each member's retirement benefit. The formula to calculate retirement benefits is credited service (years of service) multiplied by average compensation (final average salary for three consecutive years) multiplied by $2 \%$ (pension multiplier).

Each year, the System has an actuarial valuation conducted by an independent Actuary. The actuarial valuation has two primary purposes: (1) to measure the relative financial health of the System and (2) to determine the annual required contribution (ARC), the portion of covered payroll, that employers must pay during a given year to ensure assets are available for benefit obligations into the future.

To determine the relative financial health of the System, the Actuary calculates the plan's actuarial accrued liability using the System's benefit provisions and actuarial assumptions in effect at the time of the calculation. The actuarial accrued liability is then compared to the actuarial value of assets to arrive at a percentage or Funded Ratio. The Funded Ratio measures the ability of the System to pay retirement benefits over the course of the next 30 years. For year 2011, the Funded Ratio was $88.6 \%$, the highest Funded Ratio for the System in over 20 years.

The Actuary calculates an ARC that is adequate to fund the normal costs of the plan plus the unfunded actuarial accrued liability amortized over a 30 -year period. The Actuary presents the annual Actuarial Valuation Report to the Board of Trustees for consideration. Once the Board of Trustees accepts the actuarial valuation for the year, the employers are notified of the ARC as governed by state statute.

The historic ARC percentage rates of covered compensation and corresponding dollar amounts determined by the Actuary, and accepted by the Board of Trustees, for the past three fiscal years are summarized as follows:

| Fiscal Year | ARC (\%) | ARC (\$) |
| :---: | :---: | :---: |
| 2009 | 9.51\% | \$21,406,949 |
| 2010 | 8.27\% | \$19,407,727 |
| 2011 | 10.03\% | \$24,264,182 |

Detailed actuarial information can be found in the Actuarial Section of this report.

## Legislative Information

There were no major legislative changes in 2011 that directly affected the System. The last change to the System's plan provisions occurred in 2002.

A complete summary of the System's legislative history can be found in the Statistical Section on page 88 of this report.

## Professional Services

Certain professional services are provided to the System by retained consultants. The required opinion letters from the Actuary, Buck Consultants, and independent Certified Public Accountants, Huber, Ring, Helm \& Co., P.C., are contained elsewhere in this report.

The firms that provide professional services to the System appear on page 8 of this section.

## Acknowledgements

I would like to thank the Board of Trustees, staff and consultants whose work contributed to this report and helps to guarantee the continued success of the System.

Sincerely,


Andrew Clark
Executive Director

# Public School Retirement System of the City of St. Louis <br> Comprehensive Annual Financial Report 

Year Ended December 31, 2011

## Organizational Chart


"-"-".". Denotes work-flow supervision only

## 2011 PROVIDERS OF PROFESSIONAL SERVICES

## ACTUARIAL SERVICES

Buck Consultants
Stephen Siepman
St. Louis, MO

## AUDITOR

Huber, Ring, Helm \& Co., P.C.
Thomas S. Helm, CPA
St. Louis, MO

## INSURANCE CONSULTANT

Longfellow Benefits
Patrick Haraden
Boston, MA

LEGAL COUNCIL
Bartley Goffstein, LLC
Jeffrey E. Hartnett
St. Louis, MO

## PROPERTY MANAGEMENT

CB Richard Ellis
St. Louis, MO

TECHNOLOGY CONSULTING
Jupiter Consulting
St. Louis, MO

Blade Technology
St. Louis, MO

## INVESTMENT CONSULTANT

New England Pension Consultants
Michael Cairns
Chicago, IL

## buckconsultants



CB RICHARD ELLIS


# Public School Retirement System of the City of St. Louis Comprehensive Annual Financial Report <br> Year Ended December 31, 2011 

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"....to enhance the well-being and financial security of our members, retirees and beneficiaries....

## 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, 2011 and 2010 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.

In our report dated April 11, 2011, we expressed an opinion that the 2010 financial statements did not fairly present the statements of net assets and the related statements of changes in plan net assets in conformity with accounting principles generally accepted in the United States of America because investments in partnerships had been valued at cost. As described in Note 2 to the financial statements, the Company has restated its 2010 financial statements to conform with accounting principles generally accepted in the United States of America. Accordingly, our present opinion on the 2010 financial statements, as presented herein, is different from that expressed in our previous report.

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

As discussed in Note 2 to the financial statements, the financial statements include investments that are not listed on national exchanges or for which quoted market prices are not available. These investments include limited partnerships, venture capital partnerships and real estate partnerships. Such investments totaled \$73,292,125 and \$73,254,069 (8\% in 2011 and 2010 of total assets) at December 31, 2011 and 2010, respectively. Where a publicly listed price is not available, the management of the System uses alternative sources of information including audited financial statements, unaudited interim reports, independent appraisals, and similar evidence to determine the fair value of the investments.

In our opinion, 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, 2011 and 2010 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 3 -6 , and the supplemental schedules of funding progress and employer contributions on pages 25 - 26 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, schedules of investment expenses, and schedules of professional and consultant fees found on pages 29 - 30, 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, Ping, Itilm + Co., P.C.

St. Louis, Missouri

April 10, 2012

[^0]The Management Discussion and Analysis ("MD\&A") for the Public School Retirement System of the City of St. Louis ("PSRSSTL") is provided to comply with Governmental Accounting Standard No. 34. The purpose of the MD\&A is to provide an overview of PSRSSTL financial activities for the fiscal year ended December 31, 2011. This MD\&A should be read in conjunction with the PSRSSTL financial statements and supplemental information.

## FINANCIAL HIGHLIGHTS

PSRSSTL net assets were $\$ 868,086,018$ on December 31, 2011, which represents a decrease of $\$ 74,083,089$ from December 31, 2010. This decrease is due to the depreciation of the fair market value of investments and indicative of the extreme volatility seen in the financial markets during the latter half of 2011.

The overall investment return for PSRSSTL investments was (.10)\% for fiscal year 2011 and $14.9 \%$ for fiscal year 2010. The flat investment return in fiscal year 2011 compared to the positive investment return in fiscal year 2010 reflects a volatile financial market in the midst of a slow recovery from the tumultuous financial conditions experienced in 2008 and 2009. 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. The actuarially assumed rate of return remained at 8\% during fiscal year 2011.

Additions to net assets were $\$ 35$ million and $\$ 153$ million for each of the fiscal years 2011 and 2010. The primary addition to net assets was employer contributions of $\$ 29$ million in fiscal year 2011 compared to investment income of $\$ 115$ million in fiscal year 2010. The secondary addition to net assets came from member contributions of $\$ 12$ million in fiscal year 2011 compared to employer contributions of \$26 million in fiscal year 2010.

Deductions from net assets were $\$ 109$ million and $\$ 107$ million in fiscal years 2011 and 2010, respectively. The $\$ 2$ million variance in deductions from net assets between fiscal years 2011 and 2010 is mostly due to the increase in retirement/death benefits to members during fiscal year 2011.

During 2011, the Board of Trustees balanced the Asset Allocation Policy adopted in 2010 by hiring several new money managers. The Board of Trustees added to the Global Asset Allocation investment class by hiring PIMCO and investing $\$ 35$ million in the firm's All Asset Fund, and by hiring money manager Wellington Management to manage a new $\$ 25$ million real assets portfolio. The Board of Trustees hired hedge fund money managers EnTrust Capital and Permal Group to replace K-2 Advisors and Mariner Select, respectively; each money manager is responsible for a $\$ 20$ million hedge fund portfolio. The investments were funded by reallocating funds within each asset class and from domestic equities.

## FINANCIAL STATEMENTS

The PSRSSTL financial report consists of two financial statements, (1) the Statement of Plan Net Assets, and (2) the Statement of Changes in Plan Net Assets. The Statement of Plan Net Assets provides details concerning PSRSSTL assets and related liabilities other than benefit obligations. PSRSSTL net assets reflect the resources available for future benefit payments. The Statement of Changes in Plan Net Assets provides details concerning PSRSSTL financial activity during fiscal year 2011 that lead to the change in plan net assets from fiscal year 2010 to fiscal year 2011.

In addition to the financial statements, the financial report contains notes to the financial statements and supplemental information that provide further information for use in analyzing the financial statements as well as actuarial information related to the funded status of PSRSSTL.

## FINANCIAL ANALYSIS

On December 31, 2011, total assets for PSRSSTL were $\$ 868,928,446$ and comprised of cash, an office building, receivables and investments. Total assets in fiscal year 2011 decreased by 7.9\% or $\$ 74,226,226$ over fiscal year 2010 due to a lower market value of PSRSSTL investments.

On December 31, 2011, total liabilities for PSRSSTL were $\$ 842,428$ and consisted of accounts payable. Total liabilities in fiscal year 2011 decreased by $14.5 \%$ or $\$ 143,137$ over fiscal year 2010.

On December 31, 2011, net assets held in trust to pay pension benefits were $\$ 868,086,018$, a decrease of $7.9 \%$ or $\$ 74,083,089$ over fiscal year 2010.

## Condensed Statements of Plan Net Assets

|  | FY 2011 |  | $\begin{gathered} \text { FY } 2010 \\ \text { (as restated) } \\ \hline \end{gathered}$ |  | Total Change |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Amount | Percentage |
| ASSETS |  |  |  |  |  |  |  |
| Cash | \$ | 10,605,614 |  |  | \$ | 12,255,231 | \$ | $(1,649,617)$ | (13.5)\% |
| Property \& building, net |  | 2,152,334 |  | 2,219,772 |  | $(67,438)$ | (3.0)\% |
| Receivables |  | 2,095,857 |  | 2,186,564 |  | $(90,707)$ | (4.2)\% |
| Investments |  | 854,074,641 |  | 926,493,105 |  | (72,418,464) | (7.8)\% |
| Total assets |  | 868,928,446 |  | 943,154,672 |  | (74,226,226) | (7.9)\% |

## LIABILITIES

| Accounts payable | 842,428 | 985,565 | $(143,137)$ | (14.5)\% |
| :---: | :---: | :---: | :---: | :---: |
| Total current liabilities | 842,428 | 985,565 | $(143,137)$ | (14.5)\% |
| NET ASSETS | \$ 868,086,018 | \$ 942,169,107 | \$ (74,083,089) | (7.9)\% |

## REVENUES - ADDITIONS TO PLAN NET ASSETS

The assets that are required to finance PSRSSTL retirement benefits are accumulated through receipt of employer and member contributions as well as through earnings on investments. For fiscal year 2011, employer contributions were $\$ 28.7$ million; member contributions were $\$ 11.9$ million; and the net investment loss was $\$ 5.3$ million.

Employer and member contributions combined increased by $\$ 3.3$ million in fiscal year 2011 as compared to fiscal year 2010 primarily because of the increase in the required employer contributions from 8.27\% of covered compensation in fiscal year 2010 to 10.03\% in fiscal year 2011. The PSRSSTL Actuary determines the amount of employer contributions as part of the Annual Actuarial Valuation Report. The active member contribution rate of 5\% of normal compensation has been in effect since July 1, 1999.

Net investment income was $\$ 121$ million less in fiscal year 2011 than in fiscal year 2010 because investment earnings were (.10)\% for fiscal year 2011 as compared with $14.9 \%$ for fiscal year 2010. Net investment income of $\$(5,319,851)$ and $\$ 115,925,274$ in fiscal years 2011 and 2010 reflect gross investment income less investment related expenses such as investment manager and custodial fees.

## EXPENSES - DEDUCTIONS FROM PLAN NET ASSETS

The primary deductions from plan net assets were retirement and death benefits paid to retired members and their beneficiaries, retiree healthcare subsidies and refunds to members who retired or terminated employment. PSRSSTL administrative expenses in fiscal year 2011 were approximately $0.17 \%$ of assets.

|  | Condensed Statements of Changes in Plan Net Assets |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | FY 2011 |  | $\begin{gathered} \text { FY } 2010 \\ \text { (as restated) } \\ \hline \end{gathered}$ |  | Total Change |  |  |
|  |  |  |  | Amount | Percentage |
| ADDITIONS |  |  |  |  |  |  |  |
| Employer contributions | \$ | 28,720,193 |  |  | \$ | 26,075,146 | \$ | 2,645,047 | 10.1\% |
| Member contributions |  | 11,879,052 |  | 11,188,919 |  | 690,133 | 6.2\% |
| Net investment income (loss) |  | (5,319,851) |  | 115,925,274 |  | $(121,245,125)$ | (104.6)\% |
| Rental income |  | 131,119 |  | 127,426 |  | 3,693 | 2.9\% |
| Total additions (depreciation) |  | 35,410,513 |  | 153,316,765 |  | $(117,906,252)$ | (76.9)\% |
| DEDUCTIONS |  |  |  |  |  |  |  |
| Retirement/death benefits |  | 101,993,058 |  | 99,277,919 |  | 2,715,139 | 2.7\% |
| Health care subsidies |  | 2,825,430 |  | 2,808,370 |  | 17,060 | 0.6\% |
| Administrative expenses |  | 1,432,914 |  | 1,499,302 |  | $(66,388)$ | (4.4)\% |
| Refunds to members |  | 3,242,200 |  | 3,203,714 |  | 38,486 | 1.2\% |
| Total deductions |  | 109,493,602 |  | 106,789,305 |  | 2,704,297 | 2.5\% |
| INCREASE OR (DECREASE) |  |  |  |  |  |  |  |
| IN NET ASSETS | \$ | $(74,083,089)$ | \$ | 46,527,460 |  | $(120,610,549)$ | (259.2)\% |

## FINANCIAL SUMMARY

For more than a decade, PSRSSTL investment performance has been calculated consistently, thereby providing a valid basis on which performance can be compared with other public pension funds. During the past ten-year period, PSRSSTL investment returns have performed consistently when compared to other public pension funds with the cumulative PSRSSTL returns ranking in the top 9\% of public plans for the ten-year period ended December 31, 2011.

Net plan assets over this same timeframe have fluctuated all the way from a high of $\$ 1.15$ billion in fiscal year 2007 to a low of $\$ 810$ million in fiscal year 2008. At the end of fiscal year 2011, net plan assets were $\$ 868$ million, ending up between the ten-year high and low. This fluctuation in the value of net plan assets from year-to-year can be attributed to financial market conditions that have caused several large spikes followed by big losses of investment returns throughout the past ten-year period.

Over the same period, the funded status of the PSRSSTL plan, using the Government Accounting Standards Board (GASB) calculation method, has remained stable, fluctuating within the range of $80.5 \%$ in 2002 to $88.6 \%$ in 2011. The funded ratio of a plan compares its assets to its liabilities, thereby, on an actuarial basis, measuring a plan's ability to fulfill the obligations it has to its members. The funded ratio of the PSRSSTL plan for fiscal year 2011 was $88.6 \%$, the highest funded ratio for PSRSSTL since the system began tracking the ratio under the GASB method in 1992.

The Board of Trustees and the PSRSSTL plan actuary believe that the PSRSSTL plan will continue to be funded on a sound actuarial basis provided required member and employer contributions are made as recommended, a prudent and well-diversified Asset Allocation Policy remains in place, and quality investment managers continue to be selected. Despite the losses experienced during the $20113^{\text {rd }}$ Quarter, the financial markets continue to recover from the larger losses experienced in 2008 and 2009.

## REQUESTS FOR INFORMATION

This report is intended to provide the Board of Trustees, PSRSSTL members, and other interested parties a general overview of PSRSSTL financial matters. If any reader has questions about this report or needs additional financial information, contact the Public School Retirement System of the City of St. Louis.

## PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS <br> STATEMENTS OF PLAN NET ASSETS <br> DECEMBER 31, 2011 AND 2010

| ASSETS |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2011 |  | $\begin{gathered} 2010 \\ \text { (as restated) } \\ \hline \end{gathered}$ |  |
| CASH | \$ | 10,605,614 | \$ | 12,255,231 |
| PROPERTY and BUILDING, net |  | 2,152,334 |  | 2,219,772 |
| RECEIVABLES |  |  |  |  |
| Accrued interest and dividends |  | 2,095,857 |  | 2,186,564 |
| INVESTMENTS, at fair value |  |  |  |  |
| Cash equivalents |  | 37,627,622 |  | 33,566,529 |
| Bonds |  |  |  |  |
| U.S. Government and agency issues |  | 50,200,578 |  | 48,690,369 |
| Corporate |  | 51,286,089 |  | 68,563,470 |
| Foreign investments (bonds and stocks) |  | 95,408,493 |  | 109,773,594 |
| Common and preferred stocks |  | 224,917,277 |  | 265,038,827 |
| Mutual funds |  | 301,124,937 |  | 303,286,315 |
| Real estate partnerships - insurance contracts |  | 46,725,649 |  | 47,890,147 |
| Credit opportunity investments |  | 20,217,520 |  | 23,406,472 |
| Limited partnerships |  | 24,660,720 |  | 24,201,175 |
| Venture capital partnerships |  | 1,905,756 |  | 2,076,207 |
| Total investments |  | 854,074,641 |  | 926,493,105 |
| Total assets |  | 868,928,446 |  | 943,154,672 |
| LIABILITIES |  |  |  |  |
| CURRENT LIABILITIES |  |  |  |  |
| Accounts payable and accrued expenses |  | 842,428 |  | 985,565 |
| NET ASSETS HELD IN TRUST FOR PENSION BENEFITS (A schedule of funding progress is presented on page 36.) | \$ | 868,086,018 | \$ | 942,169,107 |

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

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

## STATEMENTS OF CHANGES IN PLAN NET ASSETS

## YEARS ENDED DECEMBER 31, 2011 AND 2010

| ADDITIONS | 2011 | $\begin{gathered} 2010 \\ \text { (as restated) } \end{gathered}$ |
| :---: | :---: | :---: |
| Employer contributions |  |  |
| St. Louis Public Schools | \$ 19,933,761 | \$ 16,790,176 |
| Charter Schools | 4,521,680 | 3,843,486 |
| Retirement System | 57,964 | 48,617 |
| Sick leave conversion | 4,206,788 | 5,392,867 |
| Employee contributions |  |  |
| St. Louis Public Schools | 9,480,801 | 9,297,577 |
| Charter Schools | 2,369,287 | 1,861,472 |
| Retirement System | 28,964 | 29,870 |
|  | 40,599,245 | 37,264,065 |
| Net appreciation (depreciation) in fair value of investments |  |  |
| Cash equivalents | 173,183 | 145,293 |
| Bonds |  |  |
| U.S. Government and agency issues | 4,839,701 | 2,368,569 |
| Corporate | 318,726 | 12,430,607 |
| Foreign investments | $(2,869,585)$ | 7,791,564 |
| Common and preferred stock | 6,558,047 | 51,328,791 |
| Mutual funds | $(20,035,929)$ | 32,145,348 |
| Real estate loan |  | 233 |
| Limited partnerships | 2,511,653 | 2,932,154 |
| Real estate partnerships | 6,309,362 | 7,435,595 |
| Venture capital partnerships | $(61,874)$ | 461,748 |
| Credit opportunity investments | 908,948 | 2,904,651 |
|  | $(1,347,768)$ | 119,944,553 |
| Less investment expense | 3,972,083 | 4,019,279 |
| Net investment income (loss) | $(5,319,851)$ | 115,925,274 |
| Rental income | 131,119 | 127,426 |
| Net additions | 35,410,513 | 153,316,765 |

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

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

STATEMENTS OF CHANGES IN PLAN NET ASSETS (CONTINUED)

YEARS ENDED DECEMBER 31, 2011 AND 2010

|  | 2011 | $\begin{gathered} 2010 \\ \text { (as restated) } \\ \hline \end{gathered}$ |
| :---: | :---: | :---: |
| DEDUCTIONS |  |  |
| Benefits paid |  |  |
| Retirement and death benefits | \$ 101,993,058 | \$ 99,277,919 |
| Health care subsidies and supplemental payments | 2,825,430 | 2,808,370 |
|  | 104,818,488 | 102,086,289 |
| Operating expenses | 1,432,914 | 1,499,302 |
| Contribution refunds due to death or resignation | 3,242,200 | 3,203,714 |
| Total deductions | 109,493,602 | 106,789,305 |
| INCREASE (DECREASE) IN PLAN NET ASSETS | $(74,083,089)$ | 46,527,460 |
| NET ASSETS HELD IN TRUST FOR PENSION |  |  |
| BENEFITS BEGINNING OF YEAR |  |  |
| As previously reported | 937,594,203 | 891,562,918 |
| Adjustment for change in method of reporting for certain investments | 4,574,904 | 4,078,729 |
| Balance at beginning of year, as restated | 942,169,107 | 895,641,647 |
| NET ASSETS HELD IN TRUST FOR PENSION |  |  |
| BENEFITS END OF YEAR | $\underline{\text { \$ 868,086,018 }}$ | \$ 942,169,107 |

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

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

## NOTES TO FINANCIAL STATEMENTS

## NOTE 1 - DESCRIPTION OF SYSTEM

## General

The Public School Retirement System of the City of St. Louis is a funding agency existing under provisions of the Revised Statutes of the State of Missouri (the "Statutes") to provide retirement benefits for all employees of the Board of Education of the City of St. Louis, of the Charter Schools located within the St. Louis School District, and of all employees of the Public School Retirement System of the City 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, 2011 | January 1, 2010 |
| :---: | :---: | :---: |
| Active members | 4,336 | 4,825 |
| Inactive members | 1,935 | 1,896 |
| Total members not retired | 6,271 | 6,721 |
| Retired members |  |  |
| Service and survivors | 4,312 | 4,100 |
| Disability | 275 | 418 |
|  | 4,587 | 4,518 |
| Total membership | 10,858 | 11,239 |

## Vesting

Full vesting on termination of employment after at least five years of service is provided if contributions are left with the System.

## Benefits

Upon retirement at age 65, or at any age if age plus years of credited service total 85 or more (Rule of 85), members receive monthly payments for life of yearly benefits equal to years of

## NOTE 1 - DESCRIPTION OF SYSTEM (CONTINUED)

## Benefits (continued)

credited service multiplied by $2 \%$ of average final compensation, but not to exceed $60 \%$ of average final compensation. Early retirement can occur at age 60 with 5 years of service. The service retirement allowance is reduced five ninths of one percent for each month of commencement prior to age 65 or the age at which the Rule of 85 would have been satisfied had the employee continued working until that age, if earlier.

In lieu of the benefit paid over the lifetime of the participant, reduced benefit options are available for survivor and beneficiary payments.
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.

## Return of Contributions

If, after the death of a participant, no further monthly amounts are payable to a beneficiary under an optional form of payment or under the survivor benefit provisions, the participant's beneficiary shall be paid the excess, if any, of the participant's accumulated contributions over all payments made to, or on behalf of, the deceased participant.

## Contributions by Participants

Participants contribute 5\% of compensation. Accumulated contributions are credited at the rate of interest established by the Board of Trustees. The current crediting rate is 5\%.

## Contributions by Employers

The employer contribution rate is set each year by the Board of Trustees upon recommendation of the independent actuary.

## Expenses

Administrative expenses are paid out of investment income.

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting
Plan member contributions 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.

## Prior Period Adjustment

The accompanying financial statements for 2010 have been restated to reflect the change in valuing limited partnerships and venture capital partnerships from the cost basis to fair market value. Accounts that were adjusted during this conversion include limited partnerships, venture capital partnerships, their respective appreciation (depreciation) in fair

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

value of investments and net assets held in trust for pension benefits. The effect of the restatement was to increase the Increase in Plan Net Assets balance for 2010 by \$496,175. The correction increased beginning net assets as of January 1, 2011 and 2010 by \$4,574,904 and $4,078,729$, respectively.

## 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.

## Receivables

Receivables consist of pending interest and dividends payable on investments held at the end of the year.

## 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

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.

## Limited partnerships

Fair values of the limited partnership investments are based on valuations of the underlying companies of the limited partnerships as reported by the general partner. Certain limited partnerships reflect values on a quarter lag basis due to the nature of those investments and the time it takes to value them.

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.

## NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Alternative investments
For alternative investments (venture capital partnerships) where no readily ascertainable market value exists, management, in consultation with their investment advisors, values these investments in good faith based upon audited financials, cash flow analysis, purchase and sales of similar investments, other practices used within the industry, or other information provided by the underlying investment advisors. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed.

## 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. 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 Building

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.

## NOTE 3 - INVESTMENTS

At December 31, 2011 and 2010, investments consisted of the following:

|  | 2011 |  |
| :---: | :---: | :---: |
|  | Fair Value | Cost |
| Cash equivalents | \$ 37,627,622 | \$ 37,627,622 |
| Bonds |  |  |
| U.S. Government and agency issues | 50,200,578 | 48,410,588 |
| Corporate | 51,286,089 | 50,679,825 |
| Foreign investments | 95,408,493 | 100,001,462 |
| Common and preferred stocks | 224,917,277 | 204,874,313 |
| Mutual funds | 301,124,937 | 243,148,759 |
| Real estate partnerships - insurance contracts | 46,725,649 | 45,752,389 |
| Credit opportunity investments | 20,217,520 | 16,574,127 |
| Limited partnerships | 24,660,720 | 22,148,598 |
| Venture capital partnerships | 1,905,756 |  |
|  | \$ 854,074,641 | \$ 769,217,683 |


|  | $\begin{gathered} 2010 \\ \text { (as restated) } \\ \hline \end{gathered}$ |  |
| :---: | :---: | :---: |
|  | Fair Value | Cost |
| Cash equivalents | \$ 33,566,529 | \$ 33,566,529 |
| Bonds |  |  |
| U.S. Government and agency issues | 48,690,369 | 48,526,695 |
| Corporate | 68,563,470 | 60,828,386 |
| Foreign investments | 109,773,594 | 98,639,040 |
| Common and preferred stocks | 265,038,827 | 219,394,685 |
| Mutual funds | 303,286,315 | 206,783,073 |
| Real estate partnerships - insurance contracts | 47,890,147 | 50,742,863 |
| Credit opportunity investments | 23,406,472 | 19,910,294 |
| Limited partnerships | 24,201,175 | 21,702,478 |
| Venture capital partnerships | 2,076,207 |  |
|  | \$ 926,493,105 | \$ 760,094,043 |

## NOTE 4 - OCCUPANCY

The System occupies offices in a building it owns. Occupancy expenses for the years ended December 31, 2011 and 2010 were $\$ 27,917$ and $\$ 30,460$, 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, 2011 and 2010 totaled $\$ 131,119$ and $\$ 127,426$, 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, 2011 and 2010, the System had approximately $\$ 11,063,000$ and $\$ 12,745,000$, respectively, in cash on deposit at US Bank. These balances were insured by the Federal Deposit Insurance Corporation ("FDIC") for \$250,000 per account. 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, 2011 was $\$ 12,094,530$. A significant portion of the System's investments is held in trust by US Bank of St. Louis, N.A.

On December 30, 2011, the System received $\$ 24,084,882$ from the St. Louis Board of Education for the 2011 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, 2011, 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 |  | Percentage of <br> Total |  |
| :---: | :---: | :---: | :---: |
| The Bank of New York Mellon <br> Real Estate Investments |  | $\$ 44,345,213$ <br> Investments |  |
| UBS Global Asset Management |  | $\$ 46,725,649$ | $5.5 \%$ |

## NOTE 5 - RISKS AND UNCERTAINTIES (CONTINUED)

## Credit Risk of Debt Securities

The System's rated debt investments as of December 31, 2011 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.

Fair Quality Ratings
$\underline{\text { Rate Debt InstrumentValue }}$
Corporate bonds and debentures
Foreign government and corporate obligations
United States government securities

Corporate bonds and debentures
Foreign government and corporate obligations
United States government securities

Corporate bonds and debentures
Foreign government and corporate obligations
United States government securities

| Fair Quality Ratings |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AAA |  | AA1 |  | AA2 |  |
| \$ | 3,931,175 | \$ | 640,333 | \$ | 1,168,040 |
|  | $\begin{aligned} & 17,578,458 \\ & 18,178,318 \end{aligned}$ |  |  |  | 1,542,140 |
| \$ | 39,687,951 | \$ | 640,333 | \$ | 2,710,180 |
|  | AA3 |  | A1 |  | A2 |
| \$ | 974,161 | \$ | 2,063,834 | \$ | 2,475,633 |
|  | 15,278,889 |  | $\begin{array}{r} 1,162,663 \\ 61,788 \\ \hline \end{array}$ |  | 4,134,937 |
| \$ | 16,253,050 | \$ | 3,288,285 | \$ | 6,610,570 |
|  | A3 |  | BAA1 |  | BAA2 |
| \$ | 1,285,143 | \$ | 1,715,881 | \$ | 4,656,382 |
|  | 158,061 |  | 3,189,324 |  | 536,856 |
| \$ | 1,443,204 | \$ | 4,905,205 | \$ | 5,193,238 |
|  | BAA3 |  | BA1 |  | BA2 |
| \$ | 3,967,857 | \$ | 2,111,038 | \$ | 2,382,421 |
|  | 404,330 |  | 239,902 |  | 1,324,864 |
| \$ | 4,372,187 | \$ | 2,350,940 | \$ | 3,707,285 |

## NOTE 5 - RISKS AND UNCERTAINTIES (CONTINUED)

## Credit Risk of Debt Securities (Continued)



## 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:

| Currency |  | Cash <br> ivalents | Debt | Equity | Total |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Euros |  |  | \$ 13,582,992 | \$ 16,943,662 | \$ 30,526,654 |
| Australian Dollar | \$ | 14 | 216,843 |  | 216,857 |
| Swiss Franc |  |  |  | 1,685,576 | 1,685,576 |
| Mexican Peso |  | 70,769 | 2,441,809 |  | 2,512,578 |
| New Zealand Dollar |  | 18 |  |  | 18 |
| Polish Zloty |  | 7 | 3,239,476 |  | 3,239,483 |
| Indian Rupee |  |  | 673,729 |  | 673,729 |
| Indonesian Rupiah |  |  | 771,893 |  | 771,893 |
| Japanese Yen |  | 58,812 | 17,289,326 | 4,300,207 | 21,648,345 |
| Korean Won |  |  | 792,405 | 1,455,023 | 2,247,428 |
| Hong Kong Dollar |  |  |  | 664,638 | 664,638 |
| Canadian Dollar |  |  | 464,129 | 485,289 | 949,418 |
| British Pound Sterling |  | 19 |  | 4,661,350 | 4,661,369 |
| Pence Sterling |  |  |  | 936,208 | 936,208 |
| Singapore Dollar |  |  |  | 435,800 | 435,800 |
| Various |  |  |  | 551,348 | 551,348 |
|  | \$ | 129,639 | \$ 39,472,602 | \$ 32,119,101 | \$ 71,721,342 |
| Foreign investment denominated in US Dollars |  |  |  |  | 23,687,151 |
|  |  |  |  |  | \$ 95,408,493 |

## NOTE 5 - RISKS AND UNCERTAINTIES (CONTINUED)

## 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 the fair values of investments.

| Investment Type | Fair Value | $<1$ year | 1-5 years |
| :---: | :---: | :---: | :---: |
| Corporate bonds and debentures | \$ 51,286,089 | \$ 161,835 | \$ 11,741,511 |
| Foreign government and corporate obligations | 50,050,313 | 4,527,733 | 24,648,118 |
| United States government and agency securities | 50,200,578 |  | 5,063,760 |
|  | \$ 151,536,980 | \$ 4,689,568 | \$ 41,453,389 |
| Investment Type |  | 6-10 years | 10+ years |
| Corporate bonds and debentures |  | \$ 17,716,839 | \$ 21,665,904 |
| Foreign government and corporate obligations |  | 13,331,510 | 7,542,952 |
| United States government and agency securities |  | 12,553,895 | 32,582,923 |
|  |  | \$ 43,602,244 | \$ 61,791,779 |

## NOTE 6 - PROPERTY AND BUILDING

Property and Building as of December 31, 2011 and 2010 consist of:

|  | 2011 | 2010 |
| :---: | :---: | :---: |
| 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 | 300,298 | 232,860 |
| Total Property and Building | \$2,152,334 | \$2,219,772 |

## NOTE 7 -FAIR VALUE MEASUREMENTS

The System has applied Financial Accounting Standards Board Accounting Standards Codification 820 ("FASB ASC 820"), "Fair Value Measurements and Disclosures" which establishes a framework for measuring fair value and expands disclosures about fair value measurements. FASB ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value into three broad levels explained below:

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. Nonfinancial 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, cash equivalents, accrued interest and dividends, 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.

