

***Public  
School  
Retirement  
System of the City of  
ST. Louis, Missouri***

*A Pension Trust Fund for  
Public School Employees*

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

***Comprehensive  
Annual  
Financial  
Report***

*For the Fiscal Year Ended  
**December 31, 2014***

*(Includes comparative financials for 2013)*







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

A Pension Trust Fund for  
Public School Employees

3641 Olive Street, Suite 300  
St. Louis, Missouri 63108-3601  
(314) 534-7444  
[www.psrstl.org](http://www.psrstl.org)

## **Comprehensive Annual Financial Report**

For the Fiscal Year Ended

**December 31, 2014**

(Includes comparative financials for 2013)

Prepared by:

Andrew Clark  
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.
12. ***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.

**Public School Retirement System of the City of St. Louis**  
**Comprehensive Annual Financial Report**

*Fiscal Year 2014*

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



## **Introductory Section**

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Government Finance Officers Association

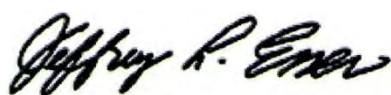
**Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting**

Presented to

**Public School Retirement System  
of the City of St. Louis  
Missouri**

For its Comprehensive Annual  
Financial Report  
for the Fiscal Year Ended

**December 31, 2013**



Executive Director/CEO

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

Fiscal Year 2014

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## Board of Trustees

An eleven-member Board of Trustees is responsible for general administration of the Retirement System and investing System assets. Active members elect five trustees: one administrator, two teachers and two non-teachers. Retired members elect two trustees: one retired teacher and one retired non-teacher. The St. Louis Public Schools (“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.

| <u>Elected by Active Members</u> | <u>Term Ends</u> | <u>Trustee Representation</u> |
|----------------------------------|------------------|-------------------------------|
| Yvette Levy                      | 12-31-2015       | Active Teacher                |
| Angela Banks                     | 12-31-2015       | Active Administrator          |
| Sheila Goodwin                   | 12-31-2016       | Active Teacher                |
| Janusz Wolynski                  | 12-31-2017       | Active Non-teacher            |
| Eural Thomas                     | 12-31-2018       | Active Non-teacher            |

| <u>Elected by Retired Members</u> | <u>Term Ends</u> | <u>Trustee Representation</u> |
|-----------------------------------|------------------|-------------------------------|
| Charles Shelton                   | 09-30-2015       | Retired Teacher               |
| Joseph Clark                      | 09-30-2017       | Retired Non-Teacher           |

| <u>SLPS Appointments</u> | <u>Term Ends</u> | <u>Trustee Representation</u> |
|--------------------------|------------------|-------------------------------|
| Richard Sullivan         | 12-31-2015       | SLPS Board of Education       |
| Mary Houlihan            | 12-31-2016       | SLPS Board of Education       |
| Tracie Goffe             | 12-31-2017       | SLPS Board of Education       |
| Christina Bennett        | 12-31-2018       | SLPS Board of Education       |

**Public School Retirement System  
of the City of St. Louis**  
3641 Olive Street, Suite 300  
St. Louis, MO 63108-3601

Office of the  
Executive Director

Phone: (314) 534-7444  
Fax: (314) 533-0531

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June 1, 2015

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

I am pleased to present the *Comprehensive Annual Financial Report (CAFR)* for the Public School Retirement System of the City of St. Louis (“System” or “plan”) for the fiscal year ended December 31, 2014. Management of the System is responsible for content 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 for fiscal year 2014.

***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 Schools District, the System, a number of Charter Schools located in the St. Louis Public Schools 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 scheme of internal controls is in place to help management safeguard assets through efficient operations where the benefits far outweigh the costs of monitoring. These controls are designed to protect assets from loss due to unauthorized use or disposition and provide reasonable assurance that the System’s financial statements remain free of material misstatements.

The System implemented GASB Statement 67 during the fiscal year ended December 31, 2014. Please refer to the Management Discussion and Analysis (“MD&A”) in the Financial Section for an overview of the changes. The MD&A also contains a review of the additions and deductions from the plan during 2014.

***Investment Activities***

The overall investment return for the plan during 2014 was 4.5%. This investment return was below the actuarial assumed rate of return of 8.0%. Thus, the investment managers added less value to the fund than expected for the year. In comparison to other public plans in the Investor Force Universe (IFU), the System’s investment return for 2014 ranked in the top 77% of the IFU while maintaining similar risk as the peer group.

## Letter of Transmittal

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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. The policy is reviewed by the Board of Trustees at least annually and modified as needed 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 investment information 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 main 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 plan year 2014, the Funded Ratio was 84.4%, which falls between the highest and lowest Funded Ratio's for the System over the last couple of decades.

The Actuary calculates an ARC that is adequate to fund the normal costs of the plan that includes 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:

| <b><u>Fiscal Year</u></b> | <b><u>ARC (%)</u></b> | <b><u>ARC (\$)</u></b> |
|---------------------------|-----------------------|------------------------|
| 2012                      | 11.88%                | \$25,928,658           |
| 2013                      | 15.07%                | \$35,367,598           |
| 2014                      | 16.50%                | \$37,267,278           |

Detailed actuarial information can be found in the Actuarial Section.

### ***Legislative Information***

There were no major legislative changes in 2014 that directly affected the System. The last change to the System's plan provisions occurred in 2002.

A legislative history of the plan is summarized on the last page of the Statistical Section.

### ***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, Anders Minkler Huber & Helm, LLC, are contained in the appropriate sections of this report.

The firms that provide professional services to the System appear at the end of this section.

### ***Certificate of Achievement***

The Government Finance Officers Association of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the System for its comprehensive annual financial report for the fiscal year ended December 31, 2013. This was the third year the System has achieved this prestigious award. In order to be awarded a Certificate of Achievement, the System must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. The System believes the current comprehensive annual financial report will again meet the Certificate of Achievement Program's requirements and it is being submitted to the GFOA to determine its eligibility for another certificate.

### ***Acknowledgements***

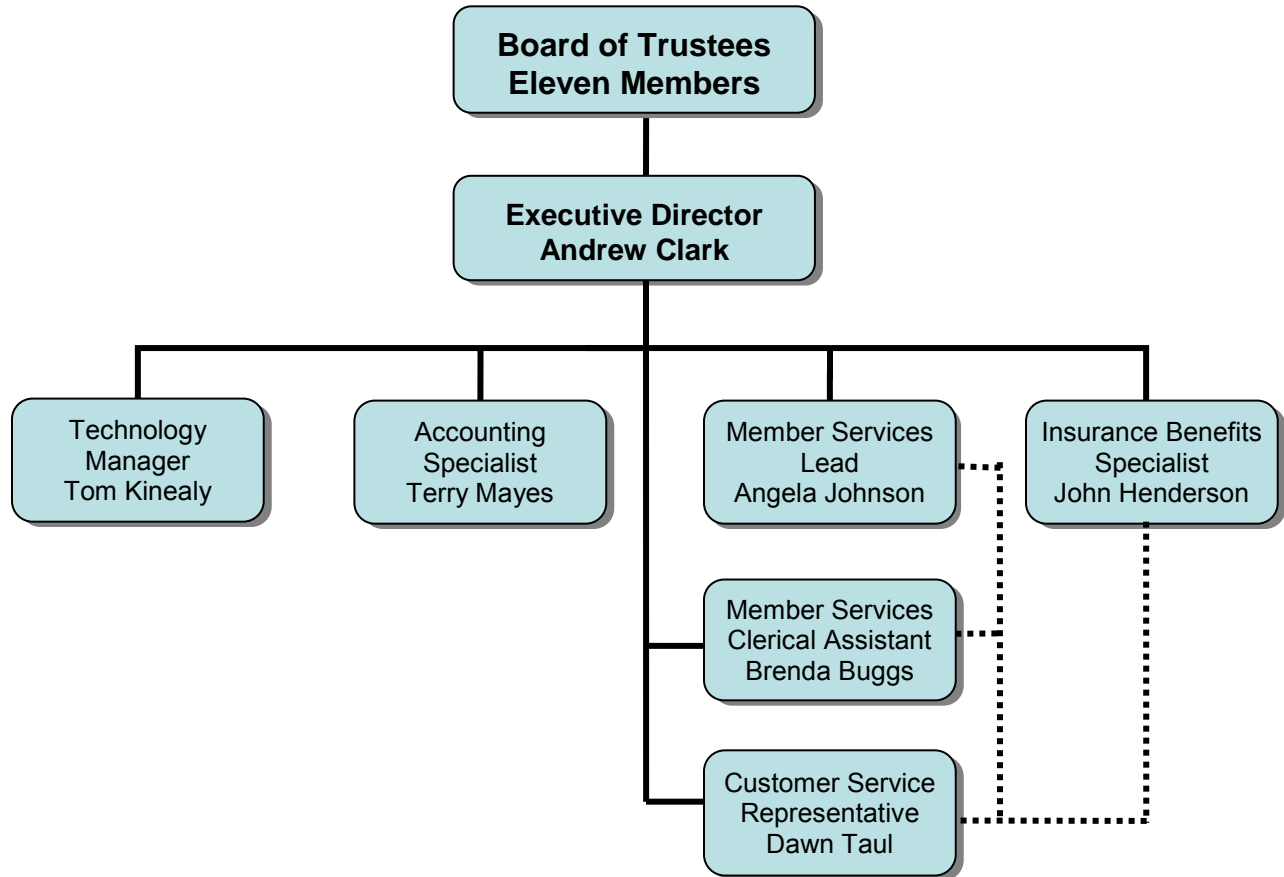
I would like to thank the Board of Trustees, staff and consultants for their assistance in preparing this report. The dedication of these groups helps to guarantee the System's continued success.

Sincerely,



Andrew Clark  
Executive Director

### Organizational Chart



..... Denotes work-flow supervision only

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

Fiscal Year 2014

## Providers of Professional Services

### Actuarial Services

#### ***Buck Consultants***

Stephen Siepman  
St. Louis, MO

### Legal Council

#### ***Hartnett Gladney Hetterman LLC***

Jeffrey E. Hartnett  
St. Louis, MO

### Auditor

#### ***Anders Minkler Huber & Helm LLP***

Thomas S. Helm, CPA  
St. Louis, MO

### Property Management

#### ***CB Richard Ellis***

St. Louis, MO

### Insurance Consultant

#### ***Longfellow Benefits***

(A division of Gallagher Benefit Services)  
Patrick Haraden  
Boston, MA

### Technology Consulting

#### ***Jupiter Consulting***

St. Louis, MO

#### ***Blade Technologies***


St. Louis, MO

### Investment Consultant

#### ***NEPC, LLC***

Kristin Finney-Cooke  
Chicago, IL

 buckconsultants

 Arthur J. Gallagher & Co.

 **CBRE**  
CB RICHARD ELLIS

 **ANDERS**  
CPAs + ADVISORS

 **NEPC**, LLC

 **BLADE**  
TECHNOLOGIES, INC.



**Public School Retirement System of the City of St. Louis**  
**Comprehensive Annual Financial Report**

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**Financial Section**

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## **Independent Auditors' Report**

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

### ***Report on the Financial Statements***

We have audited the accompanying financial statements of Public School Retirement System of the City of St. Louis (the "System"), which comprise the statements of fiduciary net position as of December 31, 2014 and 2013, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

### ***Management's Responsibility for the Financial Statements***

The System's management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### ***Auditors' Responsibility***

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 audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the System's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Independent Auditors' Report**

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### ***Opinion***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Public School Retirement System of the City of St. Louis as of December 31, 2014 and 2013, and the changes in its financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis about a Matter - GASB***

In the 2014 statements, the System implemented a new accounting standard issued by the Governmental Accounting Standards Board ("GASB"). This new standard, GASB Statement No. 67, *Financial Reporting for Pension Plans - an amendment of GASB Statement No. 25*, requires the System to determine its net pension liability using assumptions that conform to actuarial standards of practice issued by the Actuarial Standards Board. The net pension liability is the difference between the present value of pension benefits earned by the employees through the end of the fiscal year, and the market value of investments at the end of the fiscal year. See Note 11 in the Notes to the Financial Statements for further information about the System's net pension liability.

### ***Other Matters***

#### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the Management Discussion and Analysis and required supplementary information, as listed in the Table of Contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### ***Other Supplementary Information***

Our audits were conducted for the purpose of forming an opinion on the System's basic financial statements. The other supplementary information in the financial section, and the accompanying introductory, investment, actuarial, and statistical sections are presented for purposes of additional analysis and are not a required part of the financial statements.

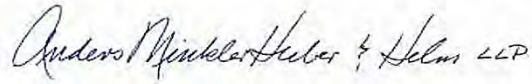
The other supplementary information in the financial section is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the other

## **Independent Auditors' Report**

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supplementary information in the financial section is fairly stated in all material respects, in relation to the basic financial statements as a whole.

The introductory, investments, actuarial, and statistical sections of the System's Comprehensive Annual Financial Report ("CAFR") are not subject to the auditing procedures applied in the audit of the basic financial statements, and accordingly, we do not express an opinion or provide any assurance on them. However, we do acknowledge the relevance of these sections to the financial status of the System as reported in the CAFR.



Anders Minkler Heber & Helms LLP

April 17, 2015

## Management Discussion and Analysis

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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, 2014. This MD&A is presented as required supplementary information to the financial statements and should be read in conjunction with the PSRSSTL financial statements, notes to the financial statements, and supplementary information.

The PSRSSTL financial statements, notes to the financial statements and required supplementary information were prepared in conformity with GASB Statement 67, Financial Reporting for Pension Plans. GASB Statement 67 replaces GASB statements 25 and 50 as reporting standards for pension systems.

Highlights of the change to these financial statements as a result of implementing GASB Statement 67 are as follows:

- GASB Statement 67 only affects reporting requirements and does not prescribe funding methods which could be different. PSRSSTL will continue to use a funding policy that follows a financing pattern which computes and requires contribution amounts (when expressed as a percentage of covered payroll) to remain approximately level from year to year and from one generation of citizens to the next generation. The actuary is required to use the entry age actuarial cost valuation method in determining the normal cost of system benefits, expressed as a percent of covered payroll for service retirement benefits, disability benefits, survivor benefits and administrative expenses. Expenses related to the investment of system assets are assumed to be covered by investment returns and income. The contribution amount required to amortize any unfunded actuarial accrued liability (“UAAL”) is expressed as a level percent of covered payroll over a stipulated number of years. The computed employer contribution rate determined by each annual actuarial valuation consists of the normal cost plus the amortization payment for the UAAL, expressed in total as a percent of covered payroll. The annual required contribution (ARC) amounts for employers are also determined by the annual actuarial valuation, conducted by the board's actuary.
- Statement of Net Assets and Statement of Changes in Net Assets have been retitled as Statements of Fiduciary Net Position and Statements of Changes in Fiduciary Net Position, respectively.
- GASB Statement 67 classifies PSRSSTL as a cost-sharing multiple-employer public pension plan for reporting purposes which includes the St. Louis Board of Education, the Public School Retirement System of the City of St. Louis and all Charter Schools operating within the district of the St. Louis Public Schools.
- The discount rate used to calculate the present value of future benefit payments for reporting purposes is based upon the projected plan net position (“PNP”) using actuarial assumptions for contributions, benefit payments and the long-term rate of return. If the projected PNP is short of projected benefit payments, a blended discount rate is required using both the weighted average of the long-term rate of return and the muni-bond rate for periods after the PNP is exhausted. PSRSSTL currently uses the long-term discount rate of 8% and expects that assets will be sufficient to cover PNP.
- New footnote requirements in the Notes to Financial Statements section include the system's Target Asset Allocation, including long-term expected real rate of return, Employers' Net Pension Liability, and Sensitivity of Net Pension Liability to Changes in the Discount Rate.

## Management Discussion and Analysis

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- New Required Supplementary Information following the Notes to Financial Statements section includes Schedules of Changes in Employer Net Pension Liability, Employer Contributions, Actuarial Present Values of Projected Benefit Payments and Projection of Fiduciary Net Position. Notes to the Required Supplementary Information include significant methods and assumptions used in calculating the actuarially determined contributions.

The basic financial statements contained in this section of the comprehensive annual financial report consist of:

- The Condensed Statements of Fiduciary Net Position illustrate the system's assets, liabilities, and resulting fiduciary net position where  $\text{Assets} - \text{Liabilities} = \text{Fiduciary Net Position}$  held in trust for pension benefits available at the end of a fiscal year. These statements are a snapshot of the financial position of the system at specific points in time.
- The Condensed Statements of Changes in Fiduciary Net Position summarize the system's financial transactions throughout a fiscal year where  $\text{Additions} - \text{Deductions} = \text{Change in Fiduciary Net Position}$ . These statements support the change from the prior year's net position on the Statements of Fiduciary Net Position.
- The Notes to the Financial Statements are an integral part of these basic financial statements and contain information that helps better understand them.
- The required supplementary Management Discussion and Analysis information, the Required Supplementary Information, and Other Supplementary Information following the Notes to the Financial Statements provide detailed historical information that is useful in evaluating the condition of the retirement plan administered by PSRSSTL.

The system's fiduciary net position was \$936,930,499 on December 31, 2014, which represents a decrease of \$25,786,866 from December 31, 2013. This decrease is primarily due to market fluctuations during the year that resulted in a temporary decline in investment values at December 31, 2014.

The system's investment returns were 4.5% in fiscal year 2014 and 15.8% in fiscal year 2013. The investment returns in fiscal years 2014 and 2013 represent positive growth seen throughout the financial markets during the two-year time period. Predicting conditions in the marketplace is always challenging yet the Board of Trustees stands behind a sound Asset Allocation Policy by remaining focused on active monitoring of its money managers and long-term investment objective. The actuarially assumed rate of return remained at 8% for fiscal year 2014.

Additions to fiduciary net position, including other income (expenses), were \$88.6 million, \$178.1 million and \$139.3 million for fiscal years 2014, 2013 and 2012, respectively. The primary addition to fiduciary net position during this time was investment income, including rental income, of \$33.9 million in fiscal year 2014, \$129 million in fiscal year 2013 and \$98.2 million in fiscal year 2012. The secondary addition to fiduciary net position came from employer contributions of \$41.8 million in fiscal year 2014, \$37 million in 2013 and \$29.6 million in fiscal year 2012, followed by member contributions of \$11.9 million in fiscal year 2014, \$11.8 in fiscal year 2013 and \$12.1 million in fiscal year 2012.

Deductions from fiduciary net position were \$114.4 million, \$112 million and \$110.9 million in fiscal years 2014, 2013 and 2012, respectively. The \$3 million increase in deductions from fiduciary net position between fiscal years 2014 and 2013 is mostly due to the increase in retirement benefits and refunds paid to terminated or deceased members in fiscal year 2014. The \$1 million increase in deductions between fiscal years 2013 and 2012 is primarily due to increased retirement benefits in 2013.

## Management Discussion and Analysis

### Financial Statements

The PSRSSTL financial report consists of two financial statements, (1) the Statements of Fiduciary Net Position, and (2) the Statements of Changes in Fiduciary Net Position. The Statements of Fiduciary Net Position provide details concerning PSRSSTL assets and liabilities other than benefit obligations. However, PSRSSTL assets are the only source available to the system to pay pension benefits. The Statements of Changes in Fiduciary Net Position provide details regarding PSRSSTL financial activity during fiscal year 2014 that caused the change in fiduciary net position from fiscal year 2013 to fiscal year 2014.

Additionally, the financial report contains notes, supplementary information and actuarial data that provide further information to use while analyzing the system's financial statements.

### Financial Analysis

On December 31, 2014, total assets for the system were \$937,780,710 and comprised of cash, an office building, receivables and investments. Total assets in fiscal year 2014 decreased by 2.7%, or \$25,804,224, compared to fiscal year 2013, which was primarily due to a decrease in the market value of the system's investments.

On December 31, 2014, total liabilities for the system were \$850,211 and consisted of accounts payable and accrued expenses. Total liabilities in fiscal year 2014 decreased by 2.0%, or \$17,358, from fiscal year 2013.

On December 31, 2014, the fiduciary net position restricted for pensions was \$936,930,499, a decrease of 2.7%, or \$25,786,866, from fiscal year 2013.

On December 31, 2013, total assets for the system were \$963,584,934 and comprised of cash, an office building, receivables and investments. Total assets in fiscal year 2013 increased by 7.4%, or \$66,204,090, over fiscal year 2012, which was primarily due to an increase in the market value of the system's investments.

On December 31, 2013, total liabilities for the system were \$867,569 and consisted of accounts payable and accrued expenses. Total liabilities in fiscal year 2013 increased by 3.4%, or \$28,898, over fiscal year 2012.

On December 31, 2013, the fiduciary net position restricted for pensions was \$962,717,365, an increase of 7.4%, or \$66,175,292, over fiscal year 2012.

### Condensed Statements of Fiduciary Net Position

|                                       | <u>FY 2014</u>        | <u>FY 2013</u>        | <u>FY 2012</u>        | <u>FY 2014</u><br><u>% Change</u> | <u>FY 2013</u><br><u>% Change</u> |
|---------------------------------------|-----------------------|-----------------------|-----------------------|-----------------------------------|-----------------------------------|
| <b>Assets</b>                         |                       |                       |                       |                                   |                                   |
| Cash                                  | \$ 10,256,299         | \$ 10,357,563         | \$ 9,931,619          | (1.0)%                            | 4.3%                              |
| Receivables                           | 1,804,836             | 1,660,691             | 1,999,802             | 8.7%                              | (17.0)%                           |
| Investments                           | 923,769,557           | 949,549,223           | 883,364,528           | (2.7)%                            | 7.5%                              |
| Property and equipment                | <u>1,950,018</u>      | <u>2,017,457</u>      | <u>2,084,895</u>      | (3.3)%                            | (3.2)%                            |
| Total Assets                          | <u>937,780,710</u>    | <u>963,584,934</u>    | <u>897,380,844</u>    | (2.7)%                            | 7.4%                              |
| <b>Liabilities</b>                    |                       |                       |                       |                                   |                                   |
| Accounts payable and accrued expenses | <u>850,211</u>        | <u>867,569</u>        | <u>838,671</u>        | (2.0)%                            | 3.4%                              |
| <b>Fiduciary Net Position</b>         | <u>\$ 936,930,499</u> | <u>\$ 962,717,365</u> | <u>\$ 896,542,173</u> | (2.7)%                            | 7.4%                              |

## Management Discussion and Analysis

### Revenues – Additions to Fiduciary Net Position

The assets available to finance PSRSSTL pension benefits are accumulated through receipt of employer and member contributions as well as through earnings on investments. For fiscal year 2014, employer contributions were around \$42 million; member contributions were approximately \$12 million; and net investment income was close to \$34 million. For fiscal year 2013, employer contributions were \$37 million, member contributions were approximately \$12 million; and net investment income was almost \$129 million.

Employer and member contributions combined increased by \$4.8 million in fiscal year 2014 as compared to the fiscal year 2013 increase of \$7.1 million, due to the increase in the required employer contribution rate from 15.07% of covered compensation in fiscal year 2013 to 16.50% in fiscal year 2014 and from 11.8% of covered compensation in fiscal year 2012 to 15.07% in fiscal year 2013. 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 covered compensation has been in effect since July 1, 1999.

Net investment income was \$95 million less in fiscal year 2014 than in fiscal year 2013 because investment earnings declined to 4.5% for fiscal year 2014 as compared to 15.8% for fiscal year 2013. Net investment income was \$30 million more in fiscal year 2013 than in fiscal year 2012 because investment earnings increased to 15.8% in fiscal year 2013 as compared to 12.4% for fiscal year 2012.

Net investment income of \$33,744,345, \$128,888,406 and \$98,065,653 in fiscal years 2014, 2013, and 2012 respectively, reflect gross investment income less investment related expenses, such as investment manager, investment advisor and custodial fees.

### Expenses – Deductions from Fiduciary Net Position

The primary deductions from fiduciary net position were payments of retirement benefits, survivor benefits, disability benefits, retiree health care subsidies and refunds to members who have retired or terminated employment. PSRSSTL operating expenses in fiscal year 2014 were approximately 0.14%; in fiscal years 2013 and 2012, these same expenses were approximately 0.15% and 0.16% of assets, respectively.