## 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, 2011 and 2010.
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: (Cash equivalents) Valued based on yields currently available on comparable securities of issuers with similar credit rating.

Limited partnerships: Valued based on valuations of the underlying companies of the limited partnerships as reported by the general partner.

Real estate partnerships - Insurance Contracts: Valued at fair value as determined by the insurance companies.

Venture capital partnerships: Valued by investment advisors based upon audited financials, other practices, and other information provided by the underlying investment advisor.

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.

## NOTE 7 - FAIR VALUE MEASUREMENTS (CONTINUED)

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, 2011:

|  | Level 1 | Level 2 | Level 3 |
| :---: | :---: | :---: | :---: |
| Credit opportunity investments | \$ 20,217,520 |  |  |
| U.S. Treasury and other government obligations |  | \$ 50,200,578 |  |
| Corporate bonds |  | 51,286,089 |  |
| Foreign investments |  | 95,408,493 |  |
| Common stocks | 224,917,277 |  |  |
| Mutual funds | 301,124,937 |  |  |
| Money market accounts |  | 37,627,622 |  |
| Real estate partnerships |  |  |  |
| - insurance contracts |  |  | \$ 46,725,649 |
| Limited partnerships |  |  | 24,660,720 |
| Venture capital partnerships |  |  | 1,905,756 |
|  | \$ 546,259,734 | \$ 234,522,782 | \$ 73,292,125 |

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 | (Restated) <br> Level 3 |
| :---: | :---: | :---: | :---: |
| Credit opportunity investments | \$ 23,406,472 |  |  |
| U.S. Treasury 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 |  |  | 24,201,175 |
| Venture capital partnerships |  |  | 2,076,207 |
|  | \$ 591,731,614 | \$ 260,593,962 | \$ 74,167,529 |

## 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, 2011:

|  | Venture Capital Partnerships | Limited <br> Partnerships |
| :---: | :---: | :---: |
| Balance, beginning of the year as previously reported | \$ | \$ 21,702,478 |
| Adjustment for change in reporting method | 2,076,207 | 2,498,697 |
| Balance, beginning of the year as restated | 2,076,207 | 24,201,175 |
| Purchases, sales, issuances, and settlements (net) | 108,577 | $(2,048,628)$ |
| Investment income (net) | 171,903 |  |
| Realized gains (losses) | 139,776 | 2,204,987 |
| Unrealized gains (losses) relating to instruments still held at the reporting date | $(590,707)$ | 303,186 |
| Balance, end of year | \$ 1,905,756 | $\underline{\text { \$ 24,660,720 }}$ |
|  | Insurance <br> Contracts |  |
| Balance, beginning of the year | \$ 47,890,147 |  |
| Purchases, sales, issuances, and settlements (net) | $(7,000,000)$ |  |
| Investment income (net) | 2,488,949 |  |
| Realized gains (losses) | $(5,564)$ |  |
| Unrealized gains relating to instruments still held at the reporting date | 3,825,976 |  |
| Management fees | $(473,859)$ |  |
| Balance, end of year | \$ 46,725,649 |  |

## 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.

|  | Venture Capital Partnerships | Limited Partnerships |
| :---: | :---: | :---: |
| Balance, beginning of the year as previously reported | \$ 810,668 | \$ 19,254,133 |
| Adjustment for change in reporting method | 919,707 | 3,159,022 |
| Balance, beginning of the year as restated | 1,730,375 | 22,413,155 |
| Purchases, sales, issuances, and settlements (net) | $(115,916)$ | (1,144,134) |
| Investment income (net) | 47,880 |  |
| Realized gains (losses) | $(742,632)$ | 3,592,479 |
| Unrealized gains (losses) relating to instruments still held at the reporting date | 1,156,500 | $(660,325)$ |
| Balance, end of year | \$ 2,076,207 | \$ 24,201,175 |
|  | Insurance <br> Contracts |  |
| Balance, beginning of the year | \$ 40,811,416 |  |
| Purchases, sales, issuances, and settlements (net) |  |  |
| Investment income (net) | 2,704,538 |  |
| Realized gains | 13,801 |  |
| 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 |  |

## 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.

## SUPPLEMENTAL INFORMATION

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

SCHEDULE OF FUNDING PROGRESS
(in millions)
DECEMBER 31, 2011

| Actuarial <br> Valuation <br> Date <br> January 1, | Actuarial Value of Assets <br> (a) |  | Liability (AAL) - <br> Frozen Entry Age <br> (b) |  | Unfunded AAL (UAAL) (b-a) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1996 | \$ | 562.2 | \$ | 664.8 | \$ | 102.6 |
| 1997 |  | 598.6 |  | 716.7 |  | 118.1 |
| 1998 |  | 644.4 |  | 759.7 |  | 115.3 |
| 1999 |  | 694.3 |  | 846.9 |  | 152.6 |
| 2000 |  | 770.1 |  | 937.7 |  | 167.6 |
| 2001 |  | 828.1 |  | 1,022.0 |  | 193.9 |
| 2002 |  | 861.1 |  | 1,069.8 |  | 208.7 |
| 2003 |  | 873.3 |  | 1,063.2 |  | 189.9 |
| 2004 |  | 902.0 |  | 1,074.3 |  | 172.3 |
| 2005 |  | 935.3 |  | 1,084.4 |  | 149.1 |
| 2006 |  | 983.8 |  | 1,122.6 |  | 138.8 |
| 2007 |  | 1,003.4 |  | 1,150.2 |  | 146.8 |
| 2008 |  | 1,014.9 |  | 1,158.9 |  | 144.0 |
| 2009 |  | 963.9 |  | 1,099.9 |  | 136.0 |
| 2010 |  | 950.7 |  | 1,076.0 |  | 125.3 |
| 2011 |  | 944.4 |  | 1,066.3 |  | 121.9 |
| Actuarial <br> Valuation <br> Date <br> January 1, |  | Funded <br> Ratio <br> (a/b) |  | Annual red Payroll <br> (c) |  | JAAL <br> a \% of red Payroll $(b-a) / c)$ |
| 1996 |  | 84.6 \% | \$ | 206.9 |  | 49.6 \% |
| 1997 |  | 83.5 |  | 210.2 |  | 56.2 |
| 1998 |  | 84.8 |  | 210.8 |  | 54.7 |
| 1999 |  | 82.0 |  | 215.6 |  | 70.8 |
| 2000 |  | 82.1 |  | 216.7 |  | 77.3 |
| 2001 |  | 81.0 |  | 235.1 |  | 82.5 |
| 2002 |  | 80.5 |  | 243.9 |  | 85.6 |
| 2003 |  | 82.1 |  | 283.9 |  | 66.9 |
| 2004 |  | 84.0 |  | 255.3 |  | 67.5 |
| 2005 |  | 86.3 |  | 240.2 |  | 62.1 |
| 2006 |  | 87.6 |  | 227.0 |  | 61.1 |
| 2007 |  | 87.2 |  | 222.4 |  | 66.0 |
| 2008 |  | 87.6 |  | 225.2 |  | 63.9 |
| 2009 |  | 87.6 |  | 234.5 |  | 58.0 |
| 2010 |  | 88.4 |  | 242.0 |  | 51.8 |
| 2011 |  | 88.6 |  | 218.3 |  | 55.8 |

See independent auditor's report.

PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS SCHEDULE OF EMPLOYER CONTRIBUTIONS

DECEMBER 31, 2011

| Employer Contributions |  |  |  |
| :---: | :---: | :---: | :---: |
| Year Ended December 31, | Annual Required Contribution | $\begin{aligned} & \text { Perce } \\ & \text { Contrib } \end{aligned}$ |  |
| 1996 | \$ 16,619,187 | 100.1 | \% |
| 1997 | 16,876,759 | 100.2 |  |
| 1998 | 15,328,067 | 111.1 |  |
| 1999 | 13,906,270 | 124.5 |  |
| 2000 | 15,543,984 | 112.3 |  |
| 2001 | 18,168,580 | 100.2 |  |
| 2002 | 19,076,442 | 100.6 |  |
| 2003 | 19,517,288 | 101.2 |  |
| 2004 | 19,210,506 | 132.0 |  |
| 2005 | 19,364,705 | 121.4 |  |
| 2006 | 14,414,133 | 114.9 |  |
| 2007 | 17,311,658 | 129.7 |  |
| 2008 | 21,021,316 | 132.5 |  |
| 2009 | 21,406,949 | 133.6 |  |
| 2010 | 19,407,722 | 134.4 |  |
| 2011 | 24,264,182 | * |  |

The information presented in the required supplemental schedules was determined as part of the actuarial valuation prepared by Buck Consultants at January 1, 2011. Additional information related to the above actuarial valuation follows:

Actuarial cost method: Frozen entry age.
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:
8.00\% for 2011 and 2010, net of expenses.

Various by age and year of membership based on actual experience of the
RP-2000 Combined Healthy Lives
RP-2000 Combined Healthy Lives
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

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 is being amortized over thirty (30) years.

See independent auditor's report.

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

## SCHEDULES OF OPERATING EXPENSES

YEARS ENDED DECEMBER 31, 2011 AND 2010


See independent auditor's report.

# PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS SCHEDULES OF OPERATING EXPENSES (CONTINUED) 

## YEARS ENDED DECEMBER 31, 2011 AND 2010

## 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:

|  | 2011 | 2010 |  |
| :---: | :---: | :---: | :---: |
| Transportation and registration | \$ 5,068 | \$ | 8,837 |
| Lodging, meals, and miscellaneous | 12,592 |  | 11,212 |
| Total | \$ 17,660 | \$ | 20,049 |

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

## SCHEDULE OF PROFESSIONAL/CONSULTANT FEES

YEARS ENDED DECEMBER 31, 2011 AND 2010

|  | 2011 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
| Actuarial services | \$ | 126,165 | \$ | 162,759 |
| Accounting and auditing fees |  | 52,657 |  | 47,961 |
| Technology consulting |  | 49,150 |  | 55,611 |
| Legal expenses |  | 70,104 |  | 61,845 |
| Medical fees |  | 700 |  | 700 |
| Building property management |  | 27,917 |  | 30,460 |
| Health insurance consulting |  | 37,944 |  | 37,944 |
| Total fees | \$ | 364,637 | \$ | 397,280 |

Note: All supplemental information regarding investment fees and expenses can be found on page 54 of the Investment Section in this report.

# Public School Retirement System of the City of St. Louis Comprehensive Annual Financial Report <br> Year Ended December 31, 2011 

## INVESTMENT SECTION

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"....through benefit programs and services which are....


NEPC, LLC

Kristin Finney-Cooke, CAiA
SENior CONSULTANT
April 13, 2012

## The Board of Trustees

Public School Retirement System of the City of St. Louis
3641 Olive Street, Suite 300
St. Louis, MO 63108
Dear Board Members,
NEPC LLC currently serves as the pension consultant for the Public School Retirement System of the City of St. Louis. In our role as the pension consultant, we assist the Board in several manners: determining and executing the overall asset allocation strategy of the Plan, drafting of the investment policy of the Plan (and amendment of when necessary), conducting investment manager searches (both traditional and alternative asset classes); conducting custodial services searches, providing ongoing performance evaluation to each individual investment manager, to each asset class composite, and for the overall investment portfolio as a whole, and providing pertinent education to the Board.

The overall objective of the Public School Retirement System of the City of St. Louis is to provide service, disability, death and vested retirement benefits, and other postemployment benefits to members and their beneficiaries. To ensure a solid foundation for the future of the System, the Public School Retirement System of the City of St. Louis has implemented an investment program designed to achieve the actuarial assumed rate of return of the long term, while prudently managing the risk of the portfolio.

Although investment manager performance is key in the future "success" of the Plan, the overall asset allocation policy will be the primary determinant of such "success". Modern portfolio theory maintains that long term investors, who assume prudent levels of risk, will be rewarded with incremental returns above lower returning and risk free assets (i.e. TBills). The pension fund, in its asset allocation policy, is required to satisfy the need to pay accumulated/earned retirement benefits today, while at the same time be prepared for "uncertain" future benefits. This balancing of short-term needs versus long-term needs is a key tenant in the overall construction of the portfolio known as the generation of income versus appreciation of assets. To facilitate this demand balance of short term versus long term, the Board has adopted a diversified asset allocation structure that is primarily weighted in equity asset classes, such as US equities and Non-US equities, with offsetting investments in fixed income which provide current income and stability.

The Board continues to work diligently on expanding the alternative investment program, which will further assist in the diversification of the portfolio. Asset classes such as hedge funds are designed to lower the overall volatility of the program, while private equity is designed to provide higher long term performance above what is expected from traditional equity markets. As the allocation strategy evolves year after year, diversification and risk mitigation will continue to be the pillars of the asset allocation structure.

[^1]

This letter summarizes the structure and performance of the Public School Retirement System of the City of St. Louis Fund through the Fiscal Year ending December 31, 2011.

## Asset Allocation and Investment Performance

As of the December $31^{\text {st }}$ fiscal year end, the Fund was in compliance with the asset allocation policy with $43.1 \%$ equities, $21.2 \%$ fixed income and credit opportunities, $12.5 \%$ global asset allocation strategies, $4.6 \%$ hedge funds, $3.9 \%$ market neutral, $5.5 \%$ real estate, $3.0 \%$ private equity, $2.6 \%$ real assets, and $3.5 \%$ cash.

During the year ending December 31,2011 , the Fund earned $-0.1 \%$, which ranked it in the $71^{\text {st }}$ percentile of public funds with assets between $\$ 500$ million and $\$ 2.5$ billion within the Independent Consultants Cooperative (ICC) Universe. Over the 12 month period ending December 31,2011, PSRS underperformed its assumed actuarial return target of $8.0 \%$. Assets decreased from $\$ 926.3$ million at the end of fiscal year 2010 to approximately $\$ 855.5$ million as of December 31, 2011. This decrease in assets was predominantly a result of liquidity needs to operate the System. Over the trailing 5 year period ending December 31,2012 , the Fund earned an annualized rate of return of $2.8 \%$, ranking in the $26^{\text {th }}$ percentile of the comparative universe. Over the trailing 10 year period ending December 31, 2012, the Fund earned an annualized rate of return of $6.0 \%$, ranking in the $9^{\text {th }}$ percentile.

## Market Commentary

The global equity markets were quite volatile in 2011, faced with optimism about a possible economic recovery coupled with worries about the European debt crisis, inflation in China, US unemployment, unrest in the Middle East, and the downgrade of the US credit rating by the S\&P.

In addition, Japan was hit by an earthquake and tsunami in March that resulted in a monumental nuclear crisis, sending the Japanese stock market into a tailspin and global markets along with it. Despite these events, worldwide markets have remained resilient, and as the year ended, improving economic data in the US and European policy moves managed to bolster equity markets.
As a whole, developed markets lagged US Markets, which was a function of weak currency returns and the uncertainty that the Euro cast on international markets. Fears surrounding the Euro and growing inflation concerns in China caused Emerging markets to suffer as investors shed risk. By and large, equity securities moved with little regard for fundamentals and correlations across risky asset classes were elevated.

Equity markets got off to a strong start in 2011 as investors, optimistic about an economic recovery, continued to reallocate assets from bonds to stocks. While the markets cooled off in March in response to unnerving global headlines, most global segments - with the obvious exception of Japan - still ended the first quarter in positive territory.