#### Condensed Statements of Changes in Fiduciary Net Position

|   | FY 2014                | FY 2013              | FY 2012              | FY 2014<br>% Change | FY 2013<br>% Change |
|---|------------------------|----------------------|----------------------|---------------------|---------------------|
| <b>Additions</b>                        |                        |                      |                      |                     |                     |
| Employer Contributions                  | \$ 41,757,458          | \$ 37,034,907        | \$ 29,551,964        | 12.8%               | 25.3%               |
| Member Contributions                    | 11,887,933             | 11,814,124           | 12,147,663           | 0.6%                | (2.7)%              |
| Net investment income                   | 33,744,345             | 128,888,406          | 98,065,562           | (73.8)%             | 31.4%               |
| Rental income                           | 143,754                | 138,506              | 134,813              | 3.8%                | 2.7%                |
| Total Additions                         | 87,533,490             | 177,875,943          | 139,900,002          | (50.8)%             | 27.1%               |
| <b>Deductions</b>                       |                        |                      |                      |                     |                     |
| Retirement benefits                     | 99,874,101             | 98,000,369           | 96,073,968           | 1.9%                | 2.0%                |
| Survivor benefits                       | 2,784,937              | 2,654,895            | 2,595,094            | 4.9%                | 2.3%                |
| Disability benefits                     | 3,524,388              | 3,402,037            | 3,246,805            | 3.6%                | 4.8%                |
| Health care subsidies                   | 2,696,001              | 2,726,158            | 2,752,751            | (1.1)%              | (1.0)%              |
| Operating expenses                      | 1,350,394              | 1,441,183            | 1,450,265            | (6.3)%              | (0.6)%              |
| Refunds to members                      | 4,203,229              | 3,690,639            | 4,773,609            | 13.9%               | (22.7)%             |
| Total Deductions                        | 114,433,050            | 111,915,281          | 110,892,492          | 2.2%                | 0.9%                |
| Other Income (Expenses)                 | 1,112,694              | 214,530              | (551,355)            | 418.7%              | 138.9%              |
| <b>Change in Fiduciary Net Position</b> | <b>\$ (25,786,866)</b> | <b>\$ 66,175,192</b> | <b>\$ 28,456,155</b> | <b>(139.0)%</b>     | <b>132.6%</b>       |



## **Management Discussion and Analysis**

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### ***Financial Summary***

For more than 17 years, the PSRSSTL Investment Consultant has consistently calculated the system's investment performance; thereby, providing a valid basis on which performance can be compared with other public pension funds. For instance, PSRSSTL investment returns have performed consistently when compared to other public pension funds with the cumulative PSRSSTL returns ranking in the top 19% of public plans since 1997 for the period ended December 31, 2014.

The fiduciary net position over this same timeframe has fluctuated from a low of \$780 million in fiscal year 1997 to a high of \$1.15 billion in fiscal year 2007. At the end of fiscal year 2014, the fiduciary net position was \$937 million, ending up close to the middle between the system's 2007 high and 1997 low. This fluctuation in the value of the fiduciary net position can be attributed to volatile financial market conditions that caused substantial losses of investment returns in several fiscal years.

Over the same period, the funded status of the PSRSSTL plan, using the GASB calculation method implemented in 1992, 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 years 2014, 2013, and 2012 was 84.4%, 84.3% and 84.9%, respectively.

The Board of Trustees and the PSRSSTL Actuary assume 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, quality investment managers continue to be selected, and the financial markets continue to remain relatively stable.

### ***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.

## Financial Statements

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**Public School Retirement System of the City of St. Louis**  
**Statements of Fiduciary Net Position**  
**Years Ended December 31, 2014 and 2013**

|  | <b>Assets</b>         |                       |
|--|-----------------------|-----------------------|
|  | <u>2014</u>           | <u>2013</u>           |
| Cash                                   | \$ 10,256,299         | \$ 10,357,563         |
| Receivables                            |                       |                       |
| Accrued interest and dividends         | 1,804,836             | 1,660,691             |
| Investments, at fair value             |                       |                       |
| Cash equivalents                       | 45,856,158            | 42,470,241            |
| Bonds                                  |                       |                       |
| U.S. Government and agency issues      | 54,142,975            | 55,038,301            |
| Corporate                              | 49,771,651            | 48,769,735            |
| Foreign investments (bonds and stocks) | 81,572,508            | 97,267,831            |
| Common and preferred stocks            | 277,686,810           | 275,848,250           |
| Mutual funds                           | 337,202,390           | 348,698,374           |
| Real estate partnerships               | 49,040,921            | 49,057,339            |
| Credit opportunity investments         | 9,939,430             | 9,530,937             |
| Limited partnerships                   | 17,619,984            | 21,148,713            |
| Venture capital partnerships           | <u>936,730</u>        | <u>1,719,502</u>      |
| Total Investments                      | 923,769,557           | 949,549,223           |
| Property and Building, net             | <u>1,950,018</u>      | <u>2,017,457</u>      |
| Total Assets                           | 937,780,710           | 963,584,934           |
|  |                       |                       |
|  | <b>Liabilities</b>    |                       |
| Accounts Payable and Accrued Expenses  | <u>850,211</u>        | <u>867,569</u>        |
| Net Position Restricted for Pensions   | <u>\$ 936,930,499</u> | <u>\$ 962,717,365</u> |

See notes to financial statements

## Financial Statements

### Public School Retirement System of the City of St. Louis Statements of Changes in Fiduciary Net Position Years Ended December 31, 2014 and 2013

|  | 2014                  | 2013                  |
|--|-----------------------|-----------------------|
| <b>Additions</b>   |                       |                       |
| Employer contributions                                       |                       |                       |
| St. Louis Public Schools                                     | \$ 31,555,696         | \$ 27,962,472         |
| Sick leave conversion  | 1,588,665             | 2,215,167             |
| Charter Schools  | 8,527,507             | 6,765,907             |
| Retirement System  | 85,590                | 91,361                |
| Plan member contributions                                    |                       |                       |
| St. Louis Public Schools                                     | 9,267,945             | 9,511,125             |
| Charter Schools  | 2,594,757             | 2,277,677             |
| Retirement System  | 25,231                | 25,322                |
|  | <u>53,645,391</u>     | <u>48,849,031</u>     |
| Net appreciation (depreciation) in fair value of investments |                       |                       |
| Cash equivalents   | 151,529               | 148,625               |
| Bonds  |                       |                       |
| U.S. Government and agency issues                            | 3,476,443             | (1,104,790)           |
| Corporate  | 3,191,710             | 3,830,831             |
| Foreign investments  | (1,402,307)           | 10,881,060            |
| Common and preferred stock                                   | 27,559,626            | 76,026,111            |
| Mutual funds   | (342,643)             | 34,486,791            |
| Limited partnerships   | (758,833)             | 3,171,204             |
| Real estate partnerships                                     | 5,482,873             | 4,479,603             |
| Venture capital partnerships                                 | 720,145               | (70,898)              |
| Credit opportunity investments                               | 458,367               | 1,579,408             |
|  | <u>38,536,910</u>     | <u>133,427,945</u>    |
| Less investment expense                                      | <u>4,792,565</u>      | <u>4,539,539</u>      |
| Net investment income  | 33,744,345            | 128,888,406           |
| Rental income  | 143,754               | 138,506               |
| Other miscellaneous income                                   | <u>1,112,694</u>      | <u>214,530</u>        |
| Net Additions  | 88,646,184            | 178,090,473           |
| <b>Deductions</b>  |                       |                       |
| Benefits paid  |                       |                       |
| Retirement benefits  | 99,874,101            | 98,000,369            |
| Survivor benefits  | 2,784,937             | 2,654,895             |
| Disability benefits  | 3,524,388             | 3,402,037             |
| Health care subsidies  | 2,696,001             | 2,726,158             |
|  | <u>108,879,427</u>    | <u>106,783,459</u>    |
| Operating expenses   | 1,350,394             | 1,441,183             |
| Contribution refunds due to death or resignation             | <u>4,203,229</u>      | <u>3,690,639</u>      |
| Total Deductions   | <u>114,433,050</u>    | <u>111,915,281</u>    |
| Net Increase (decrease) in Net Position                      | (25,786,866)          | 66,175,192            |
| Net Position Restricted for Pensions Beginning of Year       | <u>962,717,365</u>    | <u>896,542,173</u>    |
| Net Position Restricted for Pensions End of Year             | <u>\$ 936,930,499</u> | <u>\$ 962,717,365</u> |

See notes to financial statements

**Public School Retirement System of the City of St. Louis  
Notes to Financial Statements  
December 31, 2014 and 2013**

**1. Description of System**

**General**

The Public School Retirement System of the City of St. Louis (the "System") is the administrator of a cost-sharing multiple-employer pension plan 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, Charter Schools located within the St. Louis School District and the System.

Operations and management of the System are generally prescribed in the Statutes and are supervised by the Board of Trustees.

**Membership and Eligibility**

All persons employed on a full-time basis are members of the System as a condition of employment. Membership statistics, as of the latest actuarial valuations, are as follows:

|                           | January 1,<br>2014   | January 1,<br>2013   |
|---------------------------|----------------------|----------------------|
| Active members            | 4,880                | 4,786                |
| Inactive members          | <u>1,798</u>         | <u>1,643</u>         |
| Total members not retired | 6,678                | 6,429                |
| Retired members           |                      |                      |
| Service and survivors     | 4,419                | 4,250                |
| Disability                | <u>270</u>           | <u>266</u>           |
|                           | <u>4,689</u>         | <u>4,516</u>         |
| Total membership          | <u><u>11,367</u></u> | <u><u>10,945</u></u> |

**Vesting**

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

**Funding Policy**

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.

## Notes to Financial Statements

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### 1. Description of System (continued)

#### Benefits

Upon retirement at age 65, or at any age if age plus years of credited service equals or exceeds 85 (Rule of 85), members receive monthly payments for life of yearly benefits equal to years of credited service multiplied by 2% of average final compensation, but not to exceed 60% of average final compensation. 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 prior to eligibility of normal retirement. Survivor 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.

Benefits are recorded when paid.

#### Return of Contributions Upon Death

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

Active 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.

## Notes to Financial Statements

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### Investment Policy

The System's policy in regards to the allocation of invested assets is established and may be amended by the System's Board. Investments are managed on a total return basis with a long-term objective and maintaining a fully funded status for the benefits provided through the pension plan. The following was the Board adopted asset allocation policy as of October 21, 2013.

| <u>Asset Class</u>                              | <u>Target Allocation</u> |
|---|--------------------------|
| Large Cap Growth Domestic Equities              | 5.5%                     |
| Large Cap Core Domestic Equities                | 2.0%                     |
| Large Cap Value Domestic Equities               | 5.5%                     |
| Mid Cap Growth Domestic Equities                | 3.0%                     |
| Small/Micro Cap Domestic Equities               | 6.0%                     |
| International Equities                          | 12.0%                    |
| Emerging Markets Equities                       | 7.0%                     |
| Global Equities                                 | 5.0%                     |
| Global Tactical Asset Allocation                | 12.0%                    |
| Core Domestic Bonds                             | 7.0%                     |
| High Yield Domestic Bonds                       | 5.0%                     |
| Emerging Markets Debt                           | 4.0%                     |
| Global Bonds                                    | 3.0%                     |
| Credit Opportunities                            | 1.0%                     |
| Hedge Funds                                     | 5.0%                     |
| Market Neutral Hedge Funds                      | 4.0%                     |
| Real Estate                                     | 5.0%                     |
| Private Equity                                  | 4.0%                     |
| Private Debt                                    | 1.0%                     |
| Real Assets                                     | 3.0%                     |
| Cash (does not include Managers' Residual Cash) | 0.0%                     |
| Total   | <u>100%</u>              |

## 2. Summary of Significant Accounting Policies

### Basis of Presentation and Accounting

The financial statements of the System have been prepared in accordance with the criteria established by the Governmental Accounting Standards Board ("GASB") and the provisions of Financial Accounting Standards Board ("FASB"), Accounting Standards Codification (the "FASB ASC"), which is the source of authoritative, non-governmental accounting principles generally accepted in the United States of America ("GAAP"). The System's financial statements are prepared using the accrual basis of accounting.

GASB Statement 67 was adopted during the year ended December 31, 2014, addressing accounting and financial reporting requirements for pension plans. GASB Statement 67 requires changes in presentation of the *Financial Statements*, *Notes to the Financial Statements*, and *Required Supplementary Information*. Significant changes include an actuarial calculation of the total and net pension liability as defined in the accounting standard. Comprehensive footnote disclosures regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures are also included. The implementation of this standard did not significantly impact the accounting for investment balances. The total employer's net

## Notes to Financial Statements

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### 2. Summary of Significant Accounting Policies (continued)

pension liability is presented in Note 11. Related GASB Statement 67 disclosures can be found in the *Required Supplementary Information* following the last note in this section.

#### Use of Estimates

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, 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.

#### Investment Valuation and Income Recognition

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 4 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.

#### 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.

#### Investment Expenses

Investment expenses consist of investment manager, investment advisor and custodial bank fees.

### 2. Summary of Significant Accounting Policies (continued)

#### Fair Value Measurements

The System follows guidance issued by the FASB on fair value measurements, which establishes a framework for measuring fair value, clarifies the definition of fair value within that framework, and expands disclosures about the use of fair value measurements. This guidance applies whenever fair value is the applicable measurement. The three general valuation techniques used to measure fair value are the market approach, cost approach, and income approach.

#### 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 uses the straight-line method for the depreciation of the building and improvements over the estimated life of 40 years.

#### Long-Lived Asset Impairment

The System evaluates the recoverability of the carrying value of long-lived assets whenever events or circumstances indicate the carrying amount may not be recoverable. If a long-lived asset is tested for recoverability and the undiscounted estimated future cash flows expected to result from the use and eventual disposition of the asset are less than the carrying amount of the asset, the asset cost is adjusted to fair value and an impairment loss is recognized as the amount by which the carrying amount of a long-lived asset exceeds its fair value. No asset impairment was recognized during the years ended December 31, 2014 and 2013.

#### Reclassifications

Certain amounts in the 2013 financial statements have been reclassified to conform to the current year presentation.

#### Subsequent Events

The System has evaluated subsequent events through April 17, 2015, the date the financial statements were available to be issued.



### 2. Summary of Significant Accounting Policies (continued)

#### Adoption of New Accounting Standards

During the year ended December 31, 2014, the System adopted GASB Statement No. 65, *Items Previously Reported as Assets and Liabilities*. This Statement specifies items that were previously reported as assets and liabilities that should now be reported as deferred outflows of resources and deferred inflows of resources to ensure consistency in financial reporting.

During the year ended December 31, 2014, the System adopted GASB Statement No. 67 which addresses accounting and financial reporting requirements for pension plans. GASB No. 67 requires changes in the presentation of the financial statements, notes to the financial statements, and required supplementary information.

During the year ended December 31, 2014, the System adopted GASB Statement No. 69, *Government Combinations and Disposals of Government Operations*. This statement establishes accounting and financial reporting standards for mergers, acquisitions, and transfers of operations. Upon examination of GASB 69, it was determined to have no current impact on the System.

During the year ended December 31, 2014, the System adopted GASB Statement No. 70, *Accounting and Financial Reporting for Non-exchange Financial Guarantees*. This Statement establishes accounting and financial reporting standards for situations where a state or local government, as a guarantor, agrees to identify a third-party obligation holder under specified conditions. Upon examination of GASB 70, it was determined to have no current impact on the System.

#### Recent Accounting Pronouncements

GASB Statement No. 68, *"Accounting and Financial Reporting for Pensions - an amendment of GASB Statement No. 27,"* was established to set standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expenses/expenditures. This statement identifies the methods and assumptions that should be used to project benefit payments, discount projected benefit payments to their actuarial present value, and attribute that present value to periods of employee service. The System will adopt GASB 68 for its portion of the pension liability and will assist plan employers in their implementation of this statement for the year ending December 31, 2015.

## Notes to Financial Statements

### 3. Investments

At December 31, 2014 and 2013, investments consisted of the following:

|  | 2014                  |                       |
|--|-----------------------|-----------------------|
|  | <u>Fair Value</u>     | <u>Cost</u>           |
| Cash equivalents                       | \$ 45,856,158         | \$ 45,856,158         |
| Bonds                                  |                       |                       |
| U.S. Government and agency issues      | 54,142,975            | 53,208,128            |
| Corporate                              | 49,771,651            | 47,455,253            |
| Foreign investments (bonds and stocks) | 81,572,508            | 78,777,780            |
| Common and preferred stocks            | 277,686,810           | 219,422,076           |
| Mutual funds                           | 337,202,390           | 273,340,436           |
| Real estate partnerships               | 49,040,921            | 40,082,488            |
| Credit opportunity investments         | 9,939,430             | 6,493,069             |
| Limited partnerships                   | 17,619,984            | 18,765,262            |
| Venture capital partnerships           | <u>936,730</u>        | <u>192,963</u>        |
|  | <u>\$ 923,769,557</u> | <u>\$ 783,593,613</u> |

|  | 2013                  |                       |
|--|-----------------------|-----------------------|
|  | <u>Fair Value</u>     | <u>Cost</u>           |
| Cash equivalents                       | \$ 42,470,241         | \$ 42,470,241         |
| Bonds                                  |                       |                       |
| U.S. Government and agency issues      | 55,038,301            | 55,812,525            |
| Corporate                              | 48,769,735            | 44,523,846            |
| Foreign investments (bonds and stocks) | 97,267,831            | 87,472,364            |
| Common and preferred stocks            | 275,848,250           | 211,119,325           |
| Mutual funds                           | 348,698,374           | 248,541,498           |
| Real estate partnerships               | 49,057,339            | 43,245,288            |
| Credit opportunity investments         | 9,530,937             | 6,526,109             |
| Limited partnerships                   | 21,148,713            | 19,602,206            |
| Venture capital partnerships           | <u>1,719,502</u>      | <u>705,685</u>        |
|  | <u>\$ 949,549,223</u> | <u>\$ 760,019,087</u> |

|  | <u>2014</u>  |
|--|--------------|
| Annual money-weighted rate of return, net of investment expense, adjusted for the changing amounts actually invested | <u>3.93%</u> |

The System began tracking the annual money weighted rate of return during the year ended December 31, 2014.

## Notes to Financial Statements

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### 4. Fair Value Measurements

The framework for measuring fair value establishes a fair value hierarchy which prioritizes the inputs to valuation techniques used to measure fair value into Levels 1, 2, and 3. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1) and the lowest priority to unobservable inputs (Level 3). The three levels of the fair value hierarchy are described as follows:

- Level 1     Inputs to the valuation methodology are unadjusted quoted prices for identical instruments in active markets.
  
- Level 2     Inputs to the valuation methodology include quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in inactive markets, inputs other than quoted prices that are observable for the instrument, or inputs that are derived principally from or corroborated by observable market data by correlation or other means.
  
- Level 3     Inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The instrument's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

Carrying amounts of certain financial instruments such as cash and cash equivalents, receivables, accounts payable, and accrued expenses approximate fair value due to their short maturities. There have been no changes in the methodologies used at December 31, 2014 and 2013.

Following is a description of the valuation methodologies used for investments measured at fair value.

- Level 1     Investments consist of publicly traded mutual funds, common stocks, preferred stocks and credit opportunity investments. Mutual funds and credit opportunity investments are valued at the net asset value ("NAV") of shares held by the System at year-end. Common and preferred stocks are valued using the closing price reported on the active market on which the individual securities are traded.
  
- Level 2     Investments consist of corporate and foreign bonds and stocks, U.S government securities and agency issues, and cash equivalent accounts. These securities are valued using pricing models maximizing the use of observable inputs for similar securities. This includes basing value on yields currently available on comparable securities of issuers with similar credit ratings.

## Notes to Financial Statements

### 4. Fair Value Measurements (continued)

Level 3 Investments consist of real estate partnerships, limited partnerships, and venture capital partnerships. Real estate partnerships are valued at fair value as determined by the general partner. Limited partnerships are valued based on valuations of the underlying companies of the limited partnerships as reported by the general partner. Venture capital partnerships are valued by investment advisors based upon audited financial statements, other practices, and other information provided by the underlying investment advisor.

The following table presents the fair value measurements of instruments recognized in the accompanying statements of fiduciary net position measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements are categorized at December 31, 2014 and 2013:

|                                   | 2014                  |                         |                       |                      |
|-----------------------------------|-----------------------|-------------------------|-----------------------|----------------------|
|                                   | Total                 | Fair Value Measurements |                       |                      |
|                                   |                       | Level 1                 | Level 2               | Level 3              |
| Cash equivalents                  | \$ 45,856,158         | \$ -                    | \$ 45,856,158         | \$ -                 |
| U.S. Government and agency issues | 54,142,975            | -                       | 54,142,975            | -                    |
| Corporate bonds                   | 49,771,651            | -                       | 49,771,651            | -                    |
| Foreign investments               | 81,572,508            | -                       | 81,572,508            | -                    |
| Common and preferred stocks       | 277,686,810           | 277,686,810             | -                     | -                    |
| Mutual funds                      | 337,202,390           | 337,202,390             | -                     | -                    |
| Real estate partnerships          | 49,040,921            | -                       | -                     | 49,040,921           |
| Credit opportunity investments    | 9,939,430             | 9,939,430               | -                     | -                    |
| Limited partnerships              | 17,619,984            | -                       | -                     | 17,619,984           |
| Venture capital partnerships      | 936,730               | -                       | -                     | 936,730              |
|                                   | <u>\$ 923,769,557</u> | <u>\$ 624,828,630</u>   | <u>\$ 231,343,292</u> | <u>\$ 67,597,635</u> |

|                                   | 2013                  |                         |                       |                      |
|-----------------------------------|-----------------------|-------------------------|-----------------------|----------------------|
|                                   | Total                 | Fair Value Measurements |                       |                      |
|                                   |                       | Level 1                 | Level 2               | Level 3              |
| Cash equivalents                  | \$ 42,470,241         | \$ -                    | \$ 42,470,241         | \$ -                 |
| U.S. Government and agency issues | 55,038,301            | -                       | 55,038,301            | -                    |
| Corporate bonds                   | 48,769,735            | -                       | 48,769,735            | -                    |
| Foreign investments               | 97,267,831            | -                       | 97,267,831            | -                    |
| Common and preferred stocks       | 275,848,250           | 275,848,250             | -                     | -                    |
| Mutual funds                      | 348,698,374           | 348,698,374             | -                     | -                    |
| Real estate partnerships          | 49,057,339            | -                       | -                     | 49,057,339           |
| Credit opportunity investments    | 9,530,937             | 9,530,937               | -                     | -                    |
| Limited partnerships              | 21,148,713            | -                       | -                     | 21,148,713           |
| Venture capital partnerships      | 1,719,502             | -                       | -                     | 1,719,502            |
|                                   | <u>\$ 949,549,223</u> | <u>\$ 634,077,561</u>   | <u>\$ 243,546,108</u> | <u>\$ 71,925,554</u> |

## Notes to Financial Statements

### 4. Fair Value Measurements (continued)

Changes in fair value of the System's Level 3 instruments are as follows:

|   | Venture<br>Capital<br>Partnerships | Limited<br>Partnerships | Real Estate<br>Partnerships | Total                |
|---|------------------------------------|-------------------------|-----------------------------|----------------------|
| December 31, 2012                                     | \$ 1,855,345                       | \$ 23,352,373           | \$ 45,034,321               | \$ 70,242,039        |
| Realized gains  | -                                  | 1,815,916               | 17,370                      | 1,833,286            |
| Unrealized gains (losses)                             | (62,771)                           | 1,294,540               | 2,328,852                   | 3,560,621            |
| Purchases, sales, issuances,<br>and settlements (net) | (64,944)                           | (5,314,116)             | -                           | (5,379,060)          |
| Investment income (loss),<br>(net)                    | (8,128)                            | -                       | 2,133,382                   | 2,125,254            |
| Management fees                                       | -                                  | -                       | (456,586)                   | (456,586)            |
| December 31, 2013                                     | 1,719,502                          | 21,148,713              | 49,057,339                  | 71,925,554           |
| Realized gains  | 728,121                            | 1,932,951               | 36,948                      | 2,698,020            |
| Unrealized gains (losses)                             | (5,991)                            | (2,691,784)             | 3,146,383                   | 448,608              |
| Purchases, sales, issuance<br>and settlements, (net)  | (1,502,918)                        | (2,769,896)             | (5,000,000)                 | (9,272,814)          |
| Investment income (loss),<br>(net)                    | (1,984)                            | -                       | 2,299,542                   | 2,297,558            |
| Management fees                                       | -                                  | -                       | (499,291)                   | (499,291)            |
| December 31, 2014                                     | <u>\$ 936,730</u>                  | <u>\$ 17,619,984</u>    | <u>\$ 49,040,921</u>        | <u>\$ 67,597,635</u> |

## Notes to Financial Statements

### 4. Fair Value Measurements (continued)

All assets have been valued using a market approach, except for Level 3 assets. Fair values in Level 2 are calculated using quoted market prices for similar assets in markets that are not active. The following table describes the valuation technique used to calculate fair values for assets in Level 3. Annually, management determines if the current valuation techniques used in the fair value measurements are still appropriate and evaluates and adjusts the unobservable inputs used in the fair value measurements based on third-party information. There were no changes in the valuation techniques during the current year.

| <u>December 31, 2014</u>     | <u>Fair Value</u> | <u>Valuation Technique(s)</u> | <u>Unobservable Inputs</u> |
|------------------------------|-------------------|-------------------------------|----------------------------|
| Limited Partnerships         | \$ 17,619,984     | Basis in LLC                  | Undistributed Income       |
| Real Estate Partnerships     | \$ 49,040,921     | Basis in LLC                  | Undistributed Income       |
| Venture Capital Partnerships | \$ 936,730        | Basis in LLC                  | Undistributed Income       |

| <u>December 31, 2013</u>     | <u>Fair Value</u> | <u>Valuation Technique(s)</u> | <u>Unobservable Inputs</u> |
|------------------------------|-------------------|-------------------------------|----------------------------|
| Limited Partnerships         | \$ 21,148,713     | Basis in LLC                  | Undistributed Income       |
| Real Estate Partnerships     | \$ 49,057,339     | Basis in LLC                  | Undistributed Income       |
| Venture Capital Partnerships | \$ 1,719,502      | Basis in LLC                  | Undistributed Income       |

The significant unobservable inputs used in the fair value measurement of the System's investments in limited partnerships are the original cost of the investment in the partnership plus the cumulative net income of the partnership through the end of the most recent fiscal year. Significant increases or decreases in the partnership's cumulative net income through December 31, 2014 and 2013 could result in a significantly higher or lower fair value measurement.

### 5. Occupancy

The System occupies offices in a building it owns. Occupancy expenses for the years ended December 31, 2014 and 2013 were \$ 32,319 and \$27,946, 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 was five years with five one-year renewal options with annual rent ranging from \$144,047 to \$158,821 through May 2019. Rental income received for the years ended December 31, 2014 and 2013 totaled \$143,754 and \$138,506, respectively.

### 6. Property and Building

Property and building as of December 31, 2014 and 2013 consists of:

|                               | <u>2014</u>         | <u>2013</u>         |
|-------------------------------|---------------------|---------------------|
| Land                          | \$ 229,451          | \$ 229,451          |
| Building                      | 2,065,061           | 2,065,061           |
| Tenant improvements           | <u>158,120</u>      | <u>158,120</u>      |
|                               | 2,452,632           | 2,452,632           |
| Less accumulated depreciation | <u>502,614</u>      | <u>435,175</u>      |
| Total Property and Building   | <u>\$ 1,950,018</u> | <u>\$ 2,017,457</u> |

Depreciation expenses totaled \$67,439 and \$67,438 for the years ended December 31, 2014 and 2013, respectively.

## Notes to Financial Statements

### 7. Funding Status

The funded status as of January 1, which is the most recent actuarial date is as follows:

|                                   | <u>2014</u>      | <u>2013</u>      |
|-----------------------------------|------------------|------------------|
| Actuarial value of assets         | \$ 922,922,386   | \$ 914,494,335   |
| Actuarial accrual liability (AAL) | \$ 1,093,394,768 | \$ 1,085,124,658 |
| Unfunded AAL (UAAL)               | \$ 170,472,382   | \$ 170,630,323   |
| Funded ratio                      | 84.4%            | 84.3%            |
| Annual covered payroll            | \$ 243,280,015   | \$ 225,893,514   |
| UAAL as a percentage of payroll   | 70.1%            | 75.5%            |

The funded ratio increased 0.1% from the previous year. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents similar information but uses a multi-year format to show trend information. These trends indicate whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits. The trend information was obtained from the annual valuation report of the independent actuary retained by the System.

Additional information regarding assumptions used in the actuarial valuation is as follows:

|                             | <u>January 1, 2014</u>   | <u>January 1, 2013</u>   |
|-----------------------------|--|--|
| Actuarial cost method       | Frozen entry age   | Frozen entry age   |
| Amortization method         | Level dollar, closed period  | Level dollar, closed period  |
| Amortization period         | 22 years   | 23 years   |
| Inflation rate              | 3.5%   | 3.5%   |
| Asset valuation method      | Assumed Yield Method   | Assumed Yield Method   |
| Investment return           | 8.0% per annum   | 8.0% per annum   |
| Projected salary increase   | Based on actual experience of the System, at a rate of 4.5% per annum                                | Based on actual experience of the System, at a rate of 4.5% per annum                                |
| Mortality or death benefits | Mortality tables mandated by the Pension Protection Act as specified in IRS Regulation 1.430(h)(3)-1 | Mortality tables mandated by the Pension Protection Act as specified in IRS Regulation 1.430(h)(3)-1 |
| Disability Rates            | RP-2000 Disability Mortality Table   | RP-2000 Disability Mortality Table   |

## Notes to Financial Statements

### 8. Annual Required Contribution

As determined by the actuary, the annual required contribution is as follows at January 1, 2014:

|  | Board of<br>Education | Retirement<br>System | Charter<br>Schools  | Total                |
|--|-----------------------|----------------------|---------------------|----------------------|
| Normal Cost contribution                 | \$ 17,618,983         | \$ 47,607            | \$ 4,218,880        | \$ 21,885,470        |
| Actuarial accrued liability contribution | <u>13,453,867</u>     | <u>36,353</u>        | <u>3,221,540</u>    | <u>16,711,760</u>    |
| Annual required contribution (ARC)       | <u>\$ 31,072,850</u>  | <u>\$ 83,960</u>     | <u>\$ 7,440,420</u> | <u>\$ 38,597,230</u> |
| Covered compensation                     | \$ 195,853,519        | \$ 529,203           | \$ 46,897,293       | \$ 243,280,015       |
| ARC as % of covered compensation         | 15.87%                | 15.87%               | 15.87%              | 15.87%               |

As determined by the actuary, the annual required contribution is as follows at January 1, 2013:

|  | Board of<br>Education | Retirement<br>System | Charter<br>Schools | Total             |
|--|-----------------------|----------------------|--------------------|-------------------|
| Normal Cost contribution                 | \$ 17,624,667         | \$ 47,804            | \$ 3,142,261       | \$ 20,814,732     |
| Actuarial accrued liability contribution | <u>13,931,029</u>     | <u>37,786</u>        | <u>2,483,731</u>   | <u>16,452,546</u> |
| Annual required contribution (ARC)       | \$ 31,555,696         | \$ 85,590            | \$ 5,625,992       | \$ 37,267,278     |
| Covered compensation                     | \$ 191,273,081        | \$ 518,799           | \$ 34,101,634      | \$ 225,893,514    |
| ARC as % of covered compensation         | 16.50%                | 16.50%               | 16.50%             | 16.50%            |

### 9. Tax Status of Plan

The Internal Revenue Service has determined and informed the System by a letter dated June 15, 2012, that the System and related trust and amendments are designed in accordance with the applicable sections of the Internal Revenue Code ("IRC"). The System believes that the System is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believes that the System is qualified and the related trust is tax-exempt.



## Notes to Financial Statements

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### 10. 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, 2014 and 2013, the System had approximately \$10,339,000 and \$10,773,000, 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, by the Federal Home Loan 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, 2014 and 2013 was \$11,000,000. A significant portion of the System's investments are held in trust by US Bank of St. Louis, N.A.

On December 30, 2014 and December 31, 2013, the System received \$33,134,319 and \$30,126,350, respectively from the St. Louis Board of Education for the 2014 and 2013 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, 2014, 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.

| <u>Mutual Funds</u>            | <u>Fair Value</u> | <u>Percentage of Total<br/>Net Assets</u> |
|--------------------------------|-------------------|---|
| The Bank of New York Mellon    | \$ 47,660,777     | 5.1%                                      |
| <u>Real Estate Investments</u> |                   |   |
| UBS Global Asset Management    | \$ 49,040,921     | 5.2%                                      |

#### Credit Risk of Debt Securities

The System's rated debt investments as of December 31, 2014 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.

## Notes to Financial Statements

### 10. Risks and Uncertainties (continued)

As of December 31, 2014, the System held the following fixed income investments with respective Moody's quality ratings or equivalent rating. Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not considered to have credit risk. Foreign investments considered having no credit risk such as stocks and cash equivalents are not included in the following:

| Quality Rating | Corporate debt and debentures | Foreign government and corporate obligations | US Government and agency issues | Total                 |
|----------------|-------------------------------|--|---------------------------------|-----------------------|
| Aaa            | \$ 3,312,480                  | \$ 10,198,701                                | \$ 25,391,375                   | \$ 38,902,556         |
| Aa1            | -                             | 2,976,526                                    | 172,802                         | 3,149,328             |
| Aa2            | 1,444,205                     | 406,368                                      | -                               | 1,850,573             |
| Aa3            | 522,859                       | -  | -                               | 522,859               |
| A1             | 854,006                       | 5,112,957                                    | -                               | 5,966,963             |
| A2             | 988,271                       | 937,467                                      | -                               | 1,925,738             |
| A3             | 2,391,509                     | 887,041                                      | -                               | 3,278,550             |
| Baa1           | 1,816,595                     | 2,552,973                                    | -                               | 4,369,568             |
| Baa2           | 2,777,439                     | 1,377,184                                    | -                               | 4,154,623             |
| Baa3           | 3,555,383                     | 872,786                                      | -                               | 4,428,169             |
| Ba1            | 4,557,385                     | 1,201,425                                    | -                               | 5,758,810             |
| Ba2            | 2,483,889                     | 344,541                                      | -                               | 2,828,430             |
| Ba3            | 4,039,966                     | 1,780,267                                    | -                               | 5,820,233             |
| B1             | 2,878,373                     | 856,896                                      | -                               | 3,735,269             |
| B2             | 3,704,514                     | 74,750                                       | -                               | 3,779,264             |
| B3             | 2,999,633                     | 794,626                                      | -                               | 3,794,259             |
| Caa1           | 1,732,443                     | -  | -                               | 1,732,443             |
| Caa2           | 639,548                       | 226,075                                      | -                               | 865,623               |
| Ca             | 38,928                        | -  | -                               | 38,928                |
| Not rated      | 9,034,225                     | 470,792                                      | 28,578,798                      | 38,083,815            |
| Total          | <u>\$ 49,771,651</u>          | <u>\$ 31,071,375</u>                         | <u>\$ 54,142,975</u>            | <u>\$ 134,986,001</u> |

## Notes to Financial Statements

### 10. Risks and Uncertainties (continued)

As of December 31, 2013, the System held the following fixed income investments with respective Moody's quality ratings or equivalent rating.

| Quality Rating | Corporate debt and debentures | Foreign Government and corporate obligations | US Government and agency issues | Total                 |
|----------------|-------------------------------|--|---------------------------------|-----------------------|
| Aaa            | \$ 1,973,760                  | \$ 13,356,344                                | \$ 25,039,145                   | \$ 40,369,249         |
| Aa1            | 372,437                       | -  | 178,159                         | 550,596               |
| Aa2            | 1,072,142                     | 916,350                                      | -                               | 1,988,492             |
| Aa3            | 781,016                       | 7,234,923                                    | -                               | 8,015,939             |
| A1             | 1,388,740                     | 85,026                                       | -                               | 1,473,766             |
| A2             | 707,695                       | 3,389,392                                    | -                               | 4,097,087             |
| A3             | 2,226,489                     | 319,987                                      | -                               | 2,546,476             |
| Baa1           | 2,009,528                     | 4,200,163                                    | -                               | 6,209,691             |
| Baa2           | 3,555,336                     | 1,950,041                                    | -                               | 5,505,377             |
| Baa3           | 4,994,805                     | 654,801                                      | -                               | 5,649,606             |
| Ba1            | 2,979,385                     | 1,072,087                                    | -                               | 4,051,472             |
| Ba2            | 2,915,006                     | 1,299,694                                    | -                               | 4,214,700             |
| Ba3            | 3,147,638                     | 982,596                                      | -                               | 4,130,234             |
| B1             | 3,416,081                     | 566,019                                      | -                               | 3,982,100             |
| B2             | 2,567,059                     | 52,000                                       | -                               | 2,619,059             |
| B3             | 3,897,198                     | 196,300                                      | -                               | 4,093,498             |
| Caa1           | 1,253,006                     | 146,249                                      | -                               | 1,399,255             |
| Caa2           | 1,698,704                     | 144,688                                      | -                               | 1,843,392             |
| Caa3           | -                             | 110,463                                      | -                               | 110,463               |
| Ca             | 81,457                        | 63,524                                       | -                               | 144,981               |
| C              | 5,106                         | 101,115                                      | -                               | 106,221               |
| Not rated      | 7,727,147                     | 983,366                                      | 29,820,997                      | 38,531,510            |
| Total          | <u>\$ 48,769,735</u>          | <u>\$ 37,825,128</u>                         | <u>\$ 55,038,301</u>            | <u>\$ 141,633,164</u> |

## Notes to Financial Statements

### 10. Risks and Uncertainties (continued)

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The System does not have a formal policy to limit foreign currency risk. The System's exposure to foreign currency risk in U.S. dollars as of December 31, 2014 is as follows:

| Currency                                     | Cash<br>Equivalents | Fixed Income         | Equities             | Total                |
|--|---------------------|----------------------|----------------------|----------------------|
| Australian Dollar                            | \$ 1                | \$ 351,891           | \$ -                 | \$ 351,892           |
| British Pound Sterling                       | -                   | 2,976,526            | 9,289,576            | 12,266,102           |
| Canadian Dollar                              | -                   | -                    | 384,584              | 384,584              |
| Chilean Peso                                 | -                   | 212,444              | -                    | 212,444              |
| Euros  | -                   | 4,084,803            | 13,134,947           | 17,219,750           |
| Hong Kong Dollar                             | -                   | -                    | 2,796,192            | 2,796,192            |
| Indian Rupee                                 | -                   | 21,203               | -                    | 21,203               |
| Japanese Yen                                 | 21,194              | 5,112,957            | 6,250,873            | 11,385,024           |
| Korean Won                                   | -                   | -                    | 2,358,451            | 2,358,451            |
| Malaysian Ringgit                            | 19,844              | -                    | -                    | 19,844               |
| Mexican Peso                                 | 56,517              | 3,416,505            | -                    | 3,473,022            |
| New Zealand Dollar                           | 11,724              | 1,848,557            | -                    | 1,860,281            |
| Polish Zloty                                 | -                   | 704,974              | -                    | 704,974              |
| Singapore Dollar                             | -                   | -                    | 425,802              | 425,802              |
| South African Rand                           | 14                  | -                    | -                    | 14                   |
| Swedish Krona                                | 6,387               | 3,484,696            | -                    | 3,491,083            |
| Swiss Franc                                  | -                   | -                    | 5,742,740            | 5,742,740            |
|  | <u>\$ 115,681</u>   | <u>\$ 22,214,556</u> | <u>\$ 40,383,165</u> | 62,713,402           |
| Foreign investment denominated in US Dollars |                     |                      |                      | <u>18,859,106</u>    |
|  |                     |                      |                      | <u>\$ 81,572,508</u> |

The System's exposure to foreign currency risk in U.S. dollars as of December 31, 2013 is as follows:

| Currency                                     | Cash<br>Equivalents | Fixed Income         | Equities             | Total                |
|--|---------------------|----------------------|----------------------|----------------------|
| Australian Dollar                            | \$ 2,991            | \$ 4,329,852         | \$ -                 | \$ 4,332,843         |
| British Pound Sterling                       | -                   | -                    | 9,491,650            | 9,491,650            |
| Canadian Dollar                              | -                   | 110,463              | 912,023              | 1,022,486            |
| Euros  | -                   | 6,011,686            | 20,705,432           | 26,717,118           |
| Hong Kong Dollar                             | -                   | -                    | 2,673,437            | 2,673,437            |
| Japanese Yen                                 | 24,772              | 7,044,423            | 5,153,927            | 12,223,122           |
| Korean Won                                   | -                   | -                    | 1,636,286            | 1,636,286            |
| Malaysian Ringgit                            | 21,183              | -                    | -                    | 21,183               |
| Mexican Peso                                 | 68,709              | 3,493,506            | -                    | 3,562,215            |
| New Zealand Dollar                           | 19                  | -                    | -                    | 19                   |
| Polish Zloty                                 | -                   | 3,389,392            | -                    | 3,389,392            |
| Singapore Dollar                             | -                   | -                    | 734,952              | 734,952              |
| South African Rand                           | 9                   | -                    | -                    | 9                    |
| Swedish Krona                                | -                   | 4,172,309            | -                    | 4,172,309            |
| Swiss Franc                                  | -                   | -                    | 3,580,268            | 3,580,268            |
|  | <u>\$ 117,683</u>   | <u>\$ 28,551,631</u> | <u>\$ 44,887,975</u> | \$ 73,557,289        |
| Foreign investment denominated in US Dollars |                     |                      |                      | <u>23,710,542</u>    |
|  |                     |                      |                      | <u>\$ 97,267,831</u> |

## Notes to Financial Statements

### 10. Risks and Uncertainties (continued)

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The System's fixed income investments are managed in accordance with policies established by the board that are specific as to the degree of interest rate risk that can be taken. The System's policies established by the board manage the interest rate risk within the portfolio using various methods, including effective duration, option adjusted duration, average maturity, and segmented time distribution, which reflects total fair value of investments maturing during a given time period.

The segmented time distribution of the various investment types of the System's debt securities at December 31, 2014 is as follows:

| Type   | 2014 Fair Value      | Less Than 1 year  | 1 to 5 years         | 6 to 10 years        | More than 10 years   |
|--|----------------------|-------------------|----------------------|----------------------|----------------------|
| Corporate bonds and debentures               | \$ 49,771,651        | \$ 425,345        | \$ 13,730,295        | \$ 18,775,353        | \$ 16,840,660        |
| Foreign government and corporate obligations | 31,071,375           | 24,150            | 12,393,762           | 9,649,922            | 9,003,540            |
| US government and corporate obligations      | <u>54,142,975</u>    | <u>-</u>          | <u>15,974,483</u>    | <u>7,495,989</u>     | <u>30,672,502</u>    |
| Total  | <u>\$134,986,001</u> | <u>\$ 449,495</u> | <u>\$ 42,098,540</u> | <u>\$ 35,921,264</u> | <u>\$ 56,516,702</u> |

The segmented time distribution of the various investment types of the System's debt securities at December 31, 2013 is as follows:

| Type   | 2013 Fair Value      | Less than 1 year    | 1 to 5 years         | 6 to 10 years        | More than 10 years   |
|--|----------------------|---------------------|----------------------|----------------------|----------------------|
| Corporate bonds and debentures               | \$ 48,769,735        | \$ 330,815          | \$ 12,054,536        | \$ 16,792,640        | \$ 19,591,744        |
| Foreign government and corporate obligations | 37,825,128           | 2,663,259           | 13,835,849           | 15,448,421           | 5,877,599            |
| US government and corporate obligations      | <u>55,038,301</u>    | <u>700,574</u>      | <u>14,987,431</u>    | <u>12,248,794</u>    | <u>27,101,502</u>    |
| Total  | <u>\$141,633,164</u> | <u>\$ 3,694,648</u> | <u>\$ 40,877,816</u> | <u>\$ 44,489,855</u> | <u>\$ 52,570,845</u> |

**11. Employers' Net Pension Liability**

The components of the net pension liability (the retirement system's liability determined in accordance with GASB Statement 67 less the fiduciary net position) as of December 31, 2014, are shown in the *Schedule of Net Pension Liability* below.

Actuarial valuation of an ongoing plan involves estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in 2012. The net pension liability as of December 31, 2014 is \$265,067,639 based on an actuarial valuation performed as of June 2014, and a measurement date of January 1, 2014, rolled forward and updated to December 31, 2014, using generally accepted actuarial procedures.

**Schedule of Net Pension Liability**

The components of the net pension liability of the participating employers at December 31, 2014 are as follows:

|  |                       |
|--|-----------------------|
| Total pension liability  | \$ 1,201,998,138      |
| Fiduciary net position   | <u>936,930,499</u>    |
| Employers' net pension liability                                 | <u>\$ 265,067,639</u> |
| <br>Plan net position as a percentage of total pension liability | <br>77.95%            |

**Sensitivity of Net Pension Liability to Changes in the Discount Rate**

The following presents the net pension liability, calculated using the discount rate of 8%, as well as what the net pension liability would have been if it were calculated using a discount rate that is 1-percentage-point lower (7%) or 1-percentage-point higher (9%) than the current rate:

|                       | 1% Decrease<br>(7.0%) | Current Discount<br>Rate (8.0%) | 1% Increase<br>(9.0%) |
|-----------------------|-----------------------|---------------------------------|-----------------------|
| Net pension liability | 375,649,108           | 265,067,639                     | 169,951,694           |

The discount rate used to measure total pension liability was 8.00%. The projection of cash flows used to determine the discount rate assumed that contributions will continue to be made following the current funding policy. Based on these assumptions, the System's fiduciary net position was projected to be sufficient to make all projected future benefit payments of current plan members.

The System's board sets the assumptions used for these accounting results. Both the Actuary and Management believe that the assumptions are reasonable and comply with the requirements of GASB Statement No. 67 as applicable.

For the fiscal year ended December 31, 2014, the plan's schedules of changes in the employer net pension liability, employer contributions, assumptions used for these accounting results, funding progress, projections of future benefit payments and fiduciary net positions appear on the following pages under required supplementary information.

## Required Supplementary Information

### Public School Retirement System of the City of St. Louis Schedule of Changes of Employer Net Pension Liability December 31, 2014

|  |                         |
|--|-------------------------|
| Total pension liability  |                         |
| Service cost   | \$ 18,728,870           |
| Interest   | 93,305,719              |
| Changes of benefit terms   | -                       |
| Difference between expected and actual experience                          | -                       |
| Changes of assumptions   | -                       |
| Benefit payments   | (113,082,656)           |
| Refunds  | -                       |
| Net change in total pension liability                                      | <u>(1,048,067)</u>      |
| Total pension liability - beginning  | <u>1,203,046,205</u>    |
| Total pension liability - ending   | <u>\$ 1,201,998,138</u> |
| Plan fiduciary net position  |                         |
| Employer contributions   | \$ 41,757,458           |
| Employee contributions   | 11,887,933              |
| Net investment income  | 35,000,792              |
| Benefit payments including refunds   | (113,082,656)           |
| Administrative expense   | <u>(1,350,393)</u>      |
| Net change in plan fiduciary net position                                  | <u>(25,786,866)</u>     |
| Plan fiduciary net position - beginning                                    | <u>962,717,365</u>      |
| Plan fiduciary net position - ending                                       | <u>\$ 936,930,499</u>   |
| Net pension liability - ending   | <u>\$ 265,067,639</u>   |
| Total pension liability  | \$ 1,201,998,138        |
| Plan fiduciary net position  | 936,930,499             |
| Employer net pension liability   | <u>\$ 265,067,639</u>   |
| Plan fiduciary net position as a percentage of the total pension liability | 77.95%                  |
| Covered employee payroll   | \$ 243,280,015          |
| Employer net pension liability as a percentage of covered employee payroll | 109%                    |

There have been no changes in benefits or assumptions.