It was a bumpy ride for global equity markets in the second quarter. The period started on a positive trend, as investors applauded strong corporate earnings results, but macro headlines in May and June quickly derailed market gains. Continued economic fears surrounding the European debt crisis, inflationary concerns in China, poor jobs reports from the US, and ongoing unrest in the Middle East all contributed to lower returns. During the

final days of the quarter, the markets rallied sharply neutralizing major losses to end the period anywhere between modestly positive to modestly negative.

The third quarter saw panic-driven declines in the equity markets, with all major equity indices decreasing by double-digit percentages, pushing year-to-date results into negative territory. Fear overshadowed fundamentals as investors focused on macro concerns related to several issues that made headlines: the Eurozone debt crisis, a potential slowdown in China, and, closer to home, the S\&P downgrade of the US credit rating and lower-thanexpected GDP growth rates. Amid renewed worries about a double-dip recession, there was nowhere to hide in the equity markets.

During the fourth quarter equity markets posted positive results to end another volatile year in which macro headlines overshadowed company fundamentals. After the quarter started out with a huge rally in October, the lack of a clear solution to the European debt crisis caused some divergence in results, with US markets gaining advantage over non-US stocks, and European markets lagging the most. US investors responded favorably to improvements in economic data on unemployment and consumer spending during the quarter. As indicators provided support for moderate US GDP growth, the primary beneficiaries were those market segments deemed as riskier or even previously left for dead.

| Equity Index Retums (123111) |  |  |  |
| :--- | :---: | :---: | :---: |
| Global Equity | Quarter | $\mathbf{1}$ Year | 3 Years |
| MSCI World | $7.6 \%$ | $-5.5 \%$ | $11.1 \%$ |
| US Equity | $11.8 \%$ | $2.1 \%$ | $-2.4 \%$ |
| S\&P 500 |  |  |  |
| Dow Jones Industrial Average | $12.8 \%$ | $8.4 \%$ | $14.9 \%$ |
| NASDAQ Composite | $8.2 \%$ | $-0.8 \%$ | $19.4 \%$ |
| RUSSELL 1000 GROWTH | $10.6 \%$ | $2.6 \%$ | $18.0 \%$ |
| RUSSELL 1000 VALUE | $13.1 \%$ | $0.4 \%$ | $11.6 \%$ |
| RUSSELL 2000 | $15.5 \%$ | $-4.2 \%$ | $15.6 \%$ |
| RUSSELL 2000 GROWTH | $15.0 \%$ | $-2.9 \%$ | $19.0 \%$ |
| RUSSELL 2000 VALUE | $16.0 \%$ | $-5.5 \%$ | $12.4 \%$ |
| Intemational Equity |  |  |  |
| MSCI EAFE | $3.3 \%$ | $-12.1 \%$ | $7.2 \%$ |
| MSCI Emerging Markets Free | $4.4 \%$ | $-18.4 \%$ | $20.3 \%$ |
| MSCI Europe | $5.4 \%$ | $-11.1 \%$ | $7.5 \%$ |
| MSCI UK | $9.1 \%$ | $-2.6 \%$ | $15.0 \%$ |
| MSCI Japan | $-3.9 \%$ | $-14.3 \%$ | $1.5 \%$ |
| MSCI Far East | $-2.7 \%$ | $-14.7 \%$ | $3.8 \%$ |

To start the year off, the global fixed-income markets had a resilient first quarter. US credit sectors in particular posted solid results as the business environment and leading unemployment indicators improved. Over the quarter, markets became concerned with the potential for higher inflation, as well as higher interest rates, as commodity and energy prices continued to rise. In addition, uncertainty surrounding the US fiscal situation came to a head, with the highly politicized budget debate in Washington nearly shutting down the

government. Washington's continuing struggle to lay out a fiscal road map for the coming years may ultimately decide the future outlook for the US bond market.

In the second quarter, uncertainty about the sustainability of the US recovery and concerns over the European debt crisis overtook market sentiment. In this environment, high-grade US fixed-income sectors posted strong results. Concerns over domestic inflation subsided as oil prices fell, the housing market remained weak, and unemployment numbers ticked up in many parts of the country. By the end of the quarter, Congress had yet to reach an agreement on the US debt ceiling, furthering anxiety in fixed-income markets.

US high-grade fixed income markets posted strong returns in the third quarter as investors sought safety in US Treasuries, investment grade corporate bonds, and US MBS. Treasury yields fell to remarkably low levels across the yield curve, particularly at the long end, as the Fed's "Operation Twist" drove down long-term interest rates to historic levels. Riskier segments of fixed income markets sold off, including high yield corporate bonds and emerging markets debt.

As the year came to a close, fixed income markets delivered mostly positive returns, with US high yield and hard currency emerging markets debt among the best performing sectors. US high grade credit led investment grade sectors, followed by agency MBS. Riskier segments of bond markets seemed to shrug off persistent concerns over the still unsettled problems brewing in the Eurozone, providing fuel for the rally. The Federal Reserve's "Operation Twist" pushed long-term yields to record lows despite the downgrade of US Treasury securities by Standard \& Poor's. Long-term Treasuries and TIPS were the best performing fixed income segments for the year, with both returning well over $20 \%$.

| Global Fixed income | Quarter | 1 Year. | 3 Years | 5 Years |
| :---: | :---: | :---: | :---: | :---: |
| Cut World Gov Eond | -1. $1 \%$ | 6. $4 \%$ | $43 \%$ | $71 \%$ |
| JFM EMEI Plus | -10\% | $-529$ | $3.6 \%$ | 4.5\% |
| Domestic Fixed income |  |  |  |  |
| BC Aggrogato | 1.1\% | 7.6\% | 6. $8 \%$ | 6.5\% |
| BC Gowerrment | 0.8\% | 9.0\% | $40 \%$ | 5. $6 \%$ |
| ECUS Credit | 1.7\% | 8.4\% | 10.7\% | $63 \%$ |
| BC Mortgane Backed | 0.9\% | 6.2\% | 5 5\% | 65\% |
| BCC Govt/Credit | 12\% | 87\% | 66\% | 6.6\% |
| ECTIPS | 1.7\% | 8.9\% | 3. $5 \%$ | 6.9\% |
| BCC High Yield | 6 5\% | 50\% | $241 \%$ | $75 \%$ |
| S\&P LSTA Lev Loan | $29 \%$ | $15 \%$ | 19\%\% | $42 \%$ |
| 90 Dar T-BILL | 00\% | $10 \%$ | 1.4\% | 15\% |
| 10-Year Band Yireids | Dec-11 | Sep-11 | Jun-11 | Mar-11 |
| US | 9.9\% | $19 \%$ | 3-2\% | 35\% |
| Germany | $18 \%$ | $19 \%$ | $317 \%$. | 3.4\% |
| UK | 20\% | 2.4\% | 3.4\% | 37\% |
| Japen | $10 \%$ | B. $9 \%$ | $1.1 \%$ | 13\% |

## 2011 Summary

During the fiscal year, manager changes took place in the Hedge Fund category and new allocations were made in the Global Asset Allocation and Real Assets categories. Two new hedge fund managers were hired during the latter part of the year: Permal and EnTrust. A new asset class was added to the Fund structure as Real Assets (Wellington Management) was funded in August. A new Global Asset Allocation fund managed by PIMCO was added to the mix during March.

Fiscal Year 2011 was a challenging year for investors. Although the Public School Retirement System of the City of St. Louis performance slightly trailed its Policy Index during the 2011 fiscal year, the Fund is well diversified and positioned for the future. Longer term performance continues to uphold our goals and objectives, outperforming our investment policy and comparative Public Fund peer group.

Diversification aims to reduce volatility and mitigate overall plan risk across a range of asset classes with varied return patterns. Our goal is to increase the diversification, when prudent to do so, of the System's assets more broadly within the traditional and nontraditional asset classes for the purpose of reducing volatility, while at the same time enhancing the Fund's ability to generate superior returns throughout all market conditions.

Sincerely,


Kristin R. Finney Cooke, CAIA
Senior Consultant

Fiscal Year Ended December 31, 2011

Investment Policies

The System's assets are invested under the provisions of Rule XIV. - Investment Policies of the Fund's Rules \& Regulations established by the Board of Trustees. The following is a summary of the System's Investment Goals under Rule XIV., Section 3:


#### Abstract

Assets of the System shall be invested in a manner designed to preserve and enhance principal over the long term, both in real and nominal terms. Total return, consistent with prudent investment management, is the primary goal of the System. Total return, as used herein, includes income less expenses plus realized and unrealized gains and losses in the System's assets. The Trustees will establish, in the Investment and Operating Guidelines, both real and nominal long-term target rates of return for the Fund that are projected to provide a high probability of achieving the System's long-term investment objectives within acceptable risk levels. The Trustees shall establish, in the Investment and Operating Guidelines, additional performance expectations for the Fund as a whole and for each asset classification within the Fund. Total Fund risk exposure and risk adjusted returns will be regularly evaluated and compared to such peer group or groups that the Trustees and investment consultant may from time to time select.


## Investment and Operating Guidelines

The Investment and Operating Guidelines are issued for the guidance of fiduciaries, including staff, investment consultants, investment professionals and investment managers in the course of investing and administering the funds of the retirement system, and to assist in measuring the performance of the investment managers and the Fund. Included in the guidelines are specific details for the following items:

Performance Objectives by Asset Class
Operating Guidelines by Asset Class Standards of Investment Performance Reporting Requirements

Asset Allocation Policy
Liquidity Assumption for Benefit Payments
Watch List / Probation Process
Use of Guidelines by Investment Managers

## Code of Ethics Policy

The Board of Trustees has adopted a Code of Ethics Policy that prohibits conflicts of interest and requires representatives of the Fund to act with the highest level of ethical responsibility in the performance of their duties. All Trustees, employees, professionals and vendors are required to acknowledge their understanding of the policy on an annual basis.

## Investment Policies and Operating Guidelines Review

The Investment Policies and Operating Guidelines may be amended or modified from time to time by the Trustees, in the manner provided in the Fund's Rules and Regulations, upon consideration of the advice and recommendations of retained professionals, including the Fund's actuary, accountant, investment managers, investment consultant, and attorney. The Investment Policies and Operating Guidelines are usually reviewed at least once a year to insure their relevance to the Fund's needs and to communicate any material changes thereto to the investment managers.

To view or print the Investment Policies and Guidelines in their entirety, please visit http://www.psrsstl.org./Rules Regs.htm

Schedule of Investments - December 31, 2011

| Investment Category | $\mathbf{\%}$ of <br> MV | MV Over <br> Market Value (MV) | Cost | (Under) Cost |
| :--- | ---: | ---: | ---: | ---: |
| Cash Equivalents | $4.4 \%$ | $\$ 37,627,622$ | $\$ 37,627,622$ | $\$ 0$ |
| U.S. Government and Agency Issues | $5.9 \%$ | $50,200,578$ | $48,410,588$ | $1,789,990$ |
| Corporate Bonds | $6.0 \%$ | $51,286,089$ | $50,679,825$ | 606,264 |
| Foreign Corporate \& Government Bonds | $11.2 \%$ | $95,408,493$ | $100,001,462$ | $(4,592,969)$ |
| Common Stocks | $26.3 \%$ | $224,917,277$ | $204,874,313$ | $20,042,964$ |
| Mutual Funds | $35.3 \%$ | $301,124,937$ | $243,148,759$ | $57,976,178$ |
| Real Estate - Insurance Contracts | $5.5 \%$ | $46,725,649$ | $45,752,389$ | 973,260 |
| Credit opportunity Investments | $2.4 \%$ | $20,217,520$ | $16,574,127$ | $3,643,393$ |
| Alternative Investments | $3.1 \%$ | $26,566,476$ | $22,148,598$ | $4,417,878$ |
| Total |  | $\mathbf{1 0 0 . 0 \%}$ | $\mathbf{\$ 8 5 4 , 0 7 4 , 6 4 1}$ | $\$ 769,217, \mathbf{6 8 3}$ |

## Market Value of Assets by Asset Class - three years ended December 31 ${ }^{\text {st }}$

| Investment Category | As of December 31, 2009 |  | As of December 31, 2010 |  | As of December 31, 2011 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Market Value | $\%$ of <br> Total | Market Value | $\%$ of <br> Total | Market Value | $\%$ of <br> Total |
| Cash, Receivables, Cash Equivalents | \$61,958,719 | 6.9\% | \$48,008,324 | 5.1\% | \$50,329,093 | 5.8\% |
| Property and Building | 2,287,211 | 0.3\% | 2,219,772 | 0.2\% | 2,152,334 | 0.2\% |
| U.S. Government and Agency Issued Bonds | 37,624,541 | 4.2\% | 48,690,369 | 5.2\% | 50,200,578 | 5.8\% |
| Corporate Bonds | 66,236,320 | 7.4\% | 68,563,470 | 7.3\% | 51,286,089 | 5.9\% |
| Foreign Investments (bonds and stocks) | 114,276,055 | 12.8\% | 109,773,594 | 11.6\% | 95,408,493 | 11.0\% |
| Common and Preferred Stocks | 249,011,409 | 27.9\% | 265,038,827 | 28.1\% | 224,917,277 | 25.9\% |
| Mutual Funds | 279,655,937 | 31.3\% | 303,286,315 | 32.2\% | 301,124,937 | 34.7\% |
| Real Estate - Insurance Contracts | 40,811,416 | 4.6\% | 47,890,147 | 5.1\% | 46,725,649 | 5.4\% |
| Mortgages | 4,068 | 0.0\% | 0 | 0.0\% | 0 | 0.0\% |
| Credit opportunity Investments | 20,591,527 | 2.3\% | 23,406,472 | 2.5\% | 20,217,520 | 2.3\% |
| Alternative Investments | 20,064,801 | 2.2\% | 26,277,382 | 2.8\% | 26,566,476 | 3.1\% |
| Total | \$892,522,004 | 100.0\% | \$943,154,672 | 100.0\% | \$868,928,446 | 100.0\% |

For the year ending December 31, 2011, the total PSRSSTL portfolio posted a slight loss of (0.1)\%, ranking $71^{\text {st }}$ within the Investment Consultants' Cooperative (ICC) Universe of Public Funds. For the three-year and five-year periods ending December 31, 2011, the total PSRSSTL portfolio ranked $36^{\text {th }}$ and $26^{\text {th }}$ with $11.5 \%$ and $2.8 \%$ returns, respectively.

Investment returns for the retirement system's portfolio, stocks and bonds for the one-year, three-year and five-year periods ending December 31, 2011 are set forth below.

| Investment Category | $\begin{gathered}\text { Annualized Returns } \\ \text { for Periods Ended }\end{gathered}$December 31, 2011, net of fees |  |  |
| :---: | :---: | :---: | :---: |
|  | One Year | Three Years | Five Years |
| PSRS Total Portfolio | -0.1\% | 11.5\% | 2.8\% |
| Allocation Index* | 0.7\% | 10.7\% | 2.1\% |
| PSRS Domestic Equities | 1.0\% | 16.5\% | 1.2\% |
| Russell 3000 Index | 1.0\% | 14.9\% | 0.0\% |
| PSRS Domestic Bonds | 4.1\% | 13.3\% | 6.2\% |
| Barclays Capital Aggregate | 7.8\% | 6.8\% | 6.5\% |
| Barclays Capital High Yield | 5.0\% | 24.1\% | 7.5\% |
| PSRS International Equities | -11.0\% | 9.9\% | -2.9\% |
| MSCI EAFE Index | -12.1\% | 7.6\% | -4.7\% |
| PSRS Emerging Market Equities | -23.5\% | 19.4\% | 1.7\% |
| MSCI Emerging Index | -18.4\% | 20.1\% | 2.4\% |
| PSRS Global Bonds | 5.8\% | 7.5\% | 8.8\% |
| Citigroup World Government | 6.4\% | 4.7\% | 7.1\% |

*The Allocation Index is comprised of various equity, fixed income, hedge fund, real estate and Treasury bill indices in proportion to the asset weights within the pension fund.