See independent auditors' report

## Required Supplementary Information

### Public School Retirement System of the City of St. Louis Schedules of Employer Contributions December 31, 2014

#### Board of Education

| Year Ended<br>December<br>31 | Actuarially<br>Determined<br>Contribution | Contributions<br>Recognized<br>by the Plan | Contributions<br>Deficiency<br>(Excess) | Covered<br>Employee<br>Payroll | Contributions<br>recognized<br>by the Plan as<br>a Percentage<br>of Covered<br>Payroll |
|------------------------------|---|--|---|--------------------------------|--|
| 2005                         | \$18,632,674                              | \$ 18,632,674                              | \$ -                                    | \$ 245,666,358                 | 7.58%  |
| 2006                         | 13,305,881                                | 14,299,464                                 | (993,583) *                             | 221,718,075                    | 6.45%  |
| 2007                         | 16,204,917                                | 16,204,917                                 | -                                       | 212,521,330                    | 7.63%  |
| 2008                         | 19,091,518                                | 19,091,518                                 | -                                       | 201,971,702                    | 9.45%  |
| 2009                         | 19,274,150                                | 19,274,150                                 | -                                       | 202,754,929                    | 9.51%  |
| 2010                         | 16,790,176                                | 16,790,176                                 | -                                       | 202,943,889                    | 8.27%  |
| 2011                         | 19,933,761                                | 19,933,761                                 | -                                       | 198,775,945                    | 10.03%   |
| 2012                         | 20,786,075                                | 20,786,075                                 | -                                       | 175,009,885                    | 11.88%   |
| 2013                         | 27,962,472                                | 27,962,472                                 | -                                       | 185,606,968                    | 15.07%   |
| 2014                         | 31,555,696                                | 31,555,696                                 | -                                       | 191,273,081                    | 16.50%   |

\*In 2006, the Board of Education approved a 2.5% COLA for retired members.

#### Retirement System

| Year Ended<br>December<br>31 | Actuarially<br>Determined<br>Contribution | Contributions<br>Recognized<br>by the Plan | Contributions<br>Deficiency<br>(Excess) | Covered<br>Employee<br>Payroll | Contributions<br>recognized<br>by the Plan as<br>a Percentage<br>of Covered<br>Payroll |
|------------------------------|---|--|---|--------------------------------|--|
| 2005                         | \$ 43,460                                 | \$ 43,460                                  | \$ -                                    | \$ 573,002                     | 7.58%  |
| 2006                         | 34,190                                    | 36,743                                     | (2,553) *                               | 569,706                        | 6.45%  |
| 2007                         | 34,330                                    | 34,330                                     | -                                       | 450,221                        | 7.63%  |
| 2008                         | 47,364                                    | 47,364                                     | -                                       | 501,066                        | 9.45%  |
| 2009                         | 51,995                                    | 51,995                                     | -                                       | 546,968                        | 9.51%  |
| 2010                         | 48,617                                    | 48,617                                     | -                                       | 587,617                        | 8.27%  |
| 2011                         | 57,964                                    | 57,964                                     | -                                       | 578,006                        | 10.03%   |
| 2012                         | 73,902                                    | 73,902                                     | -                                       | 622,220                        | 11.88%   |
| 2013                         | 91,361                                    | 91,361                                     | -                                       | 606,427                        | 15.07%   |
| 2014                         | 85,590                                    | 85,590                                     | -                                       | 518,799                        | 16.50%   |

\*In 2006, the Retirement System approved a 2.5% COLA for retired members.

See independent auditors' report



## Required Supplementary Information

### Public School Retirement System of the City of St. Louis Schedules of Employer Contributions (continued) December 31, 2014

#### Charter Schools

| Year Ended<br>December<br>31 | Actuarially<br>Determined<br>Contribution | Contributions<br>Recognized<br>by the Plan | Contributions<br>Deficiency<br>(Excess) | Covered<br>Employee<br>Payroll | Contributions<br>recognized<br>by the Plan as<br>a Percentage<br>of Covered<br>Payroll |
|------------------------------|---|--|---|--------------------------------|--|
| 2005                         | \$ 683,657                                | \$ 983,782                                 | \$ (300,125) *                          | \$ 9,013,818                   | 10.91%   |
| 2006                         | 1,070,169                                 | 887,992                                    | 182,177 *                               | 17,832,398                     | 4.98%  |
| 2007                         | 1,067,464                                 | 887,976                                    | 179,488 *                               | 13,999,374                     | 6.34%  |
| 2008                         | 1,875,688                                 | 3,145,999                                  | (1,270,311) *                           | 19,843,158                     | 15.85%   |
| 2009                         | 2,074,020                                 | 3,377,789                                  | (1,303,769) *                           | 21,817,708                     | 15.48%   |
| 2010                         | 2,568,929                                 | 3,843,486                                  | (1,274,557) *                           | 31,050,800                     | 12.38%   |
| 2011                         | 4,272,457                                 | 4,521,680                                  | (249,223) *                             | 42,604,182                     | 10.61%   |
| 2012                         | 5,068,681                                 | 5,533,481                                  | (464,800) *                             | 42,676,134                     | 12.97%   |
| 2013                         | 7,313,765                                 | 6,765,907                                  | 547,858 *                               | 48,546,696                     | 13.94%   |
| 2014                         | 5,625,992                                 | 8,527,507                                  | (2,901,515) *                           | 34,101,634                     | 25.01%   |

\* Charter Schools report and pay employer contributions in the current year as service is credited.

The actuarially determined contribution is based on the prior year's census information.

#### Harris-Stowe College

| Year Ended<br>December<br>31 | Actuarially<br>Determined<br>Contribution | Contributions<br>Recognized<br>by the Plan | Contributions<br>Deficiency<br>(Excess) | Covered<br>Employee<br>Payroll | Contributions<br>recognized<br>by the Plan as<br>a Percentage<br>of Covered<br>Payroll |
|------------------------------|---|--|---|--------------------------------|--|
| 2005                         | \$ 4,914                                  | \$ 4,914                                   | \$ -                                    | \$ 64,796                      | 7.58%  |
| 2006                         | 3,893                                     | 4,914                                      | (1,021)                                 | 64,876                         | 7.57%  |
| 2007                         | 4,947                                     | 4,947                                      | -                                       | 64,876                         | 7.63%  |
| 2008                         | 6,746                                     | -  | 6,746                                   | 71,363                         | - %  |
| 2009                         | 6,784                                     | 6,746                                      | 38                                      | 71,363                         | - %  |

Harris-Stowe College ceased participating in plan in 2009.

See independent auditors' report

## Required Supplementary Information

### Public School Retirement System of the City of St. Louis Schedules of Employer Contributions (continued) December 31, 2014

#### Employer Contributions

| <u>Year Ended</u><br><u>December 31,</u> | <u>Annual</u><br><u>Required</u><br><u>Contribution</u> | <u>Percent</u><br><u>Contributed</u> |
|--|---|--------------------------------------|
| 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  | 118.4                                |
| 2012                                     | 25,928,658  | 114.0                                |
| 2013                                     | 35,367,598  | 104.7                                |
| 2014                                     | 37,267,278 *  |                                      |

\* To be determined at the end of the year

The actuarial information presented in the required supplementary information section was determined as part of the actuarial valuation prepared by Buck Consultants at January 1, 2014. Additional information related to the actuarial valuation follows:

#### Public School Retirement System of the City of St. Louis Actuarial Assumptions December 31, 2014

|   |  |
|---|--|
| Actuarial cost method:                            | Frozen entry age   |
| Rate of investment return                         | 8.00% for 2014 and 2013, net of expenses   |
| Participant account interest crediting rate       | 5.00% for 2014   |
| Turnover or withdrawal rates:                     | Various by age and year of membership based on actual  |
| Mortality and death rates:                        | Mortality tables mandated by the Pension Protection Act as specified in IRS Regulation 1.430(h)(3)-1 applied on a static basis, projected 7 years from the valuation date for annuitants and 15 years for non-annuitants |
| Disability rates                                  | RP-2000 Disability Mortality Table   |
| Rates of retirement between the ages of 55 and 70 | Various based on actual experience of the System   |
| Rate of salary increases                          | Based on actual experience of the System, at the rate of 4.5% per year   |
| Asset valuation method:                           | The assumed yield method of valuing assets   |

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 auditors' report

**Required Supplementary Information**

**Public School Retirement System of the City of St. Louis  
Schedule of Funding Progress  
(in millions)  
December 31, 2014**

| Actuarial<br>Valuation Date<br>January 1, | Actuarial<br>Value of Assets<br>(a) | Actuarial Accrued<br>Liability (AAL) -<br>Frozen Entry Age<br>(b) | Unfunded<br>AAL (UAAL)<br>(b - a) |
|---|-------------------------------------|---|-----------------------------------|
| 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                             |
| 2012                                      | 925.4                               | 1,090.3   | 164.9                             |
| 2013                                      | 914.5                               | 1,085.1   | 170.6                             |
| 2014                                      | 922.9                               | 1,093.4   | 170.5                             |

| Actuarial<br>Valuation Date<br>January 1, | Funded<br>Ratio<br>(a/b) | Annual<br>Covered Payroll<br>(c) | UAAL<br>as a % of<br>Covered Payroll<br>(b-a)/c |
|---|--------------------------|----------------------------------|---|
| 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  |
| 2012                                      | 84.9                     | 234.8                            | 70.2  |
| 2013                                      | 84.3                     | 225.9                            | 75.5  |
| 2014                                      | 84.4                     | 243.3                            | 70.1  |

See independent auditors' report

## Required Supplementary Information

**Public School Retirement System of the City of St. Louis**  
**Schedule of Actuarial Present Values of Projected Benefit Payments**  
**000's omitted**  
**December 31, 2014**

| Fiscal Year<br>Ending<br>12/31 | Beginning<br>Fiduciary Net<br>Position | Benefit Payments    |                   |                     | Present Value                |                                 | Using a<br>Single<br>Discount<br>Rate of<br>8.00% |
|--------------------------------|--|---------------------|-------------------|---------------------|------------------------------|---------------------------------|---|
|                                |  | Benefit<br>Payments | Funded<br>Portion | Unfunded<br>Portion | Funded<br>Portion a<br>8.00% | Unfunded<br>Portion at<br>3.34% |   |
| 2015                           | \$936,930                              | \$107,187           | \$107,187         | -                   | \$103,141                    | -                               | \$103,141   |
| 2016                           | \$950,378                              | \$106,904           | \$106,904         | -                   | \$95,248                     | -                               | \$95,248  |
| 2017                           | \$960,107                              | \$106,643           | \$106,643         | -                   | \$87,978                     | -                               | \$87,978  |
| 2018                           | \$968,996                              | \$106,452           | \$106,452         | -                   | \$81,315                     | -                               | \$81,315  |
| 2019                           | \$977,511                              | \$106,481           | \$106,481         | -                   | \$75,312                     | -                               | \$75,312  |
| 2020                           | \$985,617                              | \$106,638           | \$106,638         | -                   | \$69,836                     | -                               | \$69,836  |
| 2021                           | \$993,231                              | \$106,750           | \$106,750         | -                   | \$64,731                     | -                               | \$64,731  |
| 2022                           | \$1,000,389                            | \$106,666           | \$106,666         | -                   | \$59,889                     | -                               | \$59,889  |
| 2023                           | \$1,007,271                            | \$106,386           | \$106,386         | -                   | \$55,307                     | -                               | \$55,307  |
| 2024                           | \$1,014,058                            | \$106,049           | \$106,049         | -                   | \$51,048                     | -                               | \$51,048  |
| 2025                           | \$1,020,818                            | \$105,672           | \$105,672         | -                   | \$47,099                     | -                               | \$47,099  |
| 2026                           | \$1,027,601                            | \$105,268           | \$105,268         | -                   | \$43,443                     | -                               | \$43,443  |
| 2027                           | \$1,034,424                            | \$104,854           | \$104,854         | -                   | \$40,067                     | -                               | \$40,067  |
| 2028                           | \$1,041,288                            | \$104,594           | \$104,594         | -                   | \$37,007                     | -                               | \$37,007  |
| 2029                           | \$1,048,028                            | \$104,373           | \$104,373         | -                   | \$34,193                     | -                               | \$34,193  |
| 2030                           | \$1,054,569                            | \$104,260           | \$104,260         | -                   | \$31,626                     | -                               | \$31,626  |
| 2031                           | \$1,060,729                            | \$104,131           | \$104,131         | -                   | \$29,248                     | -                               | \$29,248  |
| 2032                           | \$1,066,452                            | \$104,232           | \$104,232         | -                   | \$27,107                     | -                               | \$27,107  |
| 2033                           | \$1,071,392                            | \$104,472           | \$104,472         | -                   | \$25,157                     | -                               | \$25,157  |
| 2034                           | \$1,075,266                            | \$104,612           | \$104,612         | -                   | \$23,325                     | -                               | \$23,325  |
| 2035                           | \$1,077,967                            | \$104,901           | \$104,901         | -                   | \$21,657                     | -                               | \$21,657  |
| 2036                           | \$1,079,002                            | \$104,893           | \$104,893         | -                   | \$20,051                     | -                               | \$20,051  |
| 2037                           | \$1,077,755                            | \$104,802           | \$104,802         | -                   | \$18,550                     | -                               | \$18,550  |
| 2038                           | \$1,063,151                            | \$104,602           | \$104,602         | -                   | \$17,143                     | -                               | \$17,143  |
| 2039                           | \$1,043,908                            | \$104,116           | \$104,116         | -                   | \$15,799                     | -                               | \$15,799  |
| 2040                           | \$1,022,234                            | \$103,683           | \$103,683         | -                   | \$14,568                     | -                               | \$14,568  |
| 2041                           | \$998,460                              | \$103,137           | \$103,137         | -                   | \$13,418                     | -                               | \$13,418  |
| 2042                           | \$972,835                              | \$102,671           | \$102,671         | -                   | \$12,368                     | -                               | \$12,368  |
| 2043                           | \$945,396                              | \$101,817           | \$101,817         | -                   | \$11,356                     | -                               | \$11,356  |
| 2044                           | \$916,406                              | \$100,715           | \$100,715         | -                   | \$10,401                     | -                               | \$10,401  |
| 2045                           | \$886,023                              | \$99,388            | \$99,388          | -                   | \$9,504                      | -                               | \$9,504   |
| 2046                           | \$854,391                              | \$97,812            | \$97,812          | -                   | \$8,661                      | -                               | \$8,661   |
| 2047                           | \$821,690                              | \$95,811            | \$95,811          | -                   | \$7,855                      | -                               | \$7,855   |
| 2048                           | \$788,312                              | \$93,531            | \$93,531          | -                   | \$7,100                      | -                               | \$7,100   |
| 2049                           | \$754,519                              | \$91,128            | \$91,128          | -                   | \$6,405                      | -                               | \$6,405   |
| 2050                           | \$720,430                              | \$88,450            | \$88,450          | -                   | \$5,756                      | -                               | \$5,756   |
| 2051                           | \$686,324                              | \$85,512            | \$85,512          | -                   | \$5,153                      | -                               | \$5,153   |
| 2052                           | \$652,487                              | \$82,223            | \$82,223          | -                   | \$4,588                      | -                               | \$4,588   |
| 2053                           | \$619,317                              | \$78,867            | \$78,867          | -                   | \$4,075                      | -                               | \$4,075   |
| 2054                           | \$586,947                              | \$75,489            | \$75,489          | -                   | \$3,611                      | -                               | \$3,611   |
| 2055                           | \$555,472                              | \$72,098            | \$72,098          | -                   | \$3,193                      | -                               | \$3,193   |
| 2056                           | \$524,983                              | \$68,710            | \$68,710          | -                   | \$2,818                      | -                               | \$2,818   |
| 2057                           | \$495,563                              | \$65,335            | \$65,335          | -                   | \$2,481                      | -                               | \$2,481   |

See independent auditors' report

**Required Supplementary Information**

**Public School Retirement System of the City of St. Louis  
 Schedule of Actuarial Present Values of Projected Benefit Payments (continued)  
 000's omitted  
 December 31, 2014**

| Fiscal Year<br>Ending<br>12/31 | Beginning<br>Fiduciary Net<br>Position | Benefit Payments    |                   |                     | Present Value                |                                 | Using a<br>Single<br>Discount<br>Rate of<br>8.00% |
|--------------------------------|--|---------------------|-------------------|---------------------|------------------------------|---------------------------------|---|
|                                |  | Benefit<br>Payments | Funded<br>Portion | Unfunded<br>Portion | Funded<br>Portion a<br>8.00% | Unfunded<br>Portion at<br>3.34% |   |
| 2058                           | \$467,287                              | \$61,982            | \$61,982          | -                   | \$2,179                      | -                               | \$2,179   |
| 2059                           | \$440,229                              | \$58,647            | \$58,647          | -                   | \$1,909                      | -                               | \$1,909   |
| 2060                           | \$414,466                              | \$55,341            | \$55,341          | -                   | \$1,668                      | -                               | \$1,668   |
| 2061                           | \$390,077                              | \$52,073            | \$52,073          | -                   | \$1,453                      | -                               | \$1,453   |
| 2062                           | \$367,132                              | \$48,848            | \$48,848          | -                   | \$1,262                      | -                               | \$1,262   |
| 2063                           | \$345,704                              | \$45,673            | \$45,673          | -                   | \$1,093                      | -                               | \$1,093   |
| 2064                           | \$325,861                              | \$42,562            | \$42,562          | -                   | \$943                        | -                               | \$943   |
| 2065                           | \$307,666                              | \$39,535            | \$39,535          | -                   | \$811                        | -                               | \$811   |
| 2066                           | \$291,163                              | \$36,606            | \$36,606          | -                   | \$695                        | -                               | \$695   |
| 2067                           | \$276,385                              | \$33,784            | \$33,784          | -                   | \$594                        | -                               | \$594   |
| 2068                           | \$263,360                              | \$31,078            | \$31,078          | -                   | \$506                        | -                               | \$506   |
| 2069                           | \$252,108                              | \$28,502            | \$28,502          | -                   | \$430                        | -                               | \$430   |
| 2070                           | \$242,635                              | \$26,058            | \$26,058          | -                   | \$364                        | -                               | \$364   |
| 2071                           | \$234,946                              | \$23,754            | \$23,754          | -                   | \$307                        | -                               | \$307   |
| 2072                           | \$229,037                              | \$21,590            | \$21,590          | -                   | \$258                        | -                               | \$258   |
| 2073                           | \$224,906                              | \$19,573            | \$19,573          | -                   | \$217                        | -                               | \$217   |
| 2074                           | \$222,543                              | \$17,694            | \$17,694          | -                   | \$182                        | -                               | \$182   |
| 2075                           | \$221,945                              | \$15,954            | \$15,954          | -                   | \$152                        | -                               | \$152   |
| 2076                           | \$223,108                              | \$14,341            | \$14,341          | -                   | \$126                        | -                               | \$126   |
| 2077                           | \$226,043                              | \$12,855            | \$12,855          | -                   | \$105                        | -                               | \$105   |
| 2078                           | \$230,757                              | \$11,485            | \$11,485          | -                   | \$87                         | -                               | \$87  |
| 2079                           | \$237,273                              | \$10,221            | \$10,221          | -                   | \$71                         | -                               | \$71  |
| 2080                           | \$245,625                              | \$9,054             | \$9,054           | -                   | \$59                         | -                               | \$59  |
| 2081                           | \$255,858                              | \$7,985             | \$7,985           | -                   | \$48                         | -                               | \$48  |
| 2082                           | \$268,023                              | \$7,005             | \$7,005           | -                   | \$39                         | -                               | \$39  |
| 2083                           | \$282,179                              | \$6,115             | \$6,115           | -                   | \$31                         | -                               | \$31  |
| 2084                           | \$298,394                              | \$5,296             | \$5,296           | -                   | \$25                         | -                               | \$25  |
| 2085                           | \$316,757                              | \$4,545             | \$4,545           | -                   | \$20                         | -                               | \$20  |
| 2086                           | \$337,370                              | \$3,876             | \$3,876           | -                   | \$16                         | -                               | \$16  |
| 2087                           | \$360,329                              | \$3,276             | \$3,276           | -                   | \$12                         | -                               | \$12  |
| 2088                           | \$385,748                              | \$2,740             | \$2,740           | -                   | \$10                         | -                               | \$10  |
| 2089                           | \$413,759                              | \$2,262             | \$2,262           | -                   | \$7                          | -                               | \$7   |
| 2090                           | \$444,507                              | \$1,851             | \$1,851           | -                   | \$6                          | -                               | \$6   |
| 2091                           | \$478,143                              | \$1,498             | \$1,498           | -                   | \$4                          | -                               | \$4   |
| 2092                           | \$514,836                              | \$1,198             | \$1,198           | -                   | \$3                          | -                               | \$3   |
| 2093                           | \$554,777                              | \$939               | \$939             | -                   | \$2                          | -                               | \$2   |
| 2094                           | \$598,182                              | \$727               | \$727             | -                   | \$2                          | -                               | \$2   |
| 2095                           | \$645,281                              | \$555               | \$555             | -                   | \$1                          | -                               | \$1   |
| 2096                           | \$696,326                              | \$417               | \$417             | -                   | \$1                          | -                               | \$1   |
| 2097                           | \$751,599                              | \$308               | \$308             | -                   | \$1                          | -                               | \$1   |
| 2098                           | \$811,407                              | \$223               | \$223             | -                   | -                            | -                               | -   |
| 2099                           | \$876,087                              | \$159               | \$159             | -                   | -                            | -                               | -   |
| 2100                           | \$946,009                              | \$111               | \$111             | -                   | -                            | -                               | -   |

See independent auditors' report

**Required Supplementary Information**

**Public School Retirement System of the City of St. Louis  
 Schedule of Actuarial Present Values of Projected Benefit Payments (continued)  
 000's omitted  
 December 31, 2014**

| Fiscal Year<br>Ending<br>12/31 | Beginning<br>Fiduciary Net<br>Position | Benefit Payments    |                   |                     | Present Value                 |                                 |   |
|--------------------------------|--|---------------------|-------------------|---------------------|-------------------------------|---------------------------------|---|
|                                |  | Benefit<br>Payments | Funded<br>Portion | Unfunded<br>Portion | Funded<br>Portion at<br>8.00% | Unfunded<br>Portion at<br>3.34% | Using a<br>Single<br>Discount<br>Rate of<br>8.00% |
| 2101                           | \$1,021,573                            | \$76                | \$76              | -                   | -                             | -                               | -   |
| 2102                           | \$1,103,220                            | \$52                | \$52              | -                   | -                             | -                               | -   |
| 2103                           | \$1,191,424                            | \$34                | \$34              | -                   | -                             | -                               | -   |
| 2104                           | \$1,286,702                            | \$22                | \$22              | -                   | -                             | -                               | -   |
| 2105                           | \$1,389,615                            | \$15                | \$15              | -                   | -                             | -                               | -   |
| 2106                           | \$1,500,769                            | \$9                 | \$9               | -                   | -                             | -                               | -   |
| 2107                           | \$1,620,820                            | \$6                 | \$6               | -                   | -                             | -                               | -   |
| 2108                           | \$1,750,480                            | \$4                 | \$4               | -                   | -                             | -                               | -   |
| 2109                           | \$1,890,514                            | \$2                 | \$2               | -                   | -                             | -                               | -   |
| 2110                           | \$2,041,753                            | \$1                 | \$1               | -                   | -                             | -                               | -   |
| 2111                           | \$2,205,091                            | \$1                 | \$1               | -                   | -                             | -                               | -   |
| 2112                           | \$2,381,498                            | -                   | -                 | -                   | -                             | -                               | -   |

See independent auditors' report

**Required Supplementary Information**

**Public School Retirement System of the City of St. Louis  
 Schedule of Projection of Fiduciary Net Position  
 000's omitted  
 December 31, 2014**

| Year | Projected<br>Beginning<br>Fiduciary Net<br>Position | Projected Total<br>Contributions | Projected<br>Benefit<br>Payments | Projected<br>Investment<br>Earnings | Projected<br>Ending<br>Fiduciary Net<br>Position |
|------|---|----------------------------------|----------------------------------|-------------------------------------|--|
| 2015 | \$936,930   | \$49,530                         | \$107,187                        | \$71,104                            | \$950,378  |
| 2016 | \$950,378   | \$44,477                         | \$106,904                        | \$72,157                            | \$960,107  |
| 2017 | \$960,107   | \$42,612                         | \$106,643                        | \$72,919                            | \$968,996  |
| 2018 | \$968,996   | \$41,351                         | \$106,452                        | \$73,616                            | \$977,511  |
| 2019 | \$977,511   | \$40,311                         | \$106,481                        | \$74,277                            | \$985,617  |
| 2020 | \$985,617   | \$39,350                         | \$106,638                        | \$74,902                            | \$993,231  |
| 2021 | \$993,231   | \$38,417                         | \$106,750                        | \$75,491                            | \$1,000,389                                      |
| 2022 | \$1,000,389   | \$37,496                         | \$106,666                        | \$76,052                            | \$1,007,271                                      |
| 2023 | \$1,007,271   | \$36,574                         | \$106,386                        | \$76,599                            | \$1,014,058                                      |
| 2024 | \$1,014,058   | \$35,665                         | \$106,049                        | \$77,143                            | \$1,020,818                                      |
| 2025 | \$1,020,818   | \$34,768                         | \$105,672                        | \$77,687                            | \$1,027,601                                      |
| 2026 | \$1,027,601   | \$33,857                         | \$105,268                        | \$78,234                            | \$1,034,424                                      |
| 2027 | \$1,034,424   | \$32,934                         | \$104,854                        | \$78,784                            | \$1,041,288                                      |
| 2028 | \$1,041,288   | \$32,001                         | \$104,594                        | \$79,333                            | \$1,048,028                                      |
| 2029 | \$1,048,028   | \$31,044                         | \$104,373                        | \$79,870                            | \$1,054,569                                      |
| 2030 | \$1,054,569   | \$30,034                         | \$104,260                        | \$80,386                            | \$1,060,729                                      |
| 2031 | \$1,060,729   | \$28,982                         | \$104,131                        | \$80,873                            | \$1,066,452                                      |
| 2032 | \$1,066,452   | \$27,858                         | \$104,232                        | \$81,315                            | \$1,071,392                                      |
| 2033 | \$1,071,392   | \$26,657                         | \$104,472                        | \$81,689                            | \$1,075,266                                      |
| 2034 | \$1,075,266   | \$25,331                         | \$104,612                        | \$81,981                            | \$1,077,967                                      |
| 2035 | \$1,077,967   | \$23,763                         | \$104,901                        | \$82,174                            | \$1,079,002                                      |
| 2036 | \$1,079,002   | \$21,401                         | \$104,893                        | \$82,245                            | \$1,077,755                                      |
| 2037 | \$1,077,755   | \$8,060                          | \$104,802                        | \$82,138                            | \$1,063,151                                      |
| 2038 | \$1,063,151   | \$4,393                          | \$104,602                        | \$80,967                            | \$1,043,908                                      |
| 2039 | \$1,043,908   | \$3,006                          | \$104,116                        | \$79,436                            | \$1,022,234                                      |
| 2040 | \$1,022,234   | \$2,200                          | \$103,683                        | \$77,709                            | \$998,460  |
| 2041 | \$998,460   | \$1,693                          | \$103,137                        | \$75,819                            | \$972,835  |
| 2042 | \$972,835   | \$1,454                          | \$102,671                        | \$73,778                            | \$945,396  |
| 2043 | \$945,396   | \$1,219                          | \$101,817                        | \$71,608                            | \$916,406  |
| 2044 | \$916,406   | \$1,008                          | \$100,715                        | \$69,324                            | \$886,023  |
| 2045 | \$886,023   | \$816                            | \$99,388                         | \$66,939                            | \$854,391  |
| 2046 | \$854,391   | \$646                            | \$97,812                         | \$64,465                            | \$821,690  |
| 2047 | \$821,690   | \$510                            | \$95,811                         | \$61,923                            | \$788,312  |
| 2048 | \$788,312   | \$398                            | \$93,531                         | \$59,340                            | \$754,519  |
| 2049 | \$754,519   | \$310                            | \$91,128                         | \$56,729                            | \$720,430  |
| 2050 | \$720,430   | \$239                            | \$88,450                         | \$54,106                            | \$686,324  |
| 2051 | \$686,324   | \$182                            | \$85,512                         | \$51,493                            | \$652,487  |
| 2052 | \$652,487   | \$137                            | \$82,223                         | \$48,916                            | \$619,317  |
| 2053 | \$619,317   | \$102                            | \$78,867                         | \$46,395                            | \$586,947  |
| 2054 | \$586,947   | \$74                             | \$75,489                         | \$43,939                            | \$555,472  |
| 2055 | \$555,472   | \$53                             | \$72,098                         | \$41,556                            | \$524,983  |
| 2056 | \$524,983   | \$38                             | \$68,710                         | \$39,252                            | \$495,563  |
| 2057 | \$495,563   | \$27                             | \$65,335                         | \$37,033                            | \$467,287  |

See independent auditors' report

**Required Supplementary Information**

**Public School Retirement System of the City of St. Louis  
Schedule of Projection of Fiduciary Net Position (continued)  
000's omitted  
December 31, 2014**

| <u>Year</u> | <u>Projected<br/>Beginning<br/>Fiduciary Net<br/>Position</u> | <u>Projected Total<br/>Contributions</u> | <u>Projected<br/>Benefit<br/>Payments</u> | <u>Projected<br/>Investment<br/>Earnings</u> | <u>Projected<br/>Ending<br/>Fiduciary Net<br/>Position</u> |
|-------------|---|--|---|--|--|
| 2058        | \$467,287   | \$19                                     | \$61,982                                  | \$34,904                                     | \$440,229  |
| 2059        | \$440,229   | \$12                                     | \$58,647                                  | \$32,873                                     | \$414,466  |
| 2060        | \$414,466   | \$8                                      | \$55,341                                  | \$30,944                                     | \$390,077  |
| 2061        | \$390,077   | \$5                                      | \$52,073                                  | \$29,123                                     | \$367,132  |
| 2062        | \$367,132   | \$2                                      | \$48,848                                  | \$27,417                                     | \$345,704  |
| 2063        | \$345,704   | \$1                                      | \$45,673                                  | \$25,829                                     | \$325,861  |
| 2064        | \$325,861   | -  | \$42,562                                  | \$24,366                                     | \$307,666  |
| 2065        | \$307,666   | -  | \$39,535                                  | \$23,032                                     | \$291,163  |
| 2066        | \$291,163   | -  | \$36,606                                  | \$21,829                                     | \$276,385  |
| 2067        | \$276,385   | -  | \$33,784                                  | \$20,759                                     | \$263,360  |
| 2068        | \$263,360   | -  | \$31,078                                  | \$19,826                                     | \$252,108  |
| 2069        | \$252,108   | -  | \$28,502                                  | \$19,029                                     | \$242,635  |
| 2070        | \$242,635   | -  | \$26,058                                  | \$18,369                                     | \$234,946  |
| 2071        | \$234,946   | -  | \$23,754                                  | \$17,846                                     | \$229,037  |
| 2072        | \$229,037   | -  | \$21,590                                  | \$17,459                                     | \$224,906  |
| 2073        | \$224,906   | -  | \$19,573                                  | \$17,210                                     | \$222,543  |
| 2074        | \$222,543   | -  | \$17,694                                  | \$17,096                                     | \$221,945  |
| 2075        | \$221,945   | -  | \$15,954                                  | \$17,117                                     | \$223,108  |
| 2076        | \$223,108   | -  | \$14,341                                  | \$17,275                                     | \$226,043  |
| 2077        | \$226,043   | -  | \$12,855                                  | \$17,569                                     | \$230,757  |
| 2078        | \$230,757   | -  | \$11,485                                  | \$18,001                                     | \$237,273  |
| 2079        | \$237,273   | -  | \$10,221                                  | \$18,573                                     | \$245,625  |
| 2080        | \$245,625   | -  | \$9,054                                   | \$19,288                                     | \$255,858  |
| 2081        | \$255,858   | -  | \$7,985                                   | \$20,149                                     | \$268,023  |
| 2082        | \$268,023   | -  | \$7,005                                   | \$21,162                                     | \$282,179  |
| 2083        | \$282,179   | -  | \$6,115                                   | \$22,330                                     | \$298,394  |
| 2084        | \$298,394   | -  | \$5,296                                   | \$23,660                                     | \$316,757  |
| 2085        | \$316,757   | -  | \$4,545                                   | \$25,159                                     | \$337,370  |
| 2086        | \$337,370   | -  | \$3,876                                   | \$26,835                                     | \$360,329  |
| 2087        | \$360,329   | -  | \$3,276                                   | \$28,695                                     | \$385,748  |
| 2088        | \$385,748   | -  | \$2,740                                   | \$30,750                                     | \$413,759  |
| 2089        | \$413,759   | -  | \$2,262                                   | \$33,010                                     | \$444,507  |
| 2090        | \$444,507   | -  | \$1,851                                   | \$35,487                                     | \$478,143  |
| 2091        | \$478,143   | -  | \$1,498                                   | \$38,191                                     | \$514,836  |
| 2092        | \$514,836   | -  | \$1,198                                   | \$41,139                                     | \$554,777  |
| 2093        | \$554,777   | -  | \$939                                     | \$44,345                                     | \$598,182  |
| 2094        | \$598,182   | -  | \$727                                     | \$47,825                                     | \$645,281  |
| 2095        | \$645,281   | -  | \$555                                     | \$51,600                                     | \$696,326  |
| 2096        | \$696,326   | -  | \$417                                     | \$55,689                                     | \$751,599  |
| 2097        | \$751,599   | -  | \$308                                     | \$60,116                                     | \$811,407  |
| 2098        | \$811,407   | -  | \$223                                     | \$64,904                                     | \$876,087  |
| 2099        | \$876,087   | -  | \$159                                     | \$70,081                                     | \$946,009  |
| 2100        | \$946,009   | -  | \$111                                     | \$75,676                                     | \$1,021,573  |

See independent auditors' report



**Required Supplementary Information**

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**Public School Retirement System of the City of St. Louis  
Schedule of Projection of Fiduciary Net Position (continued)  
000's omitted  
December 31, 2014**

| <u>Year</u> | <u>Projected<br/>Beginning<br/>Fiduciary Net<br/>Position</u> | <u>Projected Total<br/>Contributions</u> | <u>Projected<br/>Benefit<br/>Payments</u> | <u>Projected<br/>Investment<br/>Earnings</u> | <u>Projected<br/>Ending<br/>Fiduciary Net<br/>Position</u> |
|-------------|---|--|---|--|--|
| 2101        | \$1,021,573   | -  | \$76                                      | \$81,723                                     | \$1,103,220  |
| 2102        | \$1,103,220   | -  | \$52                                      | \$88,256                                     | \$1,191,424  |
| 2103        | \$1,191,424   | -  | \$34                                      | \$95,313                                     | \$1,286,702  |
| 2104        | \$1,286,702   | -  | \$22                                      | \$102,935                                    | \$1,389,615  |
| 2105        | \$1,389,615   | -  | \$15                                      | \$111,169                                    | \$1,500,769  |
| 2106        | \$1,500,769   | -  | \$9                                       | \$120,061                                    | \$1,620,820  |
| 2107        | \$1,620,820   | -  | \$6                                       | \$129,665                                    | \$1,750,480  |
| 2108        | \$1,750,480   | -  | \$4                                       | \$140,038                                    | \$1,890,514  |
| 2109        | \$1,890,514   | -  | \$2                                       | \$151,241                                    | \$2,041,753  |
| 2110        | \$2,041,753   | -  | \$1                                       | \$163,340                                    | \$2,205,091  |
| 2111        | \$2,205,091   | -  | \$1                                       | \$176,407                                    | \$2,381,498  |
| 2112        | \$2,381,498   | -  | -   | \$190,520                                    | \$2,572,018  |
| 2113        | \$2,572,018   | -  | -   | \$205,761                                    | \$2,777,779  |

See independent auditors' report

## Other Supplementary Information

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### Public School Retirement System of the City of St. Louis Schedules of Operating Expenses Years Ended December 31, 2014 and 2013

|  | <u>2014</u>         | <u>2013</u>         |
|--|---------------------|---------------------|
| Actuarial services                     | \$ 103,946          | \$ 177,146          |
| Accounting and auditing fees           | 49,229              | 51,139              |
| Computer programming and consultation  | 72,896              | 87,881              |
| Conventions, conferences, seminars     |                     |                     |
| Executive Director                     | 1,687               | 1,156               |
| Trustees (see below)                   | 30,979              | 26,928              |
| Depreciation expense                   | 67,439              | 67,438              |
| Dues and subscriptions                 | 4,857               | 4,718               |
| Employee benefits                      | 2,893               | 3,184               |
| Furniture and equipment                | 2,413               | 11,311              |
| Health insurance consultation          | 39,843              | 39,843              |
| Insurance - group health               | 54,138              | 59,824              |
| Insurance - casualty and bonding       | 87,484              | 84,707              |
| Legal fees and expenses                | 22,316              | 22,173              |
| Medical fees                           | 800                 | 2,300               |
| Miscellaneous expense                  | 8,016               | 7,247               |
| Occupancy expense                      | 32,319              | 27,946              |
| Office repairs and maintenance         | 42,134              | 47,969              |
| Office supplies and expenses           | 10,667              | 14,931              |
| Payroll taxes                          | 34,460              | 34,164              |
| Pension contribution                   | 85,590              | 91,361              |
| Postage                                | 66,665              | 60,298              |
| Printing and publishing                | 28,985              | 29,140              |
| Salaries - administrative and clerical | 450,456             | 446,591             |
| Telephone                              | 15,602              | 10,682              |
| Utilities                              | 34,580              | 31,106              |
|  | <u>\$ 1,350,394</u> | <u>\$ 1,441,183</u> |

#### 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:

|                                   | <u>2014</u>      | <u>2013</u>      |
|-----------------------------------|------------------|------------------|
| Lodging, meals, and miscellaneous | \$ 17,548        | \$ 17,650        |
| Transportation and registration   | 13,431           | 9,278            |
| Total                             | <u>\$ 30,979</u> | <u>\$ 26,928</u> |

See independent auditors' report

## Other Supplementary Information

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### Public School Retirement System of the City of St. Louis Summary of Investment Expenses Years Ended December 31, 2014 and 2013

|                            | <u>2014</u>         | <u>2013</u>         |
|----------------------------|---------------------|---------------------|
| Investment management fees | \$ 4,548,950        | \$ 4,307,303        |
| Consultant fees            | 196,336             | 192,519             |
| Banking services           | <u>47,279</u>       | <u>39,717</u>       |
| Total investment expenses  | <u>\$ 4,792,565</u> | <u>\$ 4,539,539</u> |

### Public School Retirement System of the City of St. Louis Schedules of Professional/Consultant Fees Years Ended December 31, 2014 and 2013

|                              | <u>2014</u>       | <u>2013</u>       |
|------------------------------|-------------------|-------------------|
| Actuarial services           | \$ 103,946        | \$ 177,146        |
| Accounting and auditing fees | 49,229            | 51,139            |
| Building property management | 32,319            | 27,946            |
| Health insurance consulting  | 39,843            | 39,843            |
| Legal expenses               | 22,316            | 22,173            |
| Technology consulting        | <u>72,896</u>     | <u>87,881</u>     |
| Total fees                   | <u>\$ 320,549</u> | <u>\$ 406,128</u> |

See independent auditors' report

## Other Supplementary Information

### Public School Retirement System of the City of St. Louis Schedules of Limited Partnerships Years Ended December 31, 2014 and 2013

| Partnership Name  | Style                         | Investments at<br>Fair Value as of<br>December 31,<br>2014 |
|---|-------------------------------|--|
| Landmark Equity Partners XIV, LP                          | Private Equity & Private Debt | \$ 3,281,63  |
| Lighthouse Capital Partners VI, LP                        | Private Equity & Private Debt | 1,838,53   |
| Mesirow Financial Private Equity Partnership Fund III, LP | Private Equity & Private Debt | 3,894,69   |
| Pantheon Global Secondary Fund III B, LP                  | Private Equity & Private Debt | 4,300,24   |
| Siguler Guff Distressed Opportunities Fund II, LP         | Private Equity & Private Debt | 827,26   |
| SW Pelham Fund III, LP                                    | Private Equity & Private Debt | 1,732,25   |
| Vista Foundation Fund II, LP                              | Private Equity & Private Debt | 1,745,35   |
|   |                               | <u>\$ 17,619,98</u>  |

| Partnership Name  | Style                         | Investments at<br>Fair Value as of<br>December 31,<br>2013 |
|---|-------------------------------|--|
| Landmark Equity Partners XIV, LP                          | Private Equity & Private Debt | \$ 3,300,50  |
| Lighthouse Capital Partners VI, LP                        | Private Equity & Private Debt | 3,747,51   |
| Mesirow Financial Private Equity Partnership Fund III, LP | Private Equity & Private Debt | 4,423,40   |
| Pantheon Global Secondary Fund III B, LP                  | Private Equity & Private Debt | 5,104,91   |
| Siguler Guff Distressed Opportunities Fund II, LP         | Private Equity & Private Debt | 1,176,15   |
| SW Pelham Fund III, LP                                    | Private Equity & Private Debt | 3,117,48   |
| Vista Foundation Fund II, LP                              | Private Equity & Private Debt | 278,73   |
|   |                               | <u>\$ 21,148,71</u>  |

See independent auditors' report

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# Investment Section

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KRISTIN FINNEY-COOKE, CAIA  
SENIOR CONSULTANT

June 1, 2015

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. We guide the overall asset allocation strategy of the Plan; draft the investment policy of the Plan (and amendment of when necessary); conduct investment manager searches (both traditional and alternative asset classes); provide ongoing performance evaluation for each individual investment manager, each asset class composite, and the overall investment portfolio as a whole; and on an ongoing basis we provide 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 in 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. T-Bills). 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. As such, the asset allocation policy looks to meet this objective. It takes into consideration the diversification of asset classes, but more importantly, the diversification of the risk contribution of each asset class to the investment program which in turn reduces the overall volatility of the portfolio while garnering the highest expected risk adjusted returns.

Over the last year the Board reviewed the hedge fund allocation and reallocated assets to several new hedge fund managers to further diversify the hedge fund portion of the Plan. In addition, one change was made in the manager line-up in emerging market equities as OFI Emerging Markets Fund was added. As the year came to a close, the Board was reviewing managers for the new global equity mandate. As the allocation strategy evolves year after year, diversification and risk mitigation will continue to be the pillars of the asset allocation structure.

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, 2014.

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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.

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BOSTON | ATLANTA | CHARLOTTE | CHICAGO | DETROIT | LAS VEGAS | SAN FRANCISCO



### Asset Allocation and Investment Performance

During the year ending December 31, 2014, the Fund returned 4.5% gross of fees, which ranked it in the 77<sup>th</sup> percentile of public funds with assets between \$250 million and \$1.0 billion within the InvestorForce Public Fund Defined Benefit Universe. Over the 12 month period ending December 31, 2014, PSRS performance was lower than its assumed actuarial return target of 8.0%. Assets decreased from \$950.6 million at the end of fiscal year 2013 to approximately \$926.9 million as of year-end 2014. Over the trailing 5 year period ending December 31, 2014, the Fund earned an annualized rate of return of 9.3%, ranking in the 55<sup>th</sup> percentile of the comparative universe. Over the trailing 10 year period ending December 31, 2014, the Fund earned an annualized rate of return of 6.5%, ranking in the 39<sup>th</sup> percentile.

At the December 31, 2014 fiscal year end, the allocation was 47.6% equities, 17.4% fixed income and credit opportunities, 12.4% global asset allocation strategies, 9.1% hedge funds, 5.3% real estate, 2.2% private equity, 2.1% real assets, and 3.9% cash.

### Market Commentary

2014 brought a bounty of good economic news for the U.S. Domestic equities topped off another strong year, yields on fixed income securities narrowed, the economy grew at a healthy pace and unemployment receded further. Consumer confidence in the U.S. hit levels last seen before the great recession and the economy added the most jobs since 1999.

The positive economic data supports the return of the U.S. economy, after years of recuperation and unprecedented central bank stimulus. The S&P 500 Index rose nearly 14% in 2014 and the Barclays Aggregate Index was up 6%. The U.S. economy grew 5% in the third quarter following 4.6% in the second quarter. The unemployment rate fell to 5.6% with the economy averaging more than 200,000 new jobs a month. The economic resurgence and the resilience of capital markets in the U.S. signal their readiness to function without the support of the Federal Reserve. October marked the end of quantitative easing in the U.S. and 2015 is likely to bring the first increase in the federal funds rate in nearly a decade.

For investors looking beyond U.S. stocks and government bonds, 2014 was less than stellar. Equities of developed and emerging markets were in the red along with global bond indices. The negative returns can be largely attributed to the strengthening U.S. dollar. The dollar shot up over 10% relative to a variety of major global currencies, representing a headwind for unhedged equity and bond exposures. Meanwhile, the Organization of Petroleum Exporting Countries set aside decades of policy and pledged to maintain oil output despite the excess global supply. Energy markets were acutely impacted, as the price of oil declined to nearly \$50 a barrel at year end from over \$100. Debt markets were not spared, as high yield credit spreads increased 100 basis points on the year, with yields on energy debt rising significantly. Emerging economies reliant on energy exports were stressed and suffered from declines in currencies, bonds and stocks.

### Global Equity Markets

Following a strong 2013 and with concerns regarding Fed tapering and potential rising interest rates, the U.S. market continued to be a primary driver of global growth, outperforming other developed markets as well as emerging markets in 2014. Particularly evident in the U.S., large cap outperformed small cap. Global growth outperformed global value, while value stocks persevered across developed market indexes by very small margins.

With concerns of Fed tapering, stocks started the year with a drop in January. They rebounded in February, hitting new record high, on the heels of the Fed stating it would maintain short term interest rates. Equities oscillated again in March, falling after the Fed again touched on the possibility of raising interest rates.

U.S. equities advanced in the second quarter with improving economic data underscoring growth in the United States and Europe. Equity indices scaled new highs with large cap stocks outperforming small cap stocks. International equities gained in the second quarter. Japan was one of the better performing regions of the market, given positive remarks on structural reform from Prime Minister Abe. Emerging markets rallied to a 12-month high as returns during the quarter were bolstered by improving conditions in the Ukraine, positive election results in India and better economic conditions in China.

In the third quarter, riskier small cap equities significantly underperformed large cap equities with growing concerns around economic growth in Europe and China. The energy sector was the worst performer as



oil prices dropped and global supplies continued to rise. In terms of style, growth beat value in both large and small stocks. Beyond the US, equities in developed and emerging markets underperformed, partially due to currency weakness. Also, weak economic data in Europe pushed the European Central Bank (ECB) to continue easing its monetary policy. Europe was the worst performing developed market region while subdued economic data in Japan resulted in a weaker yen.

With positive economic data, US stocks continued their winning streak in the fourth quarter. Energy was the worst performing sector, bearing the brunt of the increasing oil supply, a stronger US dollar and deteriorating global macroeconomic conditions. Small cap stocks outperformed large cap equities for the quarter, but fell behind in the year as a whole. Value equities narrowly outperformed growth among large cap and mid cap stocks in 2014, while growth beat value in small cap equities.