## ASSET ALLOCATION AND INVESTMENT MANAGERS AS OF DECEMBER 31, 2011 (000's omitted)

|  | RELATIVE TO TOTAL PORTFOLIO |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | MANAGEMENT | MARKET VALUE |  | TARGET VALUE |  | VARIANCE |  | MARKET VALUE |  |
|  | STYLE | Value | \% | Value | \% | Value | \% | Value | \% |
| LARGE CAP GROWTH DOMESTIC EQUITIES |  | 83,634 | 9.8\% | 76,993 | 9.0\% | 6,641 | 0.8\% |  |  |
| Buford, Dixon, Harper \& Sparrow | Large Cap Growth |  |  |  |  |  |  | 19,218 | 23.0\% |
| Intech | Large Cap Growth |  |  |  |  |  |  | 25,712 | 30.7\% |
| Monetary Management Group | Large Cap Growth |  |  |  |  |  |  | 38,704 | 46.3\% |
| LARGE CAP CORE DOMESTIC EQUITIES |  | 23,188 | 2.7\% | 25,664 | 3.0\% | $(2,476)$ | -0.3\% |  |  |
| Batterymarch Financial | Large Cap Core |  |  |  |  |  |  | 14,639 | 63.1\% |
| Mellon Equity Index | Large Cap Core |  |  |  |  |  |  | 8,549 | 36.9\% |
| LARGE CAP VALUE DOMESTIC EQUITIES |  | 77,842 | 9.1\% | 76,993 | 9.0\% | 849 | 0.1\% |  |  |
| Chicago Equity Partners | Large Cap Value |  |  |  |  |  |  | 45,979 | 59.1\% |
| The Edgar Lomax Company | Large Cap Value |  |  |  |  |  |  | 31,863 | 40.9\% |
| MID CAP GROWTH DOMESTIC EQUITIES |  | 25,078 | 2.9\% | 25,664 | 3.0\% | (586) | -0.1\% |  |  |
| New Amsterdam Partners | Mid Cap Growth |  |  |  |  |  |  | 25,078 | 100.0\% |
| SMALLIMICRO CAP DOMESTIC EQUITIES |  | 56,779 | 6.6\% | 59,884 | 7.0\% | $(3,105)$ | -0.4\% |  |  |
| Westfield Capital Management | Small Cap Growth |  |  |  |  |  |  | 19,065 | 33.6\% |
| Systematic Financial Management | Small Cap Value |  |  |  |  |  |  | 19,972 | 35.2\% |
| Dimensional Fund Advisors | Small Cap Core |  |  |  |  |  |  | 17,742 | 31.2\% |
| GLOBAL TACTICAL ASSET ALLOCATION (GTAA) |  | 106,748 | 12.5\% | 102,658 | 12.0\% | 4,090 | 0.5\% |  |  |
| GMO Global Balanced Asset Allocation | Balanced Fund |  |  |  |  |  |  | 35,180 | 33.0\% |
| Mellon Global Alpha I | Balanced Fund |  |  |  |  |  |  | 36,498 | 34.2\% |
| PIMCO All Asset Fund | Balanced Fund |  |  |  |  |  |  | 35,070 | 32.9\% |
| INTERNATIONAL EQUITIES |  | 102,441 | 12.0\% | 119,767 | 14.0\% | $(17,326)$ | -2.0\% |  |  |
| Battermarch GL Emerging | Emerging Markets |  |  |  |  |  |  | 21,879 | 21.4\% |
| Causeway | International Equities |  |  |  |  |  |  | 33,414 | 32.6\% |
| Dimensional Fund Advisors | Emerging Markets |  |  |  |  |  |  | 12,666 | 12.4\% |
| Pyramis | International Equities |  |  |  |  |  |  | 34,482 | 33.7\% |
| DOMESTIC BONDS |  | 74,697 | 8.7\% | 85,548 | 10.0\% | $(10,851)$ | -1.3\% |  |  |
| Earnest | Core Domestic Bonds |  |  |  |  |  |  | 21,920 | 29.3\% |
| Mellon Index Bond | Core Domestic Bonds |  |  |  |  |  |  | 617 | 0.8\% |
| MFC | Core Domestic Bonds |  |  |  |  |  |  | 52,160 | 69.8\% |
| HIGH YIELD DOMESTIC BONDS |  | 38,367 | 4.5\% | 42,774 | 5.0\% | $(4,407)$ | -0.5\% |  |  |
| Loomis Sayles | High Yield Bonds |  |  |  |  |  |  | 38,367 | 100.0\% |
| CREDIT OPPORTUNITIES |  | 20,218 | 2.4\% | 17,110 | 2.0\% | 3,108 | 0.4\% |  |  |
| Loomis Sayles | Credit Asset Trust |  |  |  |  |  |  | 20,218 | 100.0\% |
| GLOBAL BONDS |  | 48,165 | 5.6\% | 51,329 | 6.0\% | $(3,164)$ | -0.4\% |  |  |
| Mondrian | Global Bonds |  |  |  |  |  |  | 48,165 | 100.0\% |
| MARKET NEUTRAL STRATEGY |  | 33,661 | 3.9\% | 34,219 | 4.0\% | (558) | -0.1\% |  |  |
| Blue Rock | Market Neutral |  |  |  |  |  |  | 33,661 | 100.0\% |
| HEDGED STRATEGIES |  | 44,217 | 5.2\% | 42,774 | 5.0\% | 1,443 | 0.2\% |  |  |
| K2 | Cash (10\% Holdback) |  |  |  |  |  |  | 2,117 | 4.8\% |
| Mariner | Cash (10\% Holdback) |  |  |  |  |  |  | 2,661 | 6.0\% |
| Entrust | Hedge Funds |  |  |  |  |  |  | 19,277 | 43.6\% |
| Permal | Hedge Funds |  |  |  |  |  |  | 20,162 | 45.6\% |
| REAL ASSETS |  | 21,997 | 2.6\% | 25,664 | 3.0\% | $(3,667)$ | -0.4\% |  |  |
| Wellington | Commodities |  |  |  |  |  |  | 21,997 | 100.0\% |
| REAL ESTATE |  | 46,726 | 5.5\% | 42,774 | 5.0\% | 3,952 | 0.5\% |  |  |
| UBS Trumbull Property Funds | Real Estate |  |  |  |  |  |  | 46,726 | 100.0\% |
| ALTERNATIVE INVESTMENTS |  | 25,920 | 3.0\% | 25,664 | 3.0\% | 256 | 0.0\% |  |  |
| Private Equity | Alternative Investments |  |  |  |  |  |  | 25,920 | 100.0\% |
| CASH (Does Not Include Managers' Residual Cash) |  | 25,804 | 3.0\% | 0 | 0.0\% | 25,804 | 3.0\% |  |  |
| PSRSSTL | Cash Accounts |  |  |  |  |  |  | 25,804 | 100.0\% |
| TOTAL |  | \$855,482 100.0\% \$855,482 100.0\% |  |  |  |  |  |  |  |

The target values shown above represent the current Asset Allocation Policy adopted by the Board of Trustees in 2010. In 2011, the Board of Trustees added to the GTAA asset class by investing in the PIMCO All Asset Fund, hired Wellington as a real assets manager, and hired Entrust and Permal to manage hedge funds by replacing K-2 and Mariner. Funding was provided by reallocating within the asset classes and from equity investments.
2011 Return ..... 1.0\%
Average Market Capitalization ..... \$53,558,000,000
P/E Ratio ..... 15.29
Price/Book Ratio ..... 3.34
Five Year Earnings Growth Rate ..... 8.08

| Ten Largest Domestic Equity Holdings* |  |  |  |  |  |  |
| :--- | :---: | :---: | :--- | :--- | :--- | :---: |
|  | Market | Percent of <br> Domestic |  | Market | Percent of <br> Domestic |  |
| Company | $\underline{\text { Value }}$ | $\underline{\text { Equity }}$ | $\underline{\text { Company }}$ | $\underline{\text { Value }}$ | $\underline{\text { Equity }}$ |  |
| APPLE INC | $4,313,250$ | $1.7 \%$ | VERIZON COMM INC | $3,320,251$ | $1.3 \%$ |  |
| CHEVRON CORP | $3,770,710$ | $1.5 \%$ | UNITEDHEALTH INC | $2,708,846$ | $1.1 \%$ |  |
| CONOCOPHILLIPS | $3,735,535$ | $1.4 \%$ | EXXON MOBIL CORP | $2,569,669$ | $1.0 \%$ |  |
| PFIZER INC | $3,408,754$ | $1.3 \%$ | GENERAL ELECTRIC CO | $2,441,402$ | $1.0 \%$ |  |
| INTEL CORP | $3,388,283$ | $1.3 \%$ | PHILIP MORRIS | $2,425,032$ | $0.9 \%$ |  |


| Ten Best Performing Domestic Equity Holdings for $\mathbf{4}^{\text {th }}$ Quarter 2011* |  |  |  |
| :--- | :---: | :--- | :--- |
| Company | $\underline{\text { Return }}$ | $\underline{\text { Company }}$ | $\underline{\text { Return }}$ |
| INHIBITEX INC | $344.7 \%$ | SOLTA MEDICAL INC | $151.2 \%$ |
| PACIFIC ETHANOL INC | $266.8 \%$ | FIRST FIN HLDGS INC | $124.1 \%$ |
| BIOFUEL ENERGY CORP | $261.9 \%$ | NAT FIN HLDGS INTL | $119.9 \%$ |
| RSC HOLDINGS INC | $159.5 \%$ | ROYALE ENERGY INC | $118.1 \%$ |
| ARABIAN AMERICAN DEV CO | $151.6 \%$ | PATRICK INDS INC | $115.6 \%$ |


| Ten Worst Performing Domestic Equity Holdings for $\mathbf{4}^{\text {th }}$ Quarter 2011* $^{*}$ |  |  |  |  |  |  |  |  |
| :--- | :---: | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Company | $\underline{\text { Return }}$ | $\underline{\text { Company }}$ | $\underline{\text { Return }}$ |  |  |  |  |  |
| PC GROUP INC | $-96.4 \%$ | BIOSANET PHARMA INC | $-78.0 \%$ |  |  |  |  |  |
| FIRST REGL BANCORP | $-95.6 \%$ | PSIVIDA CORP | $-74.0 \%$ |  |  |  |  |  |
| REDDY ICE HLDGS INC | $-87.9 \%$ | PINNACLE AIRLINES CORF | $-72.0 \%$ |  |  |  |  |  |
| APPLIED ENERGETICS INC | $-80.8 \%$ | QUANTUM FUEL SYS TECH | $-70.8 \%$ |  |  |  |  |  |
| FIBERTOWERCORP | $-78.2 \%$ | DEARBORN BANCORP INC | $-70.1 \%$ |  |  |  |  |  |

*The information shown reflects directly held securities as of December 31, 2011, and does not include pooled fund or mutual fund holdings. The data utilized is supplied by the System's custodian US Bank. Returns for $4^{\text {th }}$ Quarter include equities held for the full period September 30, 2011 through December 31, 2011.

In 2011, the PSRSSTL domestic bond portfolio had an average maturity of 8.7 years, average duration of 5.6 years, average quality rating of $A$-, and earned $4.1 \%$. Here are the summary bond statistics for the fiscal year ending December 31, 2011.

| Bond Portfolio <br> Yield to Maturity | Percent of Portfolio* |
| :---: | :---: |
| $0.0-5.0$ | $52.8 \%$ |
| $5.0-7.0$ | $12.4 \%$ |
| $7.0-9.0$ | $13.9 \%$ |
| $9.0-11.0$ | $7.7 \%$ |
| $11.0-13.0$ | $1.3 \%$ |
| $13+$ | $4.9 \%$ |
| Unclassified | $7.0 \%$ |


| Bond Portfolio <br> Average Life | Percent of Portfolio* |
| :---: | :---: |
| $0.0-1.0$ | $0.4 \%$ |
| $1.0-3.0$ | $9.0 \%$ |
| $3.0-5.0$ | $24.8 \%$ |
| $5.0-10.0$ | $38.8 \%$ |
| $10.0-20.0$ | $10.6 \%$ |
| $20+$ | $9.4 \%$ |
| Unclassified | $7.0 \%$ |


| Bond Portfolio | Percent of Portfolio* |
| :--- | :---: |
| Quality Rating |  |
| TREASURY | $11.7 \%$ |
| AGENCY | $1.5 \%$ |
| AAA | $26.8 \%$ |
| AA-1 TO AA-3 | $3.6 \%$ |
| A-1 TO A-3 | $6.6 \%$ |
| BAA-1 TO BAA-3 | $13.8 \%$ |
| BA-1 TO BA-3 | $6.5 \%$ |
| B-1 TO B-3 | $12.7 \%$ |
| CAA TO C | $3.5 \%$ |
| NOT RATED | $1.3 \%$ |
| UNCLASSIFIED | $12.1 \%$ |

* The information shown reflects directly held securities as of December 31, 2011, and does not include pooled fund or mutual fund holdings. The data utilized is supplied by the System's custodian US Bank. Securities without cusips or with unrecognized cusips are listed as unclassified.

BROKERAGE COMMISSIONS PAID - Year Ended December 31, 2011

|  | Commission |  | Commission |  | Commission |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Company | Paid | Company | Paid | Company | Paid |
| Abel Noser | \$5,212.05 | Exane SA | 295.15 | Mizuho Securities USA | 514.17 |
| Aqua Securities | 124.00 | First Clearing | \$11,381.00 | Morgan Stanley | 6,914.89 |
| Baird \& Company | 738.80 | Friedman Billings \& Ramsey | 599.60 | Needham \& Company | 549.00 |
| Barclays Capital | 5,245.03 | Gleacher \& Co. | 108.00 | Nomura Securities | 3,238.80 |
| Blaylock \& Co. | 403.00 | Goldman Sachs | 2,644.34 | Oppenheimer \& Co. | 842.40 |
| Bloomberg Tradebook | 4,632.37 | Guzman \& Company | 2,982.13 | Pacific American Securities | 300.68 |
| Bluefin Research | 253.60 | Instinet | 2,824.89 | Pacific Crest Securities | 190.80 |
| BMO Capital Markets | 3.00 | Investment Technology Group | 19,651.65 | Pershing | 340.48 |
| BNP Paribas | 270.10 | ISI Group Inc. | 788.00 | Pipeline Trading Services | 144.50 |
| BNY Convergex | 36,697.51 | Ivy Securities Inc. | 1,194.32 | Piper Jaffray | 695.60 |
| BOE Securities | 178.00 | J P Morgan | 5,887.49 | Pulse Trading | 1,083.80 |
| Broadcort Cap Corp | 15,193.17 | Jackson Partners | 159.00 | Raymond James | 1,057.05 |
| BTIG, LLC | 344.40 | Janney Securities | 244.00 | RBC Capital Markets | 1,834.40 |
| Cabrera Capital Markets | 112.00 | Jeffries \& Co. | 4,894.91 | RBS Securities | 445.93 |
| Calyon Securities | 56.41 | JMP Securities | 147.60 | Rochdale Securities | 111.00 |
| Canaccord Genuity Inc. | 302.00 | JNK Securities | 108.00 | Rosenblatt Securities | 2,087.96 |
| Canadian Imperial Bank | 626.18 | Jones Trading Institutional | 1,424.80 | Sandler O'Neill \& Partners | 114.00 |
| Cantor Fitzgerald | 1,678.03 | Keefe Bruyette \& Woods | 665.99 | Sanford C. Bernstein \& Co | 9,184.41 |
| Cap Institutional Services | 15,642.79 | Keybanc Capital Markets | 141.60 | Santa Boadilla | 27.74 |
| Cheevers \& Co., Inc. | 240.00 | King CL \& Associates | 148.50 | Sidoti \& Co. | 921.00 |
| Citation Group | 1,185.45 | Knight Direct | 2,387.40 | Societe General | 2,081.36 |
| Citigroup | 5,967.49 | Knight Equity Markets | 3,177.39 | State Street | 72,766.89 |
| Clearview | 55.00 | Lazard Capital | 700.00 | Stephens Inc. | 222.40 |
| Collins Stewart | 1,661.20 | Leerink Swann \& Co. | 326.40 | Sterne Agee Leach Inc | 436.56 |
| Cowen \& Co. | 1,428.00 | Liquidnet Inc. | 13,197.92 | Stifel Nicolaus \& Co. | 1,575.60 |
| Craig Hallum | 680.00 | Longbow Securities LLC | 464.00 | Suntrust Capital | 275.60 |
| CR Argricole | 2,024.65 | Loop Capital Markets | 48.00 | Thinkpanmure LLC | 240.00 |
| Credit Suisse Securities | 15,299.84 | Macquarie Securites | 2,258.08 | UBS | 14,610.01 |
| Cuttone \& Co. | 49.00 | Melvin Securities | 567.00 | Wedbush Morgan Securities | 27.20 |
| Dahlman Rose \& Co. | 116.00 | Merrill Lynch | 8,682.28 | Weeden \& Co. | 3,215.39 |
| Daiwa | 1,368.39 | Merriman Curhan Ford \& Co. | 4.00 | Wells Fargo Securities | 1,164.40 |
| Davidson \& Co. | 216.40 | Miller Tabak \& Co. | 366.00 | William Blair \& Co. | 303.20 |
| Deutsche Bank Securities | 9,742.50 | Mitsubishi | 501.78 | Williams Capital Group | 1,096.32 |
| Electronic Broker Systems | 53.58 |  |  |  |  |
|  |  |  |  | 2011 Total Commissions Paid | \$345,384.70 |

PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

## SCHEDULE OF INVESTMENT EXPENSES

YEARS ENDED DECEMBER 31, 2011 AND 2010

|  | 2011 |  | 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
| Investment management fees (by Manager) |  |  |  |  |
| Batterymarch | \$ | 109,484 | \$ | 120,504 |
| BDH |  | 95,800 |  | 86,383 |
| Causeway |  | 256,836 |  | 286,307 |
| Chicago Equity |  | 178,622 |  | 170,543 |
| Earnest Partners |  | 52,777 |  | 49,854 |
| Fidelity |  | 251,781 |  | 252,481 |
| GMO |  | 11,010 |  |  |
| Intech |  | 135,377 |  | 141,530 |
| John Hancock |  | 159,319 |  | 166,110 |
| Lomax |  | 161,242 |  | 145,065 |
| Loomis Sayles |  | 308,727 |  | 321,618 |
| Mellon |  | 337,160 |  | 392,175 |
| Mondrian |  | 221,683 |  | 218,176 |
| Monetary |  | 265,244 |  | 292,267 |
| New Amsterdam |  | 104,309 |  | 103,459 |
| Systematic |  | 229,073 |  | 281,677 |
| UBS |  | 473,859 |  | 356,865 |
| US Bank |  | 152,055 |  | 153,643 |
| Wellington |  | 33,693 |  |  |
| Westfield |  | 209,061 |  | 253,708 |
| Total investment management fees |  | 3,747,112 |  | 3,792,365 |
| Consultant fees |  | 190,305 |  | 191,143 |
| Banking services |  | 33,102 |  | 34,083 |
| Foreign taxes paid |  | 1,564 |  | 1,688 |
| Total investment expenses | \$ | 3,972,083 |  | 4,019,279 |

Note: Total investment expenses tie into amounts for investment expenses under net additions on page 18 of the Financial Section of this report.

# Public School Retirement System of the City of St. Louis Comprehensive Annual Financial Report <br> Year Ended December 31, 2011 

## ACTUARIAL SECTION

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"....soundly financed and prudently administered....

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

Actuarial Valuation Report

Plan Year January 1, 2011 - December 31, 2011
June, 2011

## buckconsultants

June 20, 2011

Mr. Andrew Clark
Executive Director
PSRS of the City of St. Louis
3641 Olive Street, Suite 300
St. Louis, MO 63108-3601
Dear Members of The Public School Retirement System of the City of St. Louis Board:

## Actuarial Certification

The annual actuarial valuation required for the Public School Retirement System of the City of St. Louis has been prepared as of January 1, 2011 by Buck Consultants. The purposes of the report are to:
(1) determine the required annual contributions from the board of education, the retirement system, and the charter schools;
(2) present the valuation results of the System as of January 1, 2011;
(3) develop information used for reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

This report is submitted in accordance with Section 169.450-16 Revised Statutes of Missouri (R.S. Mo.). The required contribution to the System from the board of education, the retirement system, and the charter schools is computed in accordance with Section 169.490 R.S. Mo. The amount of the required contribution is stated on page 63 of this report.

In preparing this valuation, we have employed generally accepted actuarial methods and assumptions, in conjunction with employee data and financial information provided to us by the System, to determine a sound value for the System liability. The employee data has not been audited, but it has been reviewed and found to be consistent, both internally and with prior years' data.

Mr. Andrew Clark
PSRS of the City of St. Louis
June 20, 2011

This actuarial valuation is based on the same actuarial assumptions and methods as those used in the prior actuarial valuation. A summary of those assumptions and methods is presented beginning on page 75 of this report. All assumptions used in this valuation are as adopted by the Board. The assumptions, when applied in combination, fairly represent past and anticipated future experience of the System.

Future contribution requirements may differ from those determined in the valuation because of:
(1) differences between actual experience and anticipated experience based on the assumptions;
(2) changes in actuarial assumptions or methods;
(3) changes in statutory provisions;
(4) differences between actuarially required contributions and actual contributions.

The undersigned are members of the American Academy of Actuaries and the Society of Actuaries, are fully qualified to provide actuarial services to the System, and are available to answer questions regarding this report.

We believe that the assumptions and methods used for funding purposes and for the disclosures presented in this report satisfy the parameter requirements set forth in the Government Accounting Standards Board (GASB) Statement No. 25. We believe that this report conforms with the requirements of the Missouri statutes, and where applicable, other federal and accounting laws, regulations and rules, as well as generally accepted actuarial principles and practices.

Sincerely,


Stephen B. Siepman, FSA, EA, MAAA Principal, Consulting Actuary


Michael D. Mills, FSA, EA, MAAA
Director, Consulting Actuary

## Report Highlights

This report has been prepared by Buck Consultants to:

- Present the results of a valuation of the Public School Retirement System of the City of St. Louis as of January 1, 2011;
- Determine the required contribution rate for 2012;
- Provide reporting and disclosure information for financial statements, governmental agencies, and other interested parties.

After the summary and analysis of the valuation results, this report is divided into sections. One section contains the results of the valuation and includes the experience of the System during the 2010 plan year and information on funded levels.

Another section contains asset information. It includes market value of assets, the calculation of actuarial value of assets, the contingency reserve, and asset returns.

The final section of this report describes the basis of the valuation. It summarizes the System provisions, provides information relating to the System members, and describes the funding methods and actuarial assumptions used in determining liabilities and costs.

## Gains and losses

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 based upon the actuarial assumptions. Annual gains (or losses) should be expected as or because short-term deviations from expected long-term average experience are common.

For 2011, actuarial losses were approximately $\$ 11$ million. $\$ 9$ million of the loss is attributable to the System's actuarial rate of return on assets which was $6.9 \%, 1.1 \%$ less than the assumed rate of return of $8.00 \%$. By comparison, the rate of return on the market value of assets was $13.5 \%$. 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, 2011, the actuarial value of assets at $\$ 944$ million remains above market value of assets by approximately $\$ 7$ million. About $\$ 2$ million of the loss is attributable to demographic changes.

## Normal cost rate

The normal cost is determined annually and equals the product of the normal cost rate times covered payroll. For 2011, the annual normal cost due December 31, 2011 is $\$ 14,507,892$, as compared to $\$ 12,673,767$ for 2010, primarily due to the aforementioned actuarial loss. The annual normal cost rate increased from $4.85 \%$ to $6.39 \%$ due to the above losses and the reduction in active payroll over which to amortize costs. Covered payroll decreased from $\$ 242.0$ million to $\$ 218.3$ million.

## Accrued liability amortization

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 2010 were $\$ 6.7$ million more than the annual required contribution, which reduced the UFAAL more than expected. As a result, the amortization payment is reduced from $\$ 11,590,415$ to $\$ 11,420,766$. However, it is being spread over a smaller payroll base, so the amortization payment component of the contribution rate increased from $4.8 \%$ to $5.3 \%$ of covered payroll.

## Required contribution and timing

In 2001, the Board of Education agreed to institute a one-year lag for future years. Therefore, this actuarial valuation is used to determine the actual contribution rate for 2012. The dollar amount of the actual contribution increased to $\$ 25,928,658$ for 2012 from $\$ 24,264,182$ for 2011. As a percentage of covered compensation, the contribution rate for 2012 increased to $11.88 \%$ from 10.03\% for 2011.

## Annual Required Contribution

|  | Board of <br> Education | Retirement <br> System | Charter <br> Schools | Total |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| $\mathbf{2 0 1 1}$ |  |  |  |  |  |  |
| Normal cost contribution | $\$ 11,630,457$ | $\$ 41,350$ | $\$$ | $2,836,085$ | $\$$ | $14,507,892$ |
| Actuarial accrued liability contribution | $9,155,618$ | 32,552 | $2,232,596$ | $\$$ | $11,420,766$ |  |
| Annual required contribution | $20,786,075$ | 73,902 | $5,068,681$ | $\$$ | $25,928,658$ |  |
| Covered payroll | $175,009,885$ | 622,220 | $42,676,134$ | $\$$ | $218,308,239$ |  |
| ARC as \% of covered payroll | $11.88 \%$ | $11.88 \%$ | $11.88 \%$ | $11.88 \%$ |  |  |
| 2010 |  |  |  |  |  |  |
| Normal cost contribution |  |  |  |  |  |  |
| Actuarial accrued liability contribution | $\$ 10,411,884$ | $\$ 30,276$ | $\$$ | $2,231,607$ | $\$$ | $12,673,767$ |
| Annual required contribution | $9,521,877$ | 27,688 | $2,040,850$ | $\$$ | $11,590,415$ |  |
| Covered payroll | $19,933,761$ | 57,964 | $4,272,457$ | $\$$ | $24,264,182$ |  |
| ARC as \% of covered payroll | $198,775,945$ | 578,006 | $42,604,182$ | $\$$ | $241,958,133$ |  |


|  | January 1, 2011 |  | January 1, 2010 |  |
| :---: | :---: | :---: | :---: | :---: |
| System Assets |  |  |  |  |
| Expense and contingency reserve | \$ | 29,480,465 | \$ | 29,903,107 |
| Market value, excluding expense \& contingency reserve |  | 908,113,738 |  | 861,659,811 |
| Actuarial value |  | 944,356,735 |  | 950,709,944 |
| System liabilities |  |  |  |  |
| Unfunded actuarial accrued liability | \$ | 121,914,117 | \$ | 125,292,126 |
| Actuarial present value of projected accrued benefits | \$ | 1,115,338,412 |  | ,111,070,953 |
| Funding Ratio |  |  |  |  |
| Actuarial value funding ratio |  | 84.7\% |  | 85.6\% |
| Market value funding ratio |  | 81.4\% |  | 77.6\% |

## (1) Investment Experience

Our actuarial calculations were based upon the assumption that the System's assets earn $8.00 \%$. The approximate market value rate of return during 2010 was $13.5 \%$. The approximate actuarial value rate of return was $6.9 \%$.

## (2) Demographic Experience

The number of active members decreased from 4,825 to 4,336 for the period. The average age of active members decreased by 0.18 years, the average service decreased by 0.04 years, and the average annual salary increased $\$ 201$. There were small changes in the inactive statistics as well. The membership statistics are found in the Statistical Section of this report.

## (3) Salary Increases

The average annual salary increased $0.4 \%$ between January 1, 2010 and January 1, 2011. Total annual covered compensation decreased 9.8\% between January 1, 2010 and January 1,2011 , due to the decrease in active membership.
(4) Changes in Methods from the Prior Valuation

There have been no changes in methods since the prior valuation.
(5) Changes in Assumptions from the Prior Valuation

There have been no changes in assumptions since the prior valuation.

## (6) Changes in Benefit Provisions from the Prior Valuation

There have been no changes in benefit provisions since the prior valuation.

## (7) Other Changes

There have been no other changes since the prior valuation.

## (8) Summary

The overall effect of experience during the period resulted in a decrease in the funding ratio from $85.6 \%$ to $84.7 \%$. The total contribution rate increased from $10.03 \%$ to $11.88 \%$ of covered payroll.

Actuarial Balance Sheet as of January 1, 2011

## Actuarial assets

Actuarial value of present assets
Actuarial present value of future participant contributions
Actuarial present value of future employer contributions for:
Normal costs
Actuarial accrued liability
Total present and future assets

## Actuarial liabilities

Actuarial present value of benefits now payable
Actuarial present value of benefits payable in the future:

Active participants
Terminated vested participants
Terminated nonvested participants
Total payable in the future

Total liabilities for benefits

Surplus / (deficit)

115,027,317
\$ 944,356,735 89,935,880 121,914,117
\$1,271,234,049
\$ 811,745,629
\$ 428,590,698
26,463,750
4,433,972

459,488,420
\$1,271,234,049

## Projected Benefit Obligation Funding Ratios

The funding objective of the System is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percentage of covered compensation.

Funding ratios provide a measure of how much progress has been made towards achieving this objective. For this purpose, the System's liabilities are determined using the projected benefit obligation cost method. Under this method, liabilities are determined for each participant using only service already performed, but anticipating the impact of future salary growth on the benefits attributable to current active participants.

Here is a comparison of this liability measure to the value of assets to produce a snapshot measure of the System's funding ratios.

## Projected Benefit Obligation Funded Status

As of January 1, 2011 the projected benefit obligation was:

1. Retired members and beneficiaries currently receiving benefits and terminated members not yet receiving benefits
\$ 842,643,351
a. Current active participants
i. Accumulated member contributions, including interest

103,178,297
ii. Employer-financed benefits

169,510,764
Total projected benefit obligation
\$1,115,332,412
As of January 1, 2011 the projected benefit obligation was funded as follows:
2. Net assets available for benefits at actuarial value
\$ 944,356,735
3. Unfunded projected benefit obligation

170,975,677
4. Actuarial value funding ratio, (2) / (1)
5. Net assets available for benefits at market value
\$ 908,113,738
6. Unfunded projected benefit obligation $207,218,674$
7. Market value funding ratio, (5) / (1)

## Projected Benefit Obligation Funding Ratios (continued)

Another way to check the funding progress of the System is through a prioritized solvency test. In a prioritized solvency test, the plan's present assets (cash and investments) are sequentially allocated and compared three priorities of liabilities as follows:

- Liability 1: Active participant contributions, accumulated with interest;
- Liability 2: The liabilities for future benefits to current inactive participants and beneficiaries; and
- Liability 3: The liabilities for future benefits to current active participants for prior service.

Ideally, progress in funding of these liability groups will normally be exhibited with Liability 1 attaining $100 \%$ coverage first, then Liability 2, and finally Liability 3 . Note that $100 \%$ funding of Liability 3 does not mean that the System has completed its funding of benefits since additional benefits typically are expected to be earned in the future. Here is a history of the System's funding progress under this test.

Prioritized Solvency Test

| Valuation <br> date <br> January | Active <br> participants' <br> accumulated <br> contributions | Retirees, <br> beneficiaries <br> and inactive <br> participants | Active <br> participants <br> (employer- <br> financed) | Valuation <br> assets | Percent covered by <br> valuation assets |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $(1)$ | $(2)$ | $(3)$ |  | $(1)$ | $(2)$ | $(3)$ |
| 1997 | $118,041,749$ | $272,393,748$ | $251,827,653$ | $598,638,356$ | $100 \%$ | $100 \%$ | $83 \%$ |
| 1998 | $122,227,173$ | $296,455,647$ | $252,445,749$ | $644,429,672$ | $100 \%$ | $100 \%$ | $89 \%$ |
| 1999 | $130,705,014$ | $276,290,128$ | $303,953,494$ | $694,250,672$ | $100 \%$ | $100 \%$ | $95 \%$ |
| 2000 | $129,398,364$ | $353,852,977$ | $288,213,016$ | $770,090,498$ | $100 \%$ | $100 \%$ | $100 \%$ |
| 2001 | $127,086,325$ | $414,052,293$ | $269,590,438$ | $828,097,298$ | $100 \%$ | $100 \%$ | $100 \%$ |
| 2002 | $116,506,785$ | $476,104,516$ | $372,221,726$ | $861,128,076$ | $100 \%$ | $100 \%$ | $72 \%$ |
| 2003 | $115,570,837$ | $492,633,382$ | $361,818,972$ | $873,260,102$ | $100 \%$ | $100 \%$ | $73 \%$ |
| 2004 | $106,021,476$ | $528,287,121$ | $364,459,284$ | $901,996,455$ | $100 \%$ | $100 \%$ | $73 \%$ |
| 2005 | $89,710,662$ | $518,880,414$ | $368,306,240$ | $935,328,638$ | $100 \%$ | $100 \%$ | $89 \%$ |
| 2006 | $90,001,111$ | $661,353,685$ | $319,920,373$ | $983,828,243$ | $100 \%$ | $100 \%$ | $73 \%$ |
| 2007 | $96,223,413$ | $712,467,372$ | $305,409,824$ | $1,003,428,983$ | $100 \%$ | $100 \%$ | $64 \%$ |
| 2008 | $98,112,123$ | $781,006,957$ | $249,244,208$ | $1,014,923,381$ | $100 \%$ | $100 \%$ | $54 \%$ |
| 2009 | $104,576,264$ | $801,995,237$ | $187,035,147$ | $963,851,408$ | $100 \%$ | $100 \%$ | $31 \%$ |
| 2010 | $110,054,510$ | $805,831,292$ | $195,185,151$ | $950,709,944$ | $100 \%$ | $100 \%$ | $18 \%$ |
| 2011 | $103,178,297$ | $842,643,351$ | $169,510,764$ | $944,356,735$ | $100 \%$ | $100 \%$ | $0 \%$ |

## Valuation of the System's Assets

The amount of assets used in the actuarial valuation is known as the "actuarial value of assets." The method is discussed in the summary of methods and assumptions on page 77. The development of the actuarial value of assets is shown here.

## Development of the Actuarial Value of Assets

1. Actuarial value of assets as of January 1, 2010
\$ 950,709,944
2. Participant contributions

11,188,919
3. Employer contributions 26,075,146
4. Benefit payments and expenses 106,789,305
5. Investment increment at $8.0 \%, 8 \% \times\{(1)+.5 \times[(2)-(4)]\}$ 72,232,780
6. Expected actuarial value on January 1, 2011,
$(1)+(2)+(3)-(4)+(5)$
953,417,484
7. Market value of assets on January 1, 2011

937,594,203
8. Expense and contingency reserve on January 1, 2011, prior to adjustment

29,480,465
9. Adjustment to the investment contingency reserve
10. Excess of market value over expected actuarial value, (7) - (6) - (8) - (9)
11. Market value adjustment, $20 \% \times(10)$ $(9,060,749)$
12. Actuarial value of assets as of January 1, 2011,
(6) $+(11)$

944,356,735

## Valuation of the System's Assets (continued)

An important element in the development of the actuarial value of assets is the expense and contingency reserve. The amount of the reserve is determined pursuant to a policy adopted by the Board of Trustees.

Effective January 1, 1996, the Board of Trustees revised Rule X, 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 participants participating in the program on January 1; and
(4) The estimated amount of insurance supplements to be paid for participants expected to retire and participate in the program during the ensuing year.

The investment 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 2010, a portion of the reserve would normally be released. However, since the entire contingency reserve was released in 2009, nothing further is available to be released. Here is the history of the expense and contingency reserve:

The Expense and Contingency Reserve

|  | Expense <br> reserve | Investment <br> contingency <br> reserve | Total expense <br> and <br> contingency <br> reserve |
| :---: | ---: | ---: | :---: |
| 1996 | $\$ 33,702,346$ | $\$$ | 0 |
| 1997 | $25,403,190$ | $5,220,821$ | $\$ 33,702,346$ |
| 1998 | $30,891,555$ | $24,100,041$ | $30,624,011$ |
| 1999 | $22,142,759$ | $45,972,067$ | $54,991,596$ |
| 2000 | $27,992,032$ | $50,003,862$ | $68,114,826$ |
| 2001 | $29,837,776$ | $50,003,743$ | $77,995,894$ |
| 2002 | $23,527,529$ | $50,003,743$ | $79,841,519$ |
| 2003 | $24,952,255$ | $37,759,976$ | $73,531,272$ |
| 2004 | $26,028,780$ | $37,759,976$ | $62,712,231$ |
| 2005 | $27,170,188$ | $45,115,876$ | $63,788,756$ |
| 2006 | $32,534,770$ | $45,115,876$ | $72,286,064$ |
| 2007 | $29,864,946$ | $50,732,410$ | $77,650,646$ |
| 2008 | $31,987,370$ | $57,234,574$ | $80,597,356$ |
| 2009 | $30,555,388$ | 0 | $89,221,944$ |
| 2010 | $29,903,107$ | 0 | $30,555,388$ |
| 2011 | $29,480,465$ | 0 | $29,903,107$ |
|  |  |  | $09,480,465$ |

## Valuation of the System's Assets (continued)

The fund had a rate of return of $6.90 \%$ on an actuarial value basis, which is $1.10 \%$ below the assumed rate of return of $8.00 \%$ for 2010. Normally, in accordance with Rule X, 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 13.49\%.

There are several different methods of approximating the rates of return on investments of the trust fund. Here is a brief comparison of the actuarial assumed rate of return as compared with rates of return on market and actuarial value bases:

## Investment Performance

## 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. $\quad A=$ Market value of assets as of January 1, 2010
\$891,562,918
ii. $\quad B=$ Market value of assets as of January 1, 2011 937,594,203
iii. C = Contributions during the period

37,264,065
iv. $\mathrm{D}=$ Disbursements during the period 106,789,305
v. Rate of return: $\frac{B-A+D-C}{A+1 / 2(C-D)}$
vi. Actuarial assumed rate of return for 2010
vii. Difference between actual and assumed rates of return, (v) - (vi)

## b. Actuarial Value Basis

The rate of return on an actuarial value basis is approximated using the same method:
i. A = Actuarial value of assets as of January 1, $2010 \quad \$ 950,709,944$
ii. B = Actuarial value of assets as of January 1, 2011 944,356,735
iii. $\mathrm{C}=$ Contributions during the period

37,264,065
iv. $\mathrm{D}=$ Disbursements during the period 106,789,305
v. Rate of return: $\frac{B-A+D-C}{A+1 / 2(C-D)}$
6.90\%
vi. Actuarial assumed rate of return for 2010 8.00\%
vii. Difference between actual and assumed rates of return, (v) - (vi)
-1.10\%

## Plan Provisions and Members Census

The plan provisions of the System and the census of members are the foundation of the valuation, since these are the present facts upon which benefit payments will depend.

## Summary of Plan Provisions

## Participants

All persons regularly employed by the board of education, charter schools, and employees of the board of trustees are in the System.

## Retirement age

## Normal

Age 65 or any age if age plus the years of credited service equals or exceeds 85 (Rule of 85)

## Early

Age 60 with 5 years of service

## Service retirement allowance

a. $2 \%(1-1 / 4 \%$ if terminated prior to July 1,1999$)$ times years of credited service, subject to a maximum of $60 \%$
b. Times average final compensation (AFC)
c. Subject to a maximum of $60 \%$ of AFC.
i. AFC is the highest average compensation for any three consecutive years of the last 10 years of service.
ii. Compensation is the regular wages plus what your employer pays towards your health and welfare benefits.
iii. Minimum monthly benefit is $\$ 10.00$ for each year of credited service, up to 15 years, retirement age 65 and over.
iv. Unused sick leave is added to a participant's credited service and age.

## Early retirement benefit

Service retirement allowance reduced five-ninths of one percent for each month of commencement prior to age 65 or the age at which the Rule of 85 would have been satisfied had the employee continued working until that age, if earlier.

## Disability benefit

Service retirement allowance using actual service, or 25\% of AFC if larger, provided that in no case will the benefit exceed that payable if service had continued to age 65.
a. Disability must be incurred while an employee as determined by the medical board and approved by the board of trustees.
b. The participant must have a minimum of five years of credited service and not be eligible for normal retirement.

Continued disability is subject to routine verification.

## Withdrawal benefit

Accumulated contributions of participant with interest credited to the participant's account.

## Summary of Plan Provisions (continued)

## Vested benefit

Full vesting on termination of employment after at least five years of service is provided if contributions are left with the System. The full accrued benefit is payable at age 65 or a reduced early retirement benefit prior to age 65.

## Retirement options

In lieu of the benefit paid only over the lifetime of the participant, a reduced benefit payable for life of participant with:

Option 1 Same retirement allowance continued after death to the beneficiary.
Option 2 One-half of the retirement allowance continued after death to the beneficiary.
Option 3 Same retirement allowance continued after death to the beneficiary. If the beneficiary predeceases the participant, the retirement allowance is adjusted back to the unreduced allowance.
Option 4 One-half of retirement allowance continued after death to the beneficiary. If the beneficiary predeceases the participant, the retirement allowance is adjusted back to the unreduced allowance.
Option 5 Increased retirement allowance is provided up to age 62, such that benefit provided prior to age 62 is approximately equal to the sum of the reduced retirement allowance paid after age 62 and Social Security.
Option 6 Options 1 and 5 combined.
Option 7 Options 2 and 5 combined.

## Survivor benefits

If an active participant dies after completing 18 months of service, leaving a surviving spouse or other dependent beneficiaries, survivor benefits are payable. The widow or dependent beneficiary may elect to receive either a refund of accumulated contributions, or:
a. A survivor who is the widow at least age 62 and married to a participant for at least one year receives $\$ 60$ a month.
b. A widow with dependent, unmarried children under age 22 receives $\$ 60$ a month plus $\$ 60$ per dependent child, not to exceed $\$ 180$ per month. The benefit ceases when youngest child is age 22 and resumes again under (a) at age 62.
c. If no benefits are payable under (a) or (b), minor children may receive a benefit of $\$ 60$ per child or $\$ 180$ divided among them if more than three children.
d. If no benefits are payable under (a), (b) or (c), a dependent parent or parents may receive or share \$60 per month upon attaining age 62.

If an active participant dies after completing 5 years of service, the widow or dependent beneficiary may elect to receive either a refund of accumulated contributions or:
a. If the survivor is the widow, a survivor benefit calculated as if the participant had been age 60 at death and elected Option 1, plus $\$ 60$ per dependent child not to exceed \$180 per month.
b. If there is no widow, a survivor benefit calculated as if the participant had been age 60 at death and elected Option 1.

## Summary of Plan Provisions (continued)

## Return of contributions upon death

If after the death of a participant, no further monthly are payable to a beneficiary under an optional form of payment, or under the survivor benefit provisions, the participant's beneficiary shall be paid the excess, if any, of the participant's accumulated contributions over all payments made to or on behalf of the deceased participant.

## DROP

Effective July 1, 2001, active participants may elect to enter the deferred retirement option plan (DROP) for up to four years. Upon entering the DROP, the participant's retirement benefit is frozen and credited to the participant's DROP account. At the end of the DROP, or upon earlier termination of employment, the DROP account is paid in a lump sum or installments, at the participant's option. During the DROP, the participant continues as an active participant, but does not pay contributions. To enter the DROP the participant must be age 65 or meet the Rule of 85 . The DROP program is no longer available, ending June 30, 2008.

## Contributions by participants

Participants contribute 5\% of compensation. Accumulated contributions are credited at the rate of interest established by the board of trustees. The current crediting rate is $5 \%$.

## Contributions by employers

As needed to keep the System actuarially sound.

## Expenses

Administrative expenses paid out of investment income.

## Member Census Information

| As of January 1 | 2010 |  | 2011 |  |
| :---: | :---: | :---: | :---: | :---: |
| Active Members |  |  |  |  |
| Number |  | 4,825 |  | 4,336 |
| Average Age |  | 44.76 |  | 44.58 |
| Average Service |  | 9.08 |  | 9.04 |
| Average Annual Base Pay | \$ | 50,147 | \$ | 50,348 |
| Vested Terminated Members |  |  |  |  |
| Number |  | 627 |  | 606 |
| Average Account Balance | \$ | 29,987 | \$ | 29,113 |
| Non-vested Terminated Members |  |  |  |  |
| Number |  | 1,269 |  | 1,329 |
| Average Account Balance | \$ | 3,188 | \$ | 3,336 |
| Benefit Recipients |  |  |  |  |
| Number |  | 4,370 |  | 4,587 |
| Average Age |  | 72.53 |  | 72.45 |
| Average Monthly Benefit | \$ | 1,752 | \$ | 1,797 |

## Retired Members and Beneficiaries

| Option | Service <br> benefit | Disability <br> benefit | Survivor <br> benefit | All |
| :---: | :---: | :---: | :---: | ---: |
| 0 | 3,388 | 228 | 297 | 3,913 |
| 1 | 153 | 15 | 0 | 168 |
| 2 | 93 | 5 | 0 | 98 |
| 3 | 176 | 12 | 0 | 188 |
| 4 | 180 | 7 | 0 | 187 |
| 5 | 14 | 4 | 0 | 18 |
| 6 | 10 | 4 | 0 | 14 |
| 7 | 1 | 0 | 0 | 1 |
| Total | 4,015 | 275 | 297 | 4,587 |

## Annual Benefit Amounts

| Option | Service <br> benefit | Disability <br> benefit | Survivor <br> benefit | All |
| :---: | ---: | ---: | ---: | ---: |
| 0 | $\$ 79,064,805$ | $\$ 2,716,264$ | $\$ 3,027,265$ | $\$ 84,808,334$ |
| 1 | $2,777,884$ | 204,944 | 0 | $2,982,828$ |
| 2 | $2,086,818$ | 95,477 | 0 | $2,182,295$ |
| 3 | $3,506,985$ | 130,098 | 0 | $3,367,083$ |
| 4 | $4,557,720$ | 131,635 | 0 | $4,689,355$ |
| 5 | 327,208 | 42,869 | 0 | 370,077 |
| 6 | 210,093 | 16,587 | 0 | 226,680 |
| 7 | 30,849 | 0 | 0 | 30,849 |
| Total | $\$ 92,562,362$ | $\$ 3,337,874$ | $\$ 3,027,265$ | $\$ 98,927,501$ |

## Summary of Methods and Assumptions

The valuation is based upon the premise that the System will continue in existence, so that future events must also be considered. These future events are assumed to occur in accordance with the actuarial assumptions and concern such events as the earnings of the fund; the number of members who will retire, die or terminate their services; their ages at such termination and their expected benefits.

## Interest

8.0\% per annum.

## Participant account interest crediting rate

5.0\% per annum.

## Expenses

The rate of interest assumed is net of expenses.

## Mortality

The RP-2000 Combined Healthy Lives Mortality Table is used for active participants, retired participants and beneficiaries.

## Disability Mortality

The RP-2000 Combined Healthy Lives Mortality Table set forward five years is used for disabled participants.