Stocks of developed and emerging markets lost during the fourth quarter, as continuing weakness in commodities and a strong US dollar eroded returns. In local currency terms, developed markets performed relatively better with the Eurozone being roughly flat while Japanese stocks gained. The energy and materials sectors were the weakest performers in developed and emerging markets. Among countries, Russia was particularly hard hit with the addition of a large decline in the ruble. A bright spot in emerging markets was the financial sector in China, which gained amid speculation of a supportive monetary policy.

| Equity Index Returns as of 12/31/2014 |         |        |       |       |
|---------------------------------------|---------|--------|-------|-------|
| Global Equity                         | Quarter | 1 Year | 3 Yrs | 5 Yrs |
| MSCI World                            | .07%    | 2.9%   | 14.9% | 9.3%  |
| US Equity                             | Quarter | 1 Year | 3 Yrs | 5 Yrs |
| S&P 500                               | 4.9%    | 13.7%  | 20.4% | 15.5% |
| Dow Jones Industrial Average          | 4.6%    | 7.5%   | 15.3% | 14.2% |
| NASDAQ Composite                      | 5.4%    | 13.4%  | 27.3% | 21.7% |
| Russell 1000 Growth                   | 4.8%    | 13.1%  | 20.3% | 15.8% |
| Russell 1000 Value                    | 5.0%    | 13.5%  | 20.9% | 15.4% |
| Russell 2000                          | 9.7%    | 4.9%   | 19.2% | 15.6% |
| Russell 2000 Growth                   | 10.1%   | 5.6%   | 20.1% | 16.8% |
| Russell 2000 Value                    | 9.4%    | 4.2%   | 18.3% | 14.3% |
| International Equity                  | Quarter | 1 Year | 3 Yrs | 5 Yrs |
| MSCI EAFE                             | -3.6%   | -4.9%  | 11.1% | 5.3%  |
| MSCI Emerging Markets                 | -4.5%   | -2.2%  | 4.0%  | 1.8%  |
| MSCI Europe                           | -4.4%   | -6.2%  | 13.3% | 5.9%  |
| MSCI UK                               | -4.2%   | -5.4%  | 10.5% | 7.9%  |
| MSCI Japan                            | -2.4%   | -4.0%  | 10.7% | 6.1%  |
| MSCI Far East                         | -1.7%   | -2.6%  | 11.4% | 6.7%  |

### Global Fixed Income Markets

Bond markets rallied in the first quarter, appearing to move beyond the challenges faced by a majority of fixed income sectors in 2013. Flight to quality assets played out because of concerns around an economic slowdown in China and the unseasonably harsh winter in the U.S., fueled further by the crisis of Ukraine and Russia taking control of Crimea. A small portion of the gains in Treasuries was lost in March when markets thought the Fed may increase the federal funds rate earlier than expected. Emerging markets debt underperformed through January, but rebounded strongly in February and March.

Fixed income markets continued to rally through June on the heels of a robust first quarter. Despite expectations for higher interest rates, Treasuries rallied in the second quarter, spurring strong performance across bond sectors. Spreads continued to grind tighter during the second quarter with demand for high yield, fueling robust gains in credit markets. Despite record new supply, investment grade credit posted strong performance. Spreads on high yield credit declined to a post-crisis low. Bank loan performance softened in the second quarter as retail flows turned negative after over 90 consecutive weeks of net inflows. However, demand for collateralized loan obligations (CLOs), helped loans end the quarter in positive territory. Additional monetary accommodation implemented by the ECB in June fueled gains in Eurozone sovereign debt and helped to extend a rally in emerging markets debt. Emerging market debt was the clear winner in the first half of the year following a challenging 2013. Declining Treasury yields and economic stability in several emerging market countries also provided a tailwind for the asset class.





Risk aversion permeated fixed income markets in the third quarter due to growing concerns around geopolitical events and global economic growth. As a result, demand for long-dated US Treasuries increased, while the fear of interest rate hikes triggered a selloff in shorter dated maturities. The Treasury yield curve flattened with the spread between two- and 10-year rates falling. After a long stretch of credit spread narrowing, spreads on investment grade credit widened during the third quarter. Heavy new issuance and event risk weighed on the investment grade corporate sector, where performance was ultimately flat. Emerging market debt also slowed in the third quarter following a strong first half of the year.

Government bonds of developed markets rallied in the fourth quarter in the midst of diverging policy among central banks, global growth concerns outside of the US and a steep decline in energy prices. The yield on the 10-year US Treasury dropped during the quarter and rates on shorter-dated Treasuries rose with expectations that the Fed would start raising rates in mid-2015. In addition, expectations of lower inflation pulled down rates on the long-end, flattening the yield curve. Many risky assets underperformed Treasuries during the quarter as oil prices declined and investors fled to quality. The US investment grade corporate sector gained during the period, but underperformed like-duration Treasuries. Retail investors withdrew \$13 billion from the asset class in the quarter, but demand for CLOs remained robust. Weaker commodity prices and concerns around global growth proved to be a headwind for emerging market debt in the fourth quarter, especially for oil exporting countries such as Russia and Venezuela. Driven mostly by currency depreciation, local currency emerging market debt declined during the quarter.

| Fixed Income Index Returns as of 12/31/2014 |         |        |        |        |
|---|---------|--------|--------|--------|
| Global Fixed Income                         | Quarter | 1 Year | 3 Yrs  | 5 Yrs  |
| Citi WGBI                                   | -1.5%   | -0.5%  | -1.0%  | 1.7%   |
| JPM EMBI Plus                               | -0.9%   | 6.2%   | 5.0%   | 8.1%   |
| Domestic Fixed Income                       | Quarter | 1 Year | 3 Yrs  | 5 Yrs  |
| BC Aggregate Bond                           | 1.8%    | 6.0%   | 2.7%   | 4.5%   |
| BC US Agg. Treasury                         | 1.9%    | 5.1%   | 1.4%   | 4.2%   |
| BC US Credit                                | 1.8%    | 7.5%   | 5.1%   | 7.1%   |
| BC Mortgage Backed                          | 1.8%    | 6.1%   | 2.4%   | 4.0%   |
| BC Interim. Gov't/Credit                    | 0.9%    | 3.1%   | 2.1%   | 3.8%   |
| BC 1-10 Yr TIPS                             | -1.0%   | 0.9%   | 0.0%   | 2.8%   |
| BC High Yield                               | -1.0%   | 2.5%   | 8.4%   | 9.0%   |
| S&P LSTA Lev. Loan                          | -0.5%   | 1.6%   | 5.8%   | 6.2%   |
| 3 Month T-Bills                             | 0.0%    | 0.0%   | 0.1%   | 0.1%   |
| 10-Year Bond Yields                         | Dec-14  | Sep-14 | Dec-13 | Dec-12 |
| US  | 2.2%    | 2.5%   | 3.0%   | 1.8%   |
| Germany                                     | 0.5%    | 0.9%   | 1.9%   | 1.3%   |
| UK  | 1.8%    | 2.4%   | 3.0%   | 1.8%   |
| Japan                                       | 0.3%    | 0.5%   | 0.7%   | 0.8%   |

**2014 Summary**

During the fiscal year, one new traditional asset class manager was added, as well as three new hedge funds managers and one new private equity commitment was initiated. As the Board contemplates further enhancements to the asset allocation, we anticipate changes to the manager line-up during 2015.

2014 saw a continued domestic equity market rally and good performance in domestic bonds; however, some diversifying asset classes such as global fixed income, hedge funds and real assets trailed the domestic public markets. The Public School Retirement System of the City of St. Louis returned 4.5% for the year, which was lower than the actuarial rate. The Fund is very well diversified to reach its goals going forward. Long term performance continues to uphold our goals and objectives, outperforming the Fund's investment policy and comparative Public Fund peer group.

Sincerely,

## Investment Policies and Operating Guidelines

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

#### Investment Policies

Pursuant to the Rules & Regulations established by the PSRSSTL Board of Trustees, the System's assets are invested according to *Rule XIV. – Investment Policies*. The following is a summary of the System's Investment Goals under Rule XIV., Section 3:

*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

PSRSSTL has issued Investment and Operating Guidelines to steer the System's fiduciaries, including staff, investment consultants, investment professionals and investment managers, in the course of investing and administering the Fund's assets, and to measure the performance of the Fund and its investment managers. The guidelines contain specific directives for the following:

|                                       |   |
|---------------------------------------|---|
| Performance Objectives by Asset Class | Asset Allocation Policy                   |
| Operating Guidelines by Asset Class   | Liquidity Assumption for Benefit Payments |
| Standards of Investment Performance   | Watch List / Probation Process            |
| Reporting Requirements                | 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 PSRSSTL Rules and Regulations, upon consideration of the advice and recommendations from the System's retained professionals, including the actuary, accountant, investment managers, investment consultant, and attorney. The Investment Policies and Operating Guidelines are regularly reviewed by the Board of Trustees to ensure their relevance to the current needs of the Fund and to communicate any material changes thereto to the investment managers.

To view or print the PSRSSTL Investment Policies and Guidelines, please visit  
<http://www.psrssl.org/about-us/rules-regulations-statutes.aspx>

## Investment Summary

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

#### Schedule of Investments Year Ended December 31, 2014

| Investment Category                  | % of MV       | Market Value (MV)    | Cost                 | MV Over (Under) Cost |
|--------------------------------------|---------------|----------------------|----------------------|----------------------|
| Cash Equivalents                     | 5.0%          | \$45,856,158         | \$45,856,158         | \$0                  |
| U.S. Government and Agency Issues    | 5.9%          | 54,142,975           | 53,208,128           | 934,847              |
| Corporate Bonds                      | 5.4%          | 49,771,651           | 47,455,253           | 2,316,398            |
| Foreign Investments (bonds & stocks) | 8.8%          | 81,572,508           | 78,777,780           | 2,794,728            |
| Common and Preferred Stocks          | 30.1%         | 277,686,810          | 219,422,076          | 58,264,734           |
| Mutual Funds                         | 36.5%         | 337,202,390          | 273,340,436          | 63,861,954           |
| Real Estate Partnerships             | 5.3%          | 49,040,921           | 40,082,488           | 8,958,433            |
| Credit Opportunity Investments       | 1.1%          | 9,939,430            | 6,493,069            | 3,446,361            |
| Alternative Investments              | 2.0%          | 18,556,714           | 18,958,225           | (401,511)            |
| <b>Total</b>                         | <b>100.0%</b> | <b>\$923,769,557</b> | <b>\$783,593,613</b> | <b>\$140,175,944</b> |

#### Market Value of All Assets Years Ended December 31, 2012 – 2014

| Investment Category                    | December 31, 2012    |               | December 31, 2013    |               | December 31, 2014    |               |
|--|----------------------|---------------|----------------------|---------------|----------------------|---------------|
|  | Market Value         | % of Total    | Market Value         | % of Total    | Market Value         | % of Total    |
| Cash, Receivables, Cash Equivalents    | \$45,424,142         | 5.1%          | \$54,488,495         | 5.7%          | \$57,917,293         | 6.2%          |
| Property and Building                  | 2,084,895            | 0.2%          | 2,017,457            | 0.2%          | 1,950,018            | 0.2%          |
| U.S. Government & Agency Issued Bonds  | 43,778,548           | 4.9%          | 55,038,301           | 5.7%          | 54,142,975           | 5.8%          |
| Corporate Bonds                        | 56,771,927           | 6.3%          | 48,769,735           | 5.1%          | 49,771,651           | 5.3%          |
| Foreign Investments (bonds and stocks) | 106,939,798          | 11.9%         | 97,267,831           | 10.1%         | 81,572,508           | 8.7%          |
| Common and Preferred Stocks            | 233,243,085          | 26.0%         | 275,848,250          | 28.6%         | 277,686,810          | 29.6%         |
| Mutual Funds                           | 322,018,950          | 35.9%         | 348,698,374          | 36.2%         | 337,202,390          | 36.0%         |
| Real Estate Partnerships               | 45,034,321           | 5.0%          | 49,057,339           | 5.1%          | 49,040,921           | 5.2%          |
| Credit Opportunity Investments         | 16,877,460           | 1.9%          | 9,530,937            | 1.0%          | 9,939,430            | 1.1%          |
| Alternative Investments                | 25,207,718           | 2.8%          | 22,868,215           | 2.4%          | 18,556,714           | 2.0%          |
| <b>Total</b>                           | <b>\$897,380,844</b> | <b>100.0%</b> | <b>\$963,584,934</b> | <b>100.0%</b> | <b>\$937,780,710</b> | <b>100.0%</b> |

## Investment Returns

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

For the fiscal year ended December 31, 2014, the PSRSSTL portfolio posted a gain of 4.5%, ranking 77<sup>th</sup> within the Investor Force Universe (IFU) of Public Funds. For the three-year and five-year periods ending December 31, 2014, the PSRSSTL portfolio ranked 64<sup>th</sup> and 55<sup>th</sup> with 10.8% and 9.3% 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, 2014 are set forth below.

| <u>Investment Category</u>    | <b>Annualized Returns<br/>for Periods Ended<sup>1</sup></b> |                        |                       |
|-------------------------------|---|------------------------|-----------------------|
|                               | <b>December 31, 2014, net of fees</b>                       |                        |                       |
|                               | <b>One<br/>Year</b>   | <b>Three<br/>Years</b> | <b>Five<br/>Years</b> |
| PSRS Total Portfolio          | 4.5%  | 10.8%                  | 9.3%                  |
| Allocation Index <sup>2</sup> | 5.4%  | 11.3%                  | 9.4%                  |
| PSRS Domestic Equities        | 10.0%   | 19.9%                  | 16.2%                 |
| Russell 3000 Index            | 12.6%   | 20.5%                  | 15.6%                 |
| PSRS Domestic Bonds           | 6.0%  | 6.9%                   | 7.3%                  |
| Barclays Aggregate            | 6.0%  | 2.7%                   | 4.4%                  |
| Barclays High Yield           | 2.5%  | 8.4%                   | 9.0%                  |
| PSRS International Equities   | -5.9%   | 13.4%                  | 7.8%                  |
| MSCI EAFE Index               | -4.9%   | 11.1%                  | 5.3%                  |
| PSRS Emerging Market Equities | -4.0%   | 2.1%                   | -0.5%                 |
| MSCI Emerging Markets Index   | -2.2%   | 4.0%                   | 1.8%                  |
| PSRS Global Bonds             | -0.9%   | -1.9%                  | 1.6%                  |
| Citi World Gov Bond Index     | -0.5%   | -1.0%                  | 1.7%                  |

<sup>1</sup>The investment returns in the schedule are annualized by calculating the time weighted rates of return for the time period.

<sup>2</sup>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, 2014 (in thousands)

| ASSET CLASS<br>Money Manager                           | RELATIVE TO:<br>Management Style | TOTAL PORTFOLIO  |               |                  |               |          |       | ASSET CLASS      |        |
|--|----------------------------------|------------------|---------------|------------------|---------------|----------|-------|------------------|--------|
|  |                                  | MARKET VALUES    |               | TARGET VALUES    |               | VARIANCE |       | MARKET VALUE     |        |
|  |                                  | \$               | %             | \$               | %             | Value    | %     | Value            | %      |
| <b>LARGE CAP GROWTH DOMESTIC EQUITIES</b>              |                                  | 100,928          | 10.8%         | 51,471           | 5.5%          | 49,457   | 5.3%  |                  |        |
| Holland Capital Management                             | Large Cap Growth                 |                  |               |                  |               |          |       | 36,085           | 35.8%  |
| Intech   | Large Cap Growth                 |                  |               |                  |               |          |       | 28,577           | 28.3%  |
| TCW Asset Management                                   | Large Cap Growth                 |                  |               |                  |               |          |       | 36,266           | 35.9%  |
| <b>LARGE CAP CORE DOMESTIC EQUITIES</b>                |                                  | 24,757           | 2.6%          | 18,717           | 2.0%          | 6,040    | 0.6%  |                  |        |
| Batterymarch Financial                                 | Large Cap Core                   |                  |               |                  |               |          |       | 17,903           | 72.3%  |
| Mellon Stock Index Fund                                | Large Cap Core                   |                  |               |                  |               |          |       | 6,854            | 27.7%  |
| <b>LARGE CAP VALUE DOMESTIC EQUITIES</b>               |                                  | 92,869           | 9.9%          | 51,471           | 5.5%          | 41,398   | 4.4%  |                  |        |
| Chicago Equity Partners                                | Large Cap Value                  |                  |               |                  |               |          |       | 52,883           | 56.9%  |
| The Edgar Lomax Company                                | Large Cap Value                  |                  |               |                  |               |          |       | 39,986           | 43.1%  |
| <b>MID CAP GROWTH DOMESTIC EQUITIES</b>                |                                  | 27,860           | 3.0%          | 28,075           | 3.0%          | (215)    | 0.0%  |                  |        |
| New Amsterdam Partners                                 | Mid Cap Growth                   |                  |               |                  |               |          |       | 27,860           | 100.0% |
| <b>SMALL/MICRO CAP DOMESTIC EQUITIES</b>               |                                  | 73,761           | 7.9%          | 56,150           | 6.0%          | 17,611   | 1.9%  |                  |        |
| Westfield Capital Management                           | Small Cap Growth                 |                  |               |                  |               |          |       | 25,690           | 34.8%  |
| Systematic Financial Management                        | Small Cap Value                  |                  |               |                  |               |          |       | 25,515           | 34.6%  |
| Dimensional Fund Advisors (DFA)                        | Micro Cap                        |                  |               |                  |               |          |       | 22,556           | 30.6%  |
| <b>GLOBAL TACTICAL ASSET ALLOCATION</b>                |                                  | 115,325          | 12.3%         | 112,300          | 12.0%         | 3,025    | 0.3%  |                  |        |
| GMO  | Balanced Fund                    |                  |               |                  |               |          |       | 38,365           | 33.3%  |
| Mellon Global Alpha                                    | Balanced Fund                    |                  |               |                  |               |          |       | 40,140           | 34.8%  |
| PIMCO  | Balanced Fund                    |                  |               |                  |               |          |       | 36,820           | 31.9%  |
| <b>GLOBAL EQUITIES<sup>1</sup></b>                     |                                  | 0                | 0.0%          | 46,792           | 5.0%          | (46,792) | -5.0% |                  |        |
| To Be Determined                                       | Global Equities                  |                  |               |                  |               |          |       | 0                | 0.0%   |
| <b>INTERNATIONAL EQUITIES</b>                          |                                  | 120,650          | 12.9%         | 177,808          | 19.0%         | (57,158) | -6.1% |                  |        |
| OFI Global Trust Company                               | Emerging Markets                 |                  |               |                  |               |          |       | 22,255           | 18.4%  |
| Dimensional Fund Advisors (DFA)                        | Emerging Markets                 |                  |               |                  |               |          |       | 13,901           | 11.5%  |
| Pyramis Global Advisors                                | International Equities           |                  |               |                  |               |          |       | 43,297           | 35.9%  |
| Causeway   | International Equities           |                  |               |                  |               |          |       | 41,197           | 34.1%  |
| <b>CORE DOMESTIC BONDS</b>                             |                                  | 68,808           | 7.4%          | 65,508           | 7.0%          | 3,300    | 0.4%  |                  |        |
| EARNEST Partners                                       | Core Domestic Bonds              |                  |               |                  |               |          |       | 21,072           | 30.6%  |
| Mellon Bond Index Fund                                 | Core Domestic Bonds              |                  |               |                  |               |          |       | 667              | 1.0%   |
| Manulife Asset Management (formerly MFC)               | Core Domestic Bonds              |                  |               |                  |               |          |       | 47,069           | 68.4%  |
| <b>HIGH YIELD DOMESTIC BONDS</b>                       |                                  | 46,500           | 5.0%          | 46,792           | 5.0%          | (292)    | 0.0%  |                  |        |
| Loomis Sayles  | High Yield Bonds                 |                  |               |                  |               |          |       | 46,500           | 100.0% |
| <b>EMERGING MARKETS DEBT<sup>1</sup></b>               |                                  | 0                | 0.0%          | 37,433           | 4.0%          | (37,433) | -4.0% |                  |        |
| To Be Determined                                       | Emerging Markets                 |                  |               |                  |               |          |       | 0                | 0.0%   |
| <b>GLOBAL BONDS</b>                                    |                                  | 37,058           | 4.0%          | 28,075           | 3.0%          | 8,983    | 1.0%  |                  |        |
| Mondrian   | Global Bonds                     |                  |               |                  |               |          |       | 37,058           | 100.0% |
| <b>CREDIT OPPORTUNITIES</b>                            |                                  | 9,939            | 1.1%          | 9,358            | 1.0%          | 581      | 0.1%  |                  |        |
| Loomis Sayles  | Credit Asset Fund                |                  |               |                  |               |          |       | 9,939            | 100.0% |
| <b>HEDGED STRATEGIES</b>                               |                                  | 84,121           | 9.0%          | 84,225           | 9.0%          | (104)    | 0.0%  |                  |        |
| Passport Capital                                       | Global Long/Short Equities       |                  |               |                  |               |          |       | 10,007           | 11.9%  |
| Standard Pacific Capital                               | Global Long/Short Equities       |                  |               |                  |               |          |       | 10,115           | 12.0%  |
| Whitebox Advisors                                      | Multi-Strategy                   |                  |               |                  |               |          |       | 15,104           | 18.0%  |
| EnTrust Capital  | Fund of Funds                    |                  |               |                  |               |          |       | 23,313           | 27.7%  |
| Permal Asset Management                                | Fund of Funds                    |                  |               |                  |               |          |       | 25,582           | 30.4%  |
| <b>REAL ESTATE</b>                                     |                                  | 49,041           | 5.2%          | 46,792           | 5.0%          | 2,250    | 0.2%  |                  |        |
| UBS Trumbull Property & Income Funds                   | Commercial Real Estate           |                  |               |                  |               |          |       | 49,041           | 100.0% |
| <b>PRIVATE EQUITY &amp; PRIVATE DEBT<sup>1</sup></b>   |                                  | 18,557           | 2.0%          | 46,792           | 5.0%          | (28,235) | -3.0% |                  |        |
| Secondary, Distressed, Mezzanine, Fund of Funds, Debt  | Limited Partnerships             |                  |               |                  |               |          |       | 18,557           | 100.0% |
| <b>REAL ASSETS</b>                                     |                                  | 19,193           | 2.1%          | 28,075           | 3.0%          | (8,882)  | -0.9% |                  |        |
| Wellington Management Co.                              | Commodities                      |                  |               |                  |               |          |       | 19,193           | 100.0% |
| <b>CASH (Does Not Include Managers' Residual Cash)</b> |                                  | 46,463           | 5.0%          | 0                | 0.0%          | 46,463   | 5.0%  |                  |        |
| U.S. Bank (checking & investment accounts)             | Cash Accounts                    |                  |               |                  |               |          |       | 46,463           |        |
| <b>TOTAL (000's Omitted)</b>                           |                                  | <b>\$935,830</b> | <b>100.0%</b> | <b>\$935,830</b> | <b>100.0%</b> |          |       | <b>\$935,830</b> |        |

<sup>1</sup> New Asset Class as of 10/21/13

The target values shown above represent the Asset Allocation Policy adopted by the Board of Trustees on October 21, 2013. The Board of Trustees is expected to fill the vacant asset classes with new investments by the end of 2015. In 2014, the Board of Trustees hired OFI Global to replace Batterymarch and manage an emerging markets equity portfolio; Passport, Standard Pacific and Whitebox to manage three new hedge fund portfolios with funding provided from the termination of Blue Rock Advisors; and added a \$10 million commitment to the system's private equity asset class with Landmark Partners Fund XV, funding is made with cash as called. In late 2014, the Board of Trustees hired NCM Capital to manage a core bond portfolio with funding to occur in 2015 by reallocating investments from similar assets.

## Domestic Equity Investments

| Domestic Equity Performance & Characteristics |                |
|---|----------------|
| 2014 Return                                   | 10.0%          |
| Average Market Capitalization                 | \$72.5 Billion |
| P/E Ratio                                     | 24.6           |
| Price/Book Ratio                              | 4.6            |
| Five-Year Annualized Return                   | 16.2%          |

| PSRSSTL Ten Largest Domestic Equity Holdings |                      |                       |                      |
|--|----------------------|-----------------------|----------------------|
| <u>Company</u>                               | <u>% of Holdings</u> | <u>Company</u>        | <u>% of Holdings</u> |
| Exxon Mobil                                  | 1.6%                 | Pfizer Pharmaceutical | 1.1%                 |
| Apple  | 1.3%                 | General Electric      | 1.1%                 |
| First American Prime                         | 1.2%                 | Google "C"            | 1.0%                 |
| Visa "A"                                     | 1.2%                 | Wells Fargo           | 1.0%                 |
| Cisco Systems                                | 1.1%                 | QualComm              | 1.0%                 |

| Top Ten Contributors to the PSRSSTL Domestic Equity Portfolio Relative to the Russell 3000 Stock Index |                       |               |                |                       |               |
|--|-----------------------|---------------|----------------|-----------------------|---------------|
| <u>Company</u>   | <u>Contribution %</u> | <u>Return</u> | <u>Company</u> | <u>Contribution %</u> | <u>Return</u> |
| Cubist Pharmaceuticals   | 0.1%                  | 51.7%         | Visa "A"       | 0.1%                  | 23.1%         |
| AmTrust Financial  | 0.1%                  | 41.9%         | Target         | 0.1%                  | 22.0%         |
| Alaska Air   | 0.1%                  | 37.6%         | MedTronic      | 0.1%                  | 17.6%         |
| ImPax Laboratories   | 0.1%                  | 33.6%         | Allstate       | 0.1%                  | 14.9%         |
| Electronic Arts  | 0.1%                  | 32.0%         | IBM            | 0.1%                  | -14.9%        |

| Bottom Ten Contributors to the PSRSSTL Domestic Equity Portfolio Relative to the Russell 3000 Stock Index |                       |               |                    |                       |               |
|---|-----------------------|---------------|--------------------|-----------------------|---------------|
| <u>Company</u>  | <u>Contribution %</u> | <u>Return</u> | <u>Company</u>     | <u>Contribution %</u> | <u>Return</u> |
| Apple   | -0.2%                 | 10.0%         | Halliburton        | -0.1%                 | -38.8%        |
| Oasis Petroleum   | -0.1%                 | -60.4%        | Range Res.         | -0.1%                 | -21.1%        |
| Whiting Petroleum   | -0.1%                 | -57.4%        | Berkshire Hathaway | -0.1%                 | 8.7%          |
| Patterson Utilities   | -0.1%                 | -48.7%        | Home Depot         | -0.1%                 | 15.0%         |
| Trinity Industries  | -0.1%                 | -39.9%        | Oracle             | -0.1%                 | 17.8%         |

A complete list of portfolio holdings is available for a fee based on preparation time and the cost of materials. The information shown reflects securities held for the fiscal year ended December 31, 2014, excluding pooled or mutual funds.

## Domestic Bond Investments

| <b>PSRSSTL Domestic Bond Portfolio<br/>Performance &amp; Characteristics</b> |           |
|--|-----------|
| 2014 Return  | 6.0%      |
| Average Yield to Maturity  | 4.0%      |
| Average Maturity   | 7.3 Years |
| Average Duration   | 4.7 Years |
| Average Quality Rating   | BBB       |
| Five-Year Annualized Return  | 7.3%      |

The PSRSSTL Investment & Operating Guidelines require the average duration (interest rate sensitivity) of the PSRSSTL domestic bond portfolio to remain seven years or less. Since the average duration of the PSRSSTL domestic bond portfolio was 4.7 years at the end of fiscal year 2014, the System's domestic bond money managers met this requirement in 2014.

| <b>PSRSSTL Domestic Bond<br/>Portfolio Quality Ratings</b> | <b>Percentage of PSRSSTL<br/>Domestic Bond Portfolio</b> |
|--|--|
| AAA  | 36.5%  |
| AA   | 2.2%   |
| A  | 6.0%   |
| BBB  | 10.1%  |
| BB and Below   | 44.9%  |
| Not Rated  | 0.3%   |

The PSRSSTL Board of Trustees requires the overall average quality rating of high-grade fixed income investments to be "AA" or better and the average quality rating of securities held in high-yield fixed income investments to be "B" or better. Since more than 50% of the PSRSSTL domestic bond portfolio was rated "BBB" or better at the end of fiscal year 2014, the System's domestic bond money managers exceeded the plan's requirements for the year.

A complete list of portfolio holdings is available for a fee based on preparation time and the cost of materials. The information shown reflects securities held for the fiscal year ended December 31, 2014, excluding pooled or mutual funds.

**Investment Fees and Expenses**

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

**Brokerage Commissions Paid  
Year Ended December 31, 2014**

| <u>Company</u>                | <u>Commissions</u> | <u>Company</u>            | <u>Commissions</u> | <u>Company</u>             | <u>Commissions</u> |
|-------------------------------|--------------------|---------------------------|--------------------|----------------------------|--------------------|
| Abel Noser                    | \$2,230            | Exane SA                  | \$675              | MKM Partners               | \$58               |
| Aqua Securities               | 1,958              | FBR Capital Markets       | 377                | Morgan Stanley             | 8,538              |
| Avondale Partners             | 317                | First Clearing            | 1,680              | Needham & Company          | 1,092              |
| Baird & Company               | 1,881              | First Southwest Company   | 2,196              | North South Capital        | 60                 |
| Barclays Capital              | 5,933              | Goldman Sachs             | 3,172              | Oppenheimer & Co.          | 1,225              |
| BB&T Securities               | 473                | Goodbody                  | 111                | Pacific Crest Securities   | 272                |
| Bear Stearns Securities       | 4                  | Guzman & Company          | 3,800              | Parel                      | 99                 |
| Blaylock & Co.                | 2,343              | HSBC                      | 832                | Pershing Securities        | 269                |
| Bloomberg Tradebook           | 3,771              | Instinet                  | 11,302             | Pickering Energy Partners  | 57                 |
| Bluefin Research Partners     | 196                | ISI Group                 | 476                | Piper Jaffray              | 759                |
| BMO Capital Markets           | 1,034              | ITG                       | 23,007             | Raymond James              | 1,968              |
| Brean Capital                 | 10                 | Ivy Securities Inc.       | 2,579              | RBC Capital Markets        | 1,059              |
| Broadcort Cap Corp            | 16,236             | J P Morgan                | 6,833              | Redburn Partners           | 725                |
| BTIG, LLC                     | 70                 | Janney Montgomery Scott   | 153                | Rosenblatt Securities      | 3,971              |
| Cabrera Capital Markets       | 13,000             | Jefferies & Co.           | 3,162              | Sandler O'Neill & Partners | 6                  |
| Canaccord Genuity Inc.        | 119                | JMP Securities            | 392                | Sanford C. Bernstein & Co  | 7,198              |
| Cantor Fitzgerald             | 814                | Jones Trading             | 1,278              | Seganter Zurich            | 148                |
| Cap Institutional Services    | 9,464              | KCG Americas              | 1,835              | Societe General            | 2,181              |
| Cheevers & Co., Inc.          | 6,282              | Keefe Bruyette & Woods    | 398                | State Street               | 27,687             |
| Citation Group                | 75                 | Kepler Paris              | 575                | Stephens Inc.              | 449                |
| Citigroup                     | 7,488              | Keybank Capital Markets   | 455                | Sterne Agee Leach Inc      | 814                |
| Convergex Execution Solutions | 21,710             | King CL & Associates      | 456                | Stifel Nicolaus & Co.      | 490                |
| Cowen & Co.                   | 290                | Leerink Swann & Co.       | 165                | Sturdivant & Co.           | 2,793              |
| Craig Hallum                  | 393                | Liquidnet Inc.            | 13,150             | Sungard Brokerage          | 208                |
| Credit Suisse Securities      | 11,606             | Longbow Securities LLC    | 308                | Suntrust Capital           | 338                |
| Cuttone & Co.                 | 63                 | Loop Capital Markets      | 6,643              | UBS                        | 10,147             |
| Daiwa                         | 1,153              | M. Ramsey King Securities | 97                 | Wedbush Morgan Securities  | 212                |
| Davy Stockbrokers             | 243                | Macquarie Securities      | 1,654              | Weeden & Co.               | 850                |
| Deutsche Bank Securities      | 6,480              | Merrill Lynch             | 11,315             | Wells Fargo Securities     | 925                |
| Dougherty Company             | 51                 | Mischler Financial Group  | 251                | William Blair & Co.        | 663                |
| Evercore Group                | 279                | Mizuho Securities USA     | 964                | Williams Capital Group     | 1,321              |

**\$292,839**

**2014 Total Commissions**



## Investment Fees and Expenses

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

#### Investment Managements Fees and Expenses Years Ended December 31, 2014 and 2013

|                                      | 2014                | 2013                |
|--------------------------------------|---------------------|---------------------|
| Investment management fees           |                     |                     |
| Batterymarch Financial Management    | \$ 127,085          | \$ 117,545          |
| Causeway Capital Management          | 298,042             | 294,235             |
| Chicago Equity Partners              | 195,017             | 188,266             |
| Earnest Partners                     | 52,832              | 52,052              |
| Edgar Lomax Company                  | 195,051             | 172,499             |
| Entrust Capital Diversified Fund LTD | 316,850             | 295,594             |
| GMO                                  | -                   | 718                 |
| Holland Capital Management           | 211,582             | 193,757             |
| Intech Investment Management         | 138,116             | 121,972             |
| Loomis Sayles & Company, LP          | 283,310             | 307,644             |
| Manulife Asset Management            | 143,304             | 153,711             |
| Mellon Capital Management            | 308,185             | 299,900             |
| Mondrian Investment Partners         | 180,059             | 191,534             |
| New Amsterdam Partners               | 102,500             | 99,928              |
| OFI Global Asset Management          | 78,970              | -                   |
| Pyramis Global Advisors Trust        | 278,136             | 274,160             |
| Standard Global Equity               | 53,830              | -                   |
| SW Pelham Fund III                   | -                   | 60,748              |
| Systematic Financial Management      | 267,040             | 256,604             |
| TCW Asset Management Company         | 215,108             | 192,509             |
| UBS Realty Investors LLC             | 499,291             | 456,585             |
| US Bank Trust (custodian)            | 149,027             | 147,831             |
| Wellington Trust Company             | 203,167             | 200,263             |
| Westfield Capital Management         | <u>252,448</u>      | <u>229,248</u>      |
| Total investment management fees     | \$4,548,950         | \$4,307,303         |
| NEPC, LLC (investment consultant)    | 196,336             | 192,519             |
| Banking services                     | 47,279              | 39,717              |
| Total investment expenses            | <u>\$ 4,792,565</u> | <u>\$ 4,539,539</u> |

***“to enhance the well-being and financial security of its members, retirees and beneficiaries...”***

**Public School Retirement System of the City of St. Louis**  
**Comprehensive Annual Financial Report**  
*Fiscal Year 2014*

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# Actuarial Section

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June 2014

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, 2014 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, 2014;
- (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 72.

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. The validity of the valuation results is dependent upon the accuracy of the data and financial information provided.

This actuarial valuation is based on the same actuarial assumptions and methods as those used in the prior actuarial valuation, except for those noted under Changes from the Prior Valuation. A summary of all assumptions and methods is presented beginning on page 84. All assumptions used in this valuation are as adopted by the Board. The assumptions fairly represent past and anticipated future experience of the System. The assumptions used are individually reasonable and reasonable in the aggregate.

## Report of the Actuary

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Mr. Andrew Clark  
PSRS of the City of St. Louis

June 2014  
Page 2

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.

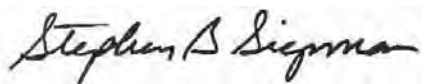
Buck Consultants prepared the Annual Required Contribution schedule, Schedules of Employer Contributions, Schedule of Funding Progress, Actuarial Assumptions, Schedule of Actuarial Present Values of Projected Benefit Payments, and Schedule of Projection of Fiduciary Net Position found in the Financial Section of this report. Buck Consultants prepared all schedules and provided all information found in this Actuarial Section.

The undersigned meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein, 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.

Statement No. 25 is no longer applicable beginning with the January 1, 2014 valuation and will be replaced by Statement No. 67. Any results displayed throughout this report with reference to Statement No. 25 are strictly for comparison purposes for any relevant Statement No. 27 or Statement No. 67 results.

Sincerely,



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



Troy Jaros, FSA, EA, MAAA  
Consultant, Retirement 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, 2014;
- Determine the required contribution rate for 2015;
- 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 2013 plan year and information on funded levels.

Another section contains information on retirement system assets, including the market value of assets, the 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.

### Experience 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 because short-term deviations from expected long-term average experience are common.

For 2014, actuarial losses due to plan experience were \$12.9 million. Roughly \$3.5 million of the loss is attributable to the System's actuarial rate of return on assets which was 7.6%, 0.4 percentage points less than the assumed rate of return of 8.00%. By comparison, the rate of return on the market value of assets was 14.4%. The difference in these returns is because the actuarial value of assets prior to January 1, 2014 had not yet fully recognized the asset losses that occurred during recent years. At January 1, 2014, the actuarial value of assets of \$923 million was below the market value of assets (excluding the expense and contingency reserve) by approximately \$9.4 million.

About \$9.4 million of the loss is attributable to demographic experience.

### Assumption Changes

For the 2014 valuation, the mortality assumption was changed. A detailed description of the change can be found in the basis of the valuation section under the summary of methods and assumptions. In total, the assumption change increased actuarial liability by approximately \$1.6 million.

## **Report of the Actuary**

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### **Normal cost rate**

The normal cost is determined annually and equals the product of the normal cost rate times covered payroll. For 2014, the annual normal cost due December 31, 2014 is \$21,885,470, as compared to \$20,814,732 for 2013, an increase primarily due to the aforementioned actuarial loss and change of assumptions. The annual normal cost rate decreased from 8.86% to 8.65% despite the experience losses and the changes in the actuarial assumptions. The average age of the active population decreased which has the effect of spreading the recognition of plan costs over a longer period of time. Covered payroll increased from \$225.9 million to \$243.3 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 re-determine 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 2013 were \$1.7 million more than the annual required contribution, which reduced the UFAAL more than expected. However, the changes in actuarial assumptions from the previous valuation increased the UFAAL by \$1.6 million. As a result, the amortization payment is increased from \$16,452,546 to \$16,711,760. The amortization payment component of the contribution rate decreased from 7.3% to 6.9% of covered payroll due to the increase in payroll resulting from the net increase in the active population by nearly 100.

### **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 2015. The dollar amount of the actual contribution increased to \$38,597,230 for 2015 from \$37,267,278 for 2014. As a percentage of covered payroll, the contribution rate for 2015 decreased to 15.87% from 16.50% for 2014.

## Summary and Comparison of Principal Valuation Results

### Annual Required Contribution

|  | Board of<br>Education | Retirement<br>System | Charter<br>Schools | Total                |
|--|-----------------------|----------------------|--------------------|----------------------|
| <b>2014</b>                              |                       |                      |                    |                      |
| Normal cost contribution                 | \$ 17,618,983         | \$ 47,607            | \$ 4,218,880       | \$ 21,885,470        |
| Actuarial accrued liability contribution | <u>13,453,867</u>     | <u>36,353</u>        | <u>3,221,540</u>   | <u>\$ 16,711,760</u> |
| Annual required contribution (ARC)       | 31,072,850            | 83,960               | 7,440,420          | \$ 38,597,230        |
| Covered payroll                          | 195,853,519           | 529,203              | 46,897,293         | \$ 243,280,015       |
| ARC as % of covered payroll              | 15.87%                | 15.87%               | 15.87%             | 15.87%               |
| <b>2013</b>                              |                       |                      |                    |                      |
| Normal cost contribution                 | \$ 17,624,667         | \$ 47,804            | \$ 3,142,261       | \$ 20,814,732        |
| Actuarial accrued liability contribution | <u>13,931,029</u>     | <u>37,786</u>        | <u>2,483,731</u>   | <u>\$ 16,452,546</u> |
| Annual required contribution             | 31,555,696            | 85,590               | 5,625,992          | \$ 37,267,278        |
| Covered payroll                          | 191,273,081           | 518,799              | 34,101,634         | \$ 225,893,514       |
| ARC as % of covered payroll              | 16.50%                | 16.50%               | 16.50%             | 16.50%               |

|   | January 1, 2014 | January 1, 2013 |
|---|-----------------|-----------------|
| <b>System Assets</b>                                  |                 |                 |
| Expense and contingency reserve                       | \$ 30,439,781   | \$ 29,181,897   |
| Market value, excluding expense & contingency reserve | 932,277,584     | 867,360,276     |
| Actuarial value                                       | 922,922,386     | 914,494,335     |
| <b>System Liabilities</b>                             |                 |                 |
| Unfunded actuarial accrued liability                  | \$ 170,472,382  | \$ 170,630,323  |
| Projected pension obligation                          | \$1,174,584,948 | \$1,160,322,263 |
| <b>Funding Ratios</b>                                 |                 |                 |
| Actuarial value funding ratio                         | 78.6%           | 78.8%           |
| Market value funding ratio                            | 79.4%           | 74.8%           |



## **Analysis of the Valuation**

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### **(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 2013 was 14.42%. The approximate actuarial value rate of return was 7.61%.

### **(2) Demographic Experience**

The number of active members increased from 4,786 to 4,880 for the period. The average age of active members decreased by 1.04 years, the average service decreased by 0.83 years, and the average annual salary increased \$2,653. There were small changes in the inactive statistics as well. The membership statistics can be found under Member Census Information.

### **(3) Salary Increases**

The average annual salary increased 5.6% between January 1, 2013 and January 1, 2014. Total annual covered payroll increased 7.7% between January 1, 2013 and January 1, 2014.

### **(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**

The healthy mortality assumption was updated for another year of improvement. Details of this assumption change can be found in the Summary of Methods and Assumptions. The net effect of changes was to increase the actuarially required employer contribution by 0.01% of covered payroll.

### **(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, along with the changes in assumptions, resulted in a decrease in the funding ratio from 78.8% to 78.6%. The total contribution rate decreased from 16.50% to 15.87% of covered payroll.

## Valuation Results

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### Actuarial Balance Sheet as of January 1, 2014

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#### Actuarial assets

|   |    |               |
|---|----|---------------|
| Actuarial value of present assets                             | \$ | 922,922,386   |
| Actuarial present value of future participant contributions   |    | 89,537,196    |
| Actuarial present value of future employer contributions for: |    |               |
| Normal costs  |    | 154,879,340   |
| Unfunded actuarial accrued liability                          |    | 170,472,382   |
| Total present and future assets                               | \$ | 1,337,811,304 |

#### Actuarial liabilities

|  |    |               |
|--|----|---------------|
| Actuarial present value of benefits now payable            | \$ | 872,838,154   |
| Actuarial present value of benefits payable in the future: |    |               |
| Active participants  | \$ | 441,334,182   |
| Terminated vested participants                             |    | 18,928,912    |
| Terminated non-vested participants                         |    | 4,710,056     |
| Total payable in the future                                |    | 464,973,150   |
| Total liabilities for benefits                             | \$ | 1,337,811,304 |
| Surplus / (deficit)  |    | 0             |

## Valuation Results

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### Projected Pension Obligation Funding Ratios

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

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 for each current active participant using only service already performed, but anticipating the impact of future salary growth on the projected pension obligation attributable to these 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 Pension Obligation Funding Status

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As of January 1, 2014 the projected pension obligation was:

|   |                  |
|---|------------------|
| 1. Retired members and beneficiaries currently receiving pensions and terminated members not yet receiving pensions | \$ 896,477,122   |
| a. Current active participants  |                  |
| i. Accumulated member contributions, including interest   | 114,092,991      |
| ii. Employer-financed pensions  | 164,014,835      |
| Total projected pension obligation  | \$ 1,174,584,948 |

As of January 1, 2014 the projected pension obligation was funded as follows:

|   |                |
|---|----------------|
| 2. Net assets available for pensions at actuarial value | \$ 922,922,386 |
| 3. Unfunded projected pension obligation                | 251,662,562    |
| 4. Actuarial value funding ratio, (2) / (1)             | 78.6%          |
| 5. Net assets available for pensions at market value    | \$ 932,277,584 |
| 6. Unfunded projected pension obligation                | 242,307,364    |
| 7. Market value funding ratio, (5) / (1)                | 79.4%          |

## Valuation Results

### Prioritized Solvency Test

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 with 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 Results (1998 – 2014)

| Valuation date<br>January 1 | Active participants' accumulated contributions | Retirees, beneficiaries and inactive participants | Active participants (employer-financed) | Valuation assets | Percent covered by valuation assets |      |      |
|-----------------------------|--|---|---|------------------|-------------------------------------|------|------|
|                             | (1)  | (2)   | (3)                                     |                  | (1)                                 | (2)  | (3)  |
| 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%   |
| 2012                        | 116,268,566                                    | 850,498,527                                       | 189,084,439                             | 925,389,359      | 100%                                | 95%  | 0%   |
| 2013                        | 120,355,959                                    | 849,412,565                                       | 190,553,739                             | 914,494,335      | 100%                                | 93%  | 0%   |
| 2014                        | 114,092,991                                    | 896,477,122                                       | 164,014,835                             | 922,922,386      | 100%                                | 90%  | 0%   |

## Retirement System Assets

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### Actuarial Value of Assets

The amount of assets used in the actuarial valuation is known as the "actuarial value of assets." The method is discussed under the Summary of Methods and Assumptions. The development of the actuarial value of assets is shown here.

### Development of the Actuarial Value of Assets

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|  |                |
|--|----------------|
| 1. Actuarial value of assets as of January 1, 2013                                 | \$ 914,494,335 |
| 2. Participant contributions   | 11,814,124     |
| 3. Employer contributions  | 37,034,907     |
| 4. Benefit payments and expenses   | 111,915,281    |
| 5. Investment increment at 8.00%, $8\% \times \{(1) + .5 \times [(2) - (4)]\}$     | 69,155,501     |
| 6. Expected actuarial value on January 1, 2014,<br>(1) + (2) + (3) - (4) + (5)     | 920,583,586    |
| 7. Market value of assets on January 1, 2014                                       | 962,717,365    |
| 8. Expense and contingency reserve on January 1, 2014, prior to adjustment         | 30,439,781     |
| 9. Adjustment to the investment contingency reserve                                | 0              |
| 10. Excess of market value over expected actuarial value,<br>(7) - (6) - (8) - (9) | 11,693,998     |
| 11. Market value adjustment, $20\% \times (10)$                                    | 2,338,800      |
| 12. Actuarial value of assets as of January 1, 2014, (6) + (11)                    | 922,922,386    |

## Retirement System Assets

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### Expense and Contingency Reserve

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 within 1% during 2013, the reserve would not be adjusted, even if the entire contingency reserve had not been released in 2009. Here is the history of the expense and contingency reserve:

#### History of the Expense and Contingency Reserve (1997 – 2014)

| January 1 | Expense<br>reserve | Investment<br>contingency<br>reserve | Total expense<br>and<br>contingency<br>reserve |
|-----------|--------------------|--------------------------------------|--|
| 1997      | \$25,403,190       | \$ 5,220,821                         | \$30,624,011                                   |
| 1998      | 30,891,555         | 24,100,041                           | 54,991,596                                     |
| 1999      | 22,142,759         | 45,972,067                           | 68,114,826                                     |
| 2000      | 27,992,032         | 50,003,862                           | 77,995,894                                     |
| 2001      | 29,837,776         | 50,003,743                           | 79,841,519                                     |
| 2002      | 23,527,529         | 50,003,743                           | 73,531,272                                     |
| 2003      | 24,952,255         | 37,759,976                           | 62,712,231                                     |
| 2004      | 26,028,780         | 37,759,976                           | 63,788,756                                     |
| 2005      | 27,170,188         | 45,115,876                           | 72,286,064                                     |
| 2006      | 32,534,770         | 45,115,876                           | 77,650,646                                     |
| 2007      | 29,864,946         | 50,732,410                           | 80,597,356                                     |
| 2008      | 31,987,370         | 57,234,574                           | 89,221,944                                     |
| 2009      | 30,555,388         | 0                                    | 30,555,388                                     |
| 2010      | 29,903,107         | 0                                    | 29,903,107                                     |
| 2011      | 29,480,465         | 0                                    | 29,480,465                                     |
| 2012      | 29,564,563         | 0                                    | 29,564,563                                     |
| 2013      | 29,181,897         | 0                                    | 29,181,897                                     |
| 2014      | 30,439,781         | 0                                    | 30,439,781                                     |

## Retirement System Assets

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### Investment Performance

The fund had a rate of return of 7.61% on an actuarial value basis, which is 0.39% below the assumed rate of return of 8.00%. In accordance with Rule X, no amounts would have been transferred from the investment contingency portion of the reserve, because the preliminary actuarial rate of return was within 1% of the assumed rate of return. Further, 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.