## Withdrawal

Withdrawals are assumed to occur at rates based on actual experience of the retirement system. During the first three years of membership, withdrawals are assumed to occur at the following rates:

| Year of <br> Membership | Non-charter school <br> employees |  | Charter school employees |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Females | Males | Females |  |
| $1^{\text {st }}$ | $17.5 \%$ | $15.0 \%$ | $50.0 \%$ | $50.0 \%$ |
| $2^{\text {nd }}$ | $15.0 \%$ | $12.5 \%$ | $25.0 \%$ | $25.0 \%$ |
| $3^{\text {rd }}$ | $10.0 \%$ | $10.0 \%$ | $15.0 \%$ | $15.0 \%$ |

## Salary scale

Salaries are assumed to increase at the rate of $4.5 \%$ per year.

## Disability

Disabilities are assumed to occur at rates based on the actual experience of the retirement system.

## Retirement

Retirements occur at rates based on the actual experience of the retirement system. Unless the age-related rate is greater, for those eligible to retire under the Rule of 85 , it is assumed that $25 \%$ will retire when first eligible for unreduced benefits with at least 30 years of credited service.

## Summary of Methods and Assumptions (continued)

## Family Structure

The probability of a participant 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. For married participants, husbands are assumed to be 3 years older than their wives.

## Usage of Cash-out Option

Participants terminating in vested status are given the option of taking a refund of their accumulated participant contributions instead of a deferred retirement benefit. Active members who terminate in the future with a vested benefit are assumed to take a deferred vested annuity, unless a refund of contributions and interest is greater than the actuarial present value of their vested deferred benefit.

## Future Benefit Increases or Additional Benefits

When funding is adequate, the Board may authorize cost of living adjustments (COLAs), as noted in the summary of plan provisions. In the past, the Board has also sometimes granted an additional monthly payment to retirees ( $13^{\text {th }}$ check.) This valuation assumes that no future COLAs and no future $13^{\text {th }}$ checks will be awarded.

## Actuarial Method - Frozen Entry Age

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).

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. The UFAAL does change, increasing due to interest and additional normal costs, and decreasing due to contributions. Any changes to plan provisions or actuarial assumptions results in a change to the UFAAL. The amount of the change is determined by computing the impact 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.

## Summary of Methods and Assumptions (continued)

## Valuation of Assets

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.

## Changes from the Prior Valuation

There have been no changes in assumptions or methods since the prior valuation.

Summary of Methods and Assumptions (continued)
Active Member Rates of Withdrawal

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

# Public School Retirement System of the City of St. Louis Comprehensive Annual Financial Report <br> Year Ended December 31, 2011 

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....in an effective and efficient manner."

## SCHEDULE OF CHANGES IN PLAN NET ASSETS

LAST 10 FISCAL YEARS

## PUBLIC SCHOOL RETIREMENT SYSTEM <br> OF THE CITY OF ST. LOUIS

SCHEDULE OF TOTAL CHANGES IN PLAN NET ASSETS, LAST 10 FISCAL YEARS

| Fiscal Year |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Additions by source | 2002 | 2003 |  | 2004 | 2005 | 2006 | 2007 |  | 2008 |  | 2009 | 2010 | 2011 |
|  |  |  |  |  |  |  |  |  |  |  |  | (as restated) |  |
| Employer contributions | \$ 21,213,347 | \$ 19,742,779 | \$ | 26,406,806 | \$ 23,514,266 | \$ 19,887,885 | \$ 22,445,608 | \$ | 27,853,996 | \$ | 28,598,502 | \$26,075,146 | \$ 28,720,193 |
| Employee contributions | 13,171,337 | 12,186,084 |  | 10,825,664 | 10,515,674 | 10,511,284 | 10,791,580 |  | 11,537,258 |  | 12,131,979 | 11,188,919 | 11,879,052 |
| Investment income (loss) | (58,151,245) | 176,197,590 |  | 119,511,676 | 63,349,054 | 128,774,730 | 103,030,906 |  | $(259,438,857)$ |  | 146,071,959 | 115,925,274 | $(5,319,851)$ |
| Other income |  |  |  |  |  |  |  |  |  |  | 71,391 | 127,426 | 131,119 |
| Total additions(depreciation) | $(23,766,561)$ | 208,126,453 |  | 156,744,146 | 97,378,994 | 159,173,899 | 136,268,094 |  | $(220,047,603)$ |  | 186,873,831 | 153,316,765 | 35,410,513 |
| Deductions by type |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Retirement and death benefits | 57,876,776 | 61,652,472 |  | 68,008,801 | 73,994,518 | 80,638,120 | 86,928,394 |  | 93,852,021 |  | 97,129,242 | 99,277,919 | 101,993,058 |
| Health care subsidies and supplemental payments | 2,447,267 | 2,490,924 |  | 2,593,142 | 2,658,573 | 2,712,541 | 2,726,258 |  | 2,781,111 |  | 2,794,544 | 2,808,370 | 2,825,430 |
| Operating expenses | 1,263,687 | 1,401,994 |  | 1,391,243 | 1,756,223 | 1,583,964 | 1,558,874 |  | 1,576,882 |  | 1,415,026 | 1,499,302 | 1,432,914 |
| Contribution refunds due to death or resignation | 3,281,320 | 7,090,729 |  | 13,274,756 | 18,067,968 | 11,252,780 | 18,559,040 |  | 22,910,310 |  | 3,765,085 | 3,203,714 | 3,242,200 |
| Total deductions by type | 64,869,050 | 72,636,119 |  | 85,267,942 | 96,477,282 | 96,187,405 | 109,772,566 |  | 121,120,324 |  | 105,103,897 | 106,789,305 | 109,493,602 |
| Changes in plan net assets | \$ (88,635,611) | \$135,490,334 | \$ | 71,476,204 | \$ 901,712 | \$62,986,494 | \$26,495,528 |  | (341,167,927) | \$ | 81,769,934 | \$46,527,460 | \$ (74,083,089) |

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

## Schedule of Average Benefit Payments (Last Five Years)

| Retirement Year | Years of Service |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 0-5 | 6-10 | 11-15 | 16-20 | 21-25 | 26-30 | 31+ |
| 2007 |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$292 | \$483 | \$814 | \$1,505 | \$2,012 | \$2,532 | \$2,887 |
| Number of Retirees | 5 | 14 | 15 | 35 | 42 | 78 | 129 |
| 2008 |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$379 | \$514 | \$913 | \$1,443 | \$1,993 | \$2,735 | \$3,049 |
| Number of Retirees | 11 | 22 | 19 | 14 | 20 | 46 | 133 |
| 2009 |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$275 | \$469 | \$725 | \$1,001 | \$2,286 | \$2,545 | \$3,303 |
| Number of Retirees | 5 | 23 | 14 | 14 | 25 | 24 | 22 |
| 2010 |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$569 | \$724 | \$919 | \$1,522 | \$2,415 | \$3,039 | \$3,189 |
| Number of Retirees | 8 | 36 | 40 | 31 | 55 | 59 | 84 |
| 2011 |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$694 | \$647 | \$1,029 | \$1,613 | \$2,292 | \$2,855 | \$2,881 |
| Number of Retirees | 6 | 25 | 18 | 17 | 20 | 15 | 13 |
| 2007-2011 |  |  |  |  |  |  |  |
| Average Monthly Benefit | \$457 | \$611 | \$927 | \$1,496 | \$2,251 | \$2,745 | \$3,034 |
| Number of Retirees | 35 | 120 | 106 | 111 | 162 | 222 | 381 |

Note: The retirement system will track final average compensation beginning with fiscal year 2012 for future schedules of average benefit payments.

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

| Retired Members and Beneficiaries By Payment Option \& Type On January 1, 2011 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Option | Service Benefit | Disability Benefit | Survivor Benefit | Total |
| 0 | 3,388 | 228 | 297 | 3,913 |
| 1 | 153 | 15 | 0 | 168 |
| 2 | 93 | 5 | 0 | 98 |
| 3 | 176 | 12 | 0 | 188 |
| 4 | 180 | 7 | 0 | 187 |
| 5 | 14 | 4 | 0 | 18 |
| 6 | 10 | 4 | 0 | 14 |
| 7 | 1 | 0 | 0 | 1 |
| Total | 4,015 | 275 | 297 | 4,587 |

Amount of Annual Benefits By Payment Option \& Type
On January 1, 2011

| Option |  | Service Benefit | Disability Benefit |  | Survivor Benefit |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | \$ | 79,064,805 | \$ | 2,716,264 | \$ | 3,027,265 | \$ | 84,808,334 |
| 1 |  | 2,777,884 |  | 204,944 |  | - |  | 2,982,828 |
| 2 |  | 2,086,818 |  | 95,477 |  |  |  | 2,182,295 |
| 3 |  | 3,506,985 |  | 130,098 |  |  |  | 3,637,083 |
| 4 |  | 4,557,720 |  | 131,635 |  | - |  | 4,689,355 |
| 5 |  | 327,208 |  | 42,869 |  | - |  | 370,077 |
| 6 |  | 210,093 |  | 16,587 |  | - |  | 226,680 |
| 7 |  | 30,849 |  | - |  | - |  | 30,849 |
| Total | \$ | 92,562,362 | \$ | 3,337,874 | \$ | 3,027,265 | \$ | 98,927,501 |

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

| Average Annual Benefit Payments By Payment Option \& Type On January 1, 2011 |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Option | Service Benefit |  | Disability Benefit |  | Survivor Benefit |  | All |  |
| 0 | \$ | 23,337 | \$ | 11,913 | \$ | 10,193 | \$ | 21,673 |
| 1 |  | 18,156 |  | 13,663 |  | - |  | 17,755 |
| 2 |  | 22,439 |  | 19,095 |  | - |  | 22,268 |
| 3 |  | 19,926 |  | 10,842 |  | - |  | 19,346 |
| 4 |  | 25,321 |  | 18,805 |  | - |  | 25,077 |
| 5 |  | 23,372 |  | 10,717 |  | - |  | 20,560 |
| 6 |  | 21,009 |  | 4,147 |  | - |  | 16,191 |
| 7 |  | 30,849 |  | - |  | - |  | 30,849 |
| All | \$ | 23,054 | \$ | 12,138 | \$ | 10,193 | \$ | 21,567 |

Average Monthly Benefit Payments By Payment Option \& Type
On January 1, 2011

| Option | Service Benefit |  | Disability Benefit |  | Survivor Benefit |  | All |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | \$ | 1,945 | \$ | 993 | \$ | 849 | \$ | 1,806 |
| 1 |  | 1,513 |  | 1,694 |  | - |  | 1,480 |
| 2 |  | 1,870 |  | 1,591 |  | - |  | 1,856 |
| 3 |  | 1,661 |  | 904 |  | - |  | 1,612 |
| 4 |  | 2,110 |  | 1,567 |  | - |  | 2,090 |
| 5 |  | 1,948 |  | 893 |  | - |  | 1,713 |
| 6 |  | 1,751 |  | 346 |  | - |  | 1,349 |
| 7 |  | 2,571 |  | - |  | - |  | 2,571 |
| All | \$ | 1,921 | \$ | 1,012 | \$ | 849 | \$ | 1,797 |

Public School Retirement System of the City of St. Louis

## Schedule of Covered Members <br> (Last Ten Years)

|  | 2011 |  | 2010 |  | 2009 |  | 2008 |  | 2007 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member Type | Covered Members | Percentage of Total | Covered Members | Percentage of Total | Covered Members | Percentage of Total | Covered Members | Percentage of Total | Covered Members | Percentage of Total |
| Active | 4,336 | 40.0\% | 4,825 | 43.5\% | 5,085 | 45.4\% | 5,021 | 45.2\% | 5,010 | 47.3\% |
| Inactive | 1,935 | 17.8\% | 1,896 | 17.1\% | 1,543 | 13.8\% | 1,635 | 14.7\% | 1,488 | 14.1\% |
| Retired (includes Beneficiaries) | 4,587 | 42.2\% | 4,370 | 39.4\% | 4,570 | 40.8\% | 4,456 | 40.1\% | 4,084 | 38.6\% |
| Total | 10,858 | 100\% | 11,091 | 100\% | 11,198 | 100\% | 11,112 | 100\% | 10,582 | 100\% |


|  | 2006 |  | 2005 |  | 2004 |  | 2003 |  | 2002 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member Type | Covered Members | Percentage of Total | Covered Members | Percentage of Total | Covered Members | Percentage of Total | Covered Members | Percentage of Total | Covered Members | Percentage of Total |
| Active | 5,156 | 50.9\% | 5,549 | 57.2\% | 6,074 | 59.1\% | 6,928 | 63.0\% | 6,589 | 64.0\% |
| Inactive | 952 | 9.4\% | 548 | 5.6\% | 509 | 4.9\% | 494 | 4.5\% | 118 | 1.1\% |
| Retired (includes Beneficiaries) | 4,026 | 39.7\% | 3,606 | 37.2\% | 3,700 | 36.0\% | 3,578 | 32.5\% | 3,590 | 34.9\% |
| Total | 10,134 | 100\% | 9,703 | 100\% | 10,283 | 100\% | 11,000 | 100\% | 10,297 | 100\% |

## The Year in Review

During 2011, PSRSSTL added 125 new retirees to payroll that included 6 approved applications for Supplemental Pension Benefits under the Sick Leave Conversion Program sponsored by St. Louis Public Schools. In addition, the retirement system added 634 new members and processed more than 500 refund distributions for members who left PSRSSTL.

## 2011 Membership Changes



The following charts and graphs show the progressive increase of assets, investments and contributions since 1957 when the System's substantial growth first began.



## CONTRIBUTION GROWTH

## (in millions)



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

- Missouri General Assembly formed the retirement system for all full-time employees of the St. Louis Board of Education
- Plan provisions revised for all future employees, active participants given option to remain in the "old plan" or upgrade to the "new plan"
- Credited Service allowed for time lost from 1944-1947
- Various Credited Service options added, "old plan" participants granted another opportunity to upgrade to the "new plan," introduction of survivor, disability and minimum benefits
- First increase in benefits granted to certain teacher retirees
- Plan provisions upgraded and revised, credited service limits removed, survivor benefits revised, employee contribution rate set at 3\% of compensation, Trustees granted rule-making authority, first back-to-work provision for certain retirees
- Plan provisions revised to allow sick leave balances to be added to credited service and age requirements for retirement, early retirement and survivor benefits revised
- Plan provisions upgraded, insurance benefits improved, actuarial cost method changed to the "frozen entry age cost method," several administrative changes were made that included the broadening of investment authority for the Board of Trustees
- Survivor and disability benefits upgraded, second back-to-work provision added for certain retirees
- First supplemental early retirement benefit added for certain retirees
- "Old plan" participants granted another opportunity to join "new plan," increased the minimum retirement benefit, several administrative changes made
- Survivor and supplemental benefits enhanced
- Certain plan provisions were improved
- Supplemental benefits extended for certain retirees
- Supplemental benefits enhanced for certain retirees
- Credited service purchase allowed for certain periods of lay-offs, investment trustee position replaced with school administrator trustee position, COLA provisions added
- COLA provision added for certain retirees
- Employee Contribution rate increased to 4.5\%, pension factor set at 2\%, catch-up COLA for certain retirees, Board of Education agreed to 8.3\% employer contribution rate for three years
- Employee contribution rate set at 5\%
- COLA provisions added for certain retirees, DROP added until 2005, employer contribution rate set at 8\%, actuary to determine annual employer contribution rate beginning in 2002 and future years
- Credited service rules revised, pre-tax transfers allowed between certain retirement plans, Charter School provisions added and clarified, social security leveling pension benefit options introduced, actuarial provisions revised to allow the Board of Trustees more flexibility, amortization limit set at 30 years
- Several administrative changes were made, including to allow the Board of Trustees to grant an increase in pension benefits provided certain conditions are met, Board of Trustees annual educational requirements expanded, actuarial cost reporting revised for all Missouri retirement plans
- State reporting requirements revised for all Missouri retirement plans


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

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"Investing Your Money For Lifetime Securtiy"


[^0]:    *To clarify, a few 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.

[^1]:    Return data for the Fund was reconciled from manager provided time-weighted returns that were calculated in accordance with the CFA Institute's Global Investment Performance Standards (GIPS), Valuations, where available, are based on published national securities exchange prices, as provided by PSRS's custodian, US Bank