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:

#### Market Value Basis

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

|      |   |                |
|------|---|----------------|
| i.   | A = Market value of assets as of January 1, 2013                  | \$ 896,542,173 |
| ii.  | B = Market value of assets as of January 1, 2014                  | 962,717,365    |
| iii. | C = Contributions during the period                               | 48,849,031     |
| iv.  | D = Disbursements during the period                               | 107,747,920    |
| v.   | Rate of return: $\frac{B - A + D - C}{A + \frac{1}{2}(C - D)}$    | 14.42%         |
| vi.  | Actuarial assumed rate of return for 2013                         | 8.00%          |
| vii. | Difference between actual and assumed rates of return, (v) – (vi) | 6.42%          |

#### 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, 2013               | \$ 914,494,335 |
| ii.  | B = Actuarial value of assets as of January 1, 2014               | 922,922,386    |
| iii. | C = Contributions during the period                               | 48,849,031     |
| iv.  | D = Disbursements during the period                               | 107,747,920    |
| v.   | Rate of return: $\frac{B - A + D - C}{A + \frac{1}{2}(C - D)}$    | 7.61%          |
| vi.  | Actuarial assumed rate of return for 2013                         | 8.00%          |
| vii. | Difference between actual and assumed rates of return, (v) – (vi) | -0.39%         |

## **Basis of the Valuation**

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### **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.



## **Basis of the Valuation**

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### **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.

## **Basis of the Valuation**

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### **Summary of Plan Provisions (continued)**

#### **Return of contributions upon death**

If after the death of a participant, no further monthly benefits 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.

## Basis of the Valuation

### Member Census (Last Two Years)

| As of January 1                      | 2013      | 2014      |
|--------------------------------------|-----------|-----------|
| <b>Active Members</b>                |           |           |
| Number                               | 4,786     | 4,880     |
| Average Age                          | 44.69     | 43.65     |
| Average Service                      | 8.92      | 8.08      |
| Average Annual Base Pay              | \$ 47,199 | \$ 49,852 |
| <b>Vested Terminated Members</b>     |           |           |
| Number                               | 380       | 462       |
| Average Account Balance              | \$ 29,459 | \$ 27,314 |
| <b>Non-vested Terminated Members</b> |           |           |
| Number                               | 1,263     | 1,336     |
| Average Account Balance              | \$ 3,139  | \$ 3,525  |
| <b>Benefit Recipients</b>            |           |           |
| Number                               | 4,516     | 4,689     |
| Average Age                          | 73.10     | 73.15     |
| Average Monthly Benefit              | \$ 1,838  | \$ 1,867  |

Note: Please see the Statistical Section for a ten year history of the System's membership census.

### Schedule of Active Member Valuation Data (Last Six Years)

| <u>Plan Year</u> | <u>Number of Active Members</u> | <u>Annual Payroll</u> | <u>Average Annual Pay</u> | <u>% Increase in Average Pay</u> |
|------------------|---------------------------------|-----------------------|---------------------------|----------------------------------|
| 2009             | 5,085                           | 234,582,326           | 46,132                    | 2.86%                            |
| 2010             | 4,825                           | 241,959,275           | 50,147                    | 8.70%                            |
| 2011             | 4,336                           | 218,308,928           | 50,348                    | 0.40%                            |
| 2012             | 4,784                           | 234,703,040           | 49,060                    | -2.56%                           |
| 2013             | 4,786                           | 225,894,414           | 47,199                    | -3.79%                           |
| 2014             | 4,880                           | 243,277,760           | 49,852                    | 5.62%                            |

### Schedule of Retirees & Beneficiaries Added or Removed from Rolls (Last Six Years)

| <u>Plan Year</u> | <u>Added to Rolls</u> |                          | <u>Removed from Rolls</u> |                          | <u>Rolls – End of Year</u> |                          | <u>% Increase in Annual Allowances</u> | <u>Average Annual Allowance</u> |
|------------------|-----------------------|--------------------------|---------------------------|--------------------------|----------------------------|--------------------------|--|---------------------------------|
|                  | <u>No.</u>            | <u>Annual Allowances</u> | <u>No.</u>                | <u>Annual Allowances</u> | <u>No.</u>                 | <u>Annual Allowances</u> |  |                                 |
| 2009             | N/A                   |                          | N/A                       |                          | N/A                        |                          | N/A                                    | N/A                             |
| 2010             | N/A                   |                          | N/A                       |                          | 4,370                      |                          | N/A                                    | N/A                             |
| 2011             | 373                   |                          | 156                       |                          | 4,587                      | \$98,927,501             | N/A                                    | \$21,567                        |
| 2012             | 135                   | \$2,606,505              | 182                       | \$2,793,752              | 4,540                      | 98,768,933               | -0.16%                                 | 21,755                          |
| 2013             | 164                   | 3,544,756                | 188                       | 2,699,920                | 4,516                      | 99,629,314               | 0.87%                                  | 22,061                          |
| 2014             | 313                   | 7,711,256                | 140                       | 2,288,004                | 4,689                      | 105,061,832              | 5.45%                                  | 22,406                          |

Note: The retirement system began tracking changes to Retiree Payroll in Fiscal Year 2013. The changes will appear in the schedule above as they occur with each new fiscal year.

## Basis of the Valuation

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### 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

Mortality tables mandated by the Pension Protection Act as specified in IRS Regulation 1.430(h) (3)-1, applied on a static basis, projected 7 years from the valuation date for annuitants and 15 years for non-annuitants.

#### Disability Mortality

The RP-2000 Disability Mortality Table is used for disabled participants.

#### Withdrawal

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

| Year of Membership | Non-charter school employees | Charter school employees |
|--------------------|------------------------------|--------------------------|
| 1 <sup>st</sup>    | 25.0%                        | 30.0%                    |
| 2 <sup>nd</sup>    | 20.0%                        | 25.0%                    |
| 3 <sup>rd</sup>    | 15.0%                        | 20.0%                    |
| 4 <sup>th</sup>    | 12.5%                        | 15.0%                    |
| 5 <sup>th</sup>    | 10.0%                        | 10.0%                    |

#### 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.

## **Basis of the Valuation**

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### **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<sup>th</sup> check.) This valuation assumes that no future COLAs and no future 13<sup>th</sup> 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 result 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.

## Basis of the Valuation

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### 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

The mortality tables for non-disabled members were updated to the IRS Static Mortality Tables mandated for use by private pension plans for the 2014 plan year.

#### Non-Annuitant Rates of Withdrawal, Disability and Retirement

| Attained<br>Age | Withdrawal Rates |         | Disability Rates |         | Retirement<br>Rate* |
|-----------------|------------------|---------|------------------|---------|---------------------|
|                 | Males            | Females | Males            | Females |                     |
| 20              | 18.50%           | 18.50%  | .000%            | .000%   | 0.00%               |
| 25              | 15.50%           | 15.50%  | .000%            | .000%   | 0.00%               |
| 30              | 11.00%           | 11.00%  | .040%            | .040%   | 0.00%               |
| 35              | 9.00%            | 9.00%   | .040%            | .040%   | 0.00%               |
| 40              | 7.50%            | 7.50%   | .080%            | .075%   | 0.00%               |
| 45              | 4.00%            | 4.00%   | .150%            | .100%   | 0.00%               |
| 50              | 2.50%            | 2.50%   | .200%            | .150%   | 0.00%               |
| 55              | 2.00%            | 2.00%   | .450%            | .250%   | 0.00%               |
| 60              | 1.50%            | 1.50%   | .550%            | .325%   | 20.00%              |
| 65              | 0.00%            | 0.00%   | .000%            | .000%   | 35.00%              |
| 70              | 0.00%            | 0.00%   | .000%            | .000%   | 30.00%              |
| 72              | 0.00%            | 0.00%   | .000%            | .000%   | 100.00%             |

\*The retirement rate for all members less than 60 years old is 25% under the "Rule of 85."

## Basis of the Valuation

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### Summary of Methods and Assumptions (continued)

#### Non-Annuitant Mortality Rates

| Death Rates |     |         | Death Rates |     |         |
|-------------|-----|---------|-------------|-----|---------|
| Male        | Age | Female  | Male        | Age | Female  |
| .000384     | 30  | .000197 | .018870     | 75  | .015583 |
| .000668     | 35  | .000345 | .052121     | 80  | .039587 |
| .000855     | 40  | .000455 | .095566     | 85  | .068252 |
| .001032     | 45  | .000704 | .168603     | 90  | .123630 |
| .001263     | 50  | .001019 | .256478     | 95  | .186501 |
| .001737     | 55  | .002001 | .272216     | 96  | .196923 |
| .003056     | 60  | .003399 | .287507     | 97  | .210765 |
| .005032     | 65  | .005033 | .308741     | 98  | .219291 |
| .006401     | 70  | .006583 | .3233342    | 99  | .226576 |

#### Annuitant Mortality Rates

| Death Rates |     |         | Death Rates |     |         |
|-------------|-----|---------|-------------|-----|---------|
| Male        | Age | Female  | Male        | Age | Female  |
| .000384     | 30  | .000197 | .028138     | 75  | .023743 |
| .000668     | 35  | .000345 | .052121     | 80  | .039587 |
| .000855     | 40  | .000455 | .095566     | 85  | .068252 |
| .001618     | 45  | .000710 | .168603     | 90  | .123630 |
| .003651     | 50  | .001635 | .256478     | 95  | .186501 |
| .003947     | 55  | .002983 | .272216     | 96  | .196923 |
| .005841     | 60  | .005581 | .287507     | 97  | .210765 |
| .009980     | 65  | .009329 | .308741     | 98  | .219291 |
| .016167     | 70  | .015069 | .323342     | 99  | .226576 |

#### Disability Mortality Rates

| Death Rates |     |         | Death Rates |     |         |
|-------------|-----|---------|-------------|-----|---------|
| Male        | Age | Female  | Male        | Age | Female  |
| .022571     | 30  | .007450 | .082067     | 75  | .052230 |
| .022571     | 35  | .007450 | .109372     | 80  | .072312 |
| .022571     | 40  | .007450 | .141603     | 85  | .100203 |
| .022571     | 45  | .007450 | .183408     | 90  | .140049 |
| .028975     | 50  | .011535 | .267491     | 95  | .194509 |
| .035442     | 55  | .016544 | .283905     | 96  | .205379 |
| .042042     | 60  | .021839 | .299852     | 97  | .215240 |
| .050174     | 65  | .028026 | .315296     | 98  | .223941 |
| .062583     | 70  | .037635 | .330207     | 99  | .231387 |

***“through benefit programs and services which are soundly financed and prudently administered in an effective and efficient manner.”***



## **Statistical Section**

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## Summary

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The statistical section contains information about the System not found elsewhere in the CAFR that is broken down into several different parts.

The first part, found on page 91, is a Schedule of Changes in Fiduciary Net Position for the last 10 fiscal years that provides detail on the additions and deductions from the plan's assets and concludes with the annual change to the fiduciary net position for each year.

The second part, found on pages 92 - 96, contains membership schedules and a graph that detail information about the plan's retired, active and inactive members. The information found on these pages includes census data for retirees by payment option and type of retirement, average benefit payments for the last five fiscal years, covered members for the last ten fiscal years and a summary of membership changes in fiscal year 2014.

There are several charts and graphs on page 97 that contain a number of decades of history on the progress of the plan's market value of assets, employer and employee contributions, and investment income.

The last page in the statistical section provides detail on the plan's legislative history that began on January 1, 1944.

**Schedules of Changes in Fiduciary Net Position  
Last 10 Fiscal Years**

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

**Schedule of Changes in Fiduciary Net Position  
Last 10 Fiscal Years Ended December 31<sup>st</sup>**

| Fiscal Year                              | 2005          | 2006          | 2007          | 2008             | 2009          | 2010          | 2011            | 2012          | 2013          | 2014            |
|--|---------------|---------------|---------------|------------------|---------------|---------------|-----------------|---------------|---------------|-----------------|
| <b>Additions by source</b>               |               |               |               |                  |               | (as restated) |                 |               |               |                 |
| Employer contributions                   | \$ 23,514,266 | \$ 19,887,885 | \$ 22,445,608 | \$ 27,853,996    | \$ 28,598,502 | \$ 26,075,146 | \$ 28,720,193   | \$ 29,551,964 | \$ 37,034,907 | \$ 41,757,458   |
| Employee contributions                   | 10,515,674    | 10,511,284    | 10,791,580    | 11,537,258       | 12,131,979    | 11,188,919    | 11,879,052      | 12,147,663    | 11,814,124    | 11,887,933      |
| Investment income (loss)                 | 63,349,054    | 128,774,730   | 103,030,906   | (259,438,857)    | 146,071,959   | 115,925,274   | (5,319,851)     | 97,514,207    | 129,102,935   | 34,857,035      |
| Other income                             |               |               |               |                  | 71,391        | 127,426       | 131,119         | 134,813       | 138,506       | 143,754         |
| <b>Total additions(depreciation)</b>     | 97,378,994    | 159,173,899   | 136,268,094   | (220,047,603)    | 186,873,831   | 153,316,765   | 35,410,513      | 139,348,647   | 178,090,472   | 88,646,180      |
| <b>Deductions by type*</b>               |               |               |               |                  |               |               |                 |               |               |                 |
| Retirement benefits                      | 73,994,518    | 80,638,120    | 86,928,394    | 93,852,021       | 97,129,242    | 99,277,919    | 96,303,329      | 96,073,967    | 98,000,369    | 99,874,101      |
| Survivor benefits                        |               |               |               |                  |               |               | 2,540,407       | 2,595,094     | 2,654,895     | 2,784,937       |
| Disability benefits                      |               |               |               |                  |               |               | 3,149,322       | 3,246,806     | 3,402,037     | 3,524,388       |
| Health care subsidies                    | 2,658,573     | 2,712,541     | 2,726,258     | 2,781,111        | 2,794,544     | 2,808,370     | 2,825,430       | 2,752,751     | 2,726,158     | 2,696,001       |
| Operating expenses                       | 1,756,223     | 1,583,964     | 1,558,874     | 1,576,882        | 1,415,026     | 1,499,302     | 1,432,914       | 1,450,265     | 1,441,183     | 1,350,390       |
| Contribution refunds                     | 18,067,968    | 11,252,780    | 18,559,040    | 22,910,310       | 3,765,085     | 3,203,714     | 3,242,200       | 4,773,609     | 3,690,639     | 4,203,229       |
| <b>Total deductions by type</b>          | 96,477,282    | 96,187,405    | 109,772,566   | 121,120,324      | 105,103,897   | 106,789,305   | 109,493,602     | 110,892,492   | 111,915,281   | 114,433,046     |
| <b>Changes in fiduciary net position</b> | \$ 901,712    | \$ 62,986,494 | \$ 26,495,528 | \$ (341,167,927) | \$ 81,769,934 | \$ 46,527,460 | \$ (74,083,089) | \$ 28,456,155 | \$ 66,175,191 | \$ (25,786,866) |

\*Note: The retirement system began providing dollar breakdowns of retirement, survivor and disability benefits back to fiscal year 2011 with the annual report for the fiscal year ended December 31, 2013. Prior to fiscal year 2011, this detail is combined in the retirement benefits line item. This detailed information will appear in the schedule of changes in fiduciary net position as it occurs.

## Retirement Benefit Schedules

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

#### Retired Members and Beneficiaries By Payment Option & Type On January 1, 2014

| Option       | Service Benefit | Disability Benefit | Survivor Benefit | Total        |
|--------------|-----------------|--------------------|------------------|--------------|
| 0            | 3,475           | 217                | 303              | 3,995        |
| 1            | 150             | 16                 | -                | 166          |
| 2            | 86              | 5                  | -                | 91           |
| 3            | 187             | 14                 | -                | 201          |
| 4            | 186             | 7                  | -                | 193          |
| 5            | 21              | 5                  | -                | 26           |
| 6            | 10              | 6                  | -                | 16           |
| 7            | 1               | -                  | -                | 1            |
| <b>Total</b> | <b>4,116</b>    | <b>270</b>         | <b>303</b>       | <b>4,689</b> |

#### Amount of Annual Benefits By Payment Option & Type On January 1, 2014

| Option       | Service Benefit      | Disability Benefit  | Survivor Benefit    | Total                 |
|--------------|----------------------|---------------------|---------------------|-----------------------|
| 0            | \$ 84,055,339        | \$ 2,839,794        | \$ 3,235,986        | \$ 90,131,119         |
| 1            | 2,744,996            | 208,221             | -                   | 2,953,217             |
| 2            | 1,973,355            | 124,270             | -                   | 2,097,625             |
| 3            | 3,852,931            | 186,343             | -                   | 4,039,274             |
| 4            | 4,773,461            | 142,656             | -                   | 4,916,117             |
| 5            | 560,917              | 71,877              | -                   | 632,794               |
| 6            | 210,093              | 50,744              | -                   | 260,837               |
| 7            | 30,849               | -                   | -                   | 30,849                |
| <b>Total</b> | <b>\$ 98,201,941</b> | <b>\$ 3,623,905</b> | <b>\$ 3,235,986</b> | <b>\$ 105,061,832</b> |

- 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.

## Retirement Benefit Schedules

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

#### Average Annual Benefit Payments By Payment Option & Type On January 1, 2014

| Option     | Service Benefit  | Disability Benefit | Survivor Benefit | All              |
|------------|------------------|--------------------|------------------|------------------|
| 0          | \$ 24,189        | \$ 13,087          | \$ 10,680        | \$ 22,561        |
| 1          | 18,300           | 13,014             | -                | 17,790           |
| 2          | 22,946           | 24,854             | -                | 23,051           |
| 3          | 20,604           | 13,310             | -                | 20,096           |
| 4          | 25,664           | 20,379             | -                | 25,472           |
| 5          | 26,710           | 14,375             | -                | 24,338           |
| 6          | 21,009           | 8,457              | -                | 16,302           |
| 7          | 30,849           | -                  | -                | 30,849           |
| <b>All</b> | <b>\$ 23,859</b> | <b>\$ 13,422</b>   | <b>\$ 10,680</b> | <b>\$ 22,406</b> |

#### Average Monthly Benefit Payments By Payment Option & Type On January 1, 2014

| Option     | Service Benefit | Disability Benefit | Survivor Benefit | All             |
|------------|-----------------|--------------------|------------------|-----------------|
| 0          | \$ 2,016        | \$ 1,091           | \$ 890           | \$ 1,880        |
| 1          | 1,525           | 1,085              | -                | 1,483           |
| 2          | 1,912           | 2,071              | -                | 1,921           |
| 3          | 1,717           | 1,109              | -                | 1,675           |
| 4          | 2,139           | 1,698              | -                | 2,123           |
| 5          | 2,226           | 1,198              | -                | 2,028           |
| 6          | 1,751           | 705                | -                | 1,359           |
| 7          | 2,571           | -                  | -                | 2,571           |
| <b>All</b> | <b>\$ 1,988</b> | <b>\$ 1,119</b>    | <b>\$ 890</b>    | <b>\$ 1,867</b> |

- 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.

## Retirement Benefit Schedules

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

#### Schedule of Average Benefit Payments Last Five Fiscal Years Ended December 31<sup>st</sup>

| Retirement Year(s)       | Years of Service |         |         |         |         |         |         |
|--------------------------|------------------|---------|---------|---------|---------|---------|---------|
|                          | 0 - 5            | 6 - 10  | 11 - 15 | 16 - 20 | 21 - 25 | 26 - 30 | 31+     |
| <b>2010</b>              |                  |         |         |         |         |         |         |
| Average Monthly Benefit  | \$569            | \$724   | \$919   | \$1,522 | \$2,415 | \$3,039 | \$3,189 |
| Number of Retirees       | 8                | 36      | 40      | 31      | 55      | 59      | 84      |
| <b>2011</b>              |                  |         |         |         |         |         |         |
| 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      |
| <b>2012</b>              |                  |         |         |         |         |         |         |
| Average Monthly Benefit  | \$399            | \$620   | \$1,143 | \$1,457 | \$2,171 | \$3,234 | \$3,767 |
| Average Monthly Salary * | \$3,809          | \$4,025 | \$4,642 | \$4,856 | \$4,977 | \$5,901 | \$6,162 |
| Number of Retirees       | 5                | 32      | 23      | 19      | 25      | 34      | 15      |
| <b>2013</b>              |                  |         |         |         |         |         |         |
| Average Monthly Benefit  | \$414            | \$617   | \$985   | \$1,655 | \$2,438 | \$3,105 | \$3,564 |
| Average Monthly Salary * | \$3,920          | \$4,043 | \$4,170 | \$4,771 | \$5,351 | \$5,527 | \$5,888 |
| Number of Retirees       | 7                | 36      | 50      | 27      | 58      | 73      | 33      |
| <b>2014</b>              |                  |         |         |         |         |         |         |
| Average Monthly Benefit  | \$538            | \$674   | \$1,077 | \$1,908 | \$2,311 | \$3,382 | \$3,035 |
| Average Monthly Salary * | \$6,007          | \$4,553 | \$4,639 | \$5,438 | \$5,143 | \$5,882 | \$5,123 |
| Number of Retirees       | 8                | 24      | 15      | 18      | 18      | 26      | 22      |
| <b>2010 - 2014</b>       |                  |         |         |         |         |         |         |
| Average Monthly Benefit  | \$527            | \$657   | \$1,007 | \$1,619 | \$2,363 | \$3,124 | \$3,271 |
| Average Monthly Salary * | \$4,579          | \$4,207 | \$4,484 | \$5,022 | \$5,157 | \$5,770 | \$5,724 |
| Number of Retirees       | 34               | 153     | 146     | 112     | 176     | 207     | 167     |

\*Note: The retirement system began tracking average monthly salary during the fiscal year ended December 31, 2012. The average monthly salary will appear in the schedule of average benefit payments as it occurs.

**Schedule of Covered Members**

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

**Schedule of Covered Members  
Last Ten Fiscal Years Ended December 31<sup>st</sup>**

| Member Type                      | 2014            |                     | 2013            |                     | 2012            |                     | 2011            |                     | 2010            |                     |
|----------------------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|
|                                  | 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                           | 4,880           | 42.9%               | 4,786           | 43.7%               | 4,784           | 42.4%               | 4,336           | 40.0%               | 4,825           | 43.5%               |
| Inactive                         | 1,798           | 15.8%               | 1,643           | 15.0%               | 1,958           | 17.4%               | 1,935           | 17.8%               | 1,896           | 17.1%               |
| Retired (includes Beneficiaries) | 4,689           | 41.3%               | 4,516           | 41.3%               | 4,540           | 40.2%               | 4,587           | 42.2%               | 4,370           | 39.4%               |
| <b>Total</b>                     | <b>11,367</b>   | <b>100%</b>         | <b>10,945</b>   | <b>100%</b>         | <b>11,282</b>   | <b>100%</b>         | <b>10,858</b>   | <b>100%</b>         | <b>11,091</b>   | <b>100%</b>         |

| Member Type                      | 2009            |                     | 2008            |                     | 2007            |                     | 2006            |                     | 2005            |                     |
|----------------------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|
|                                  | 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                           | 5,085           | 45.4%               | 5,021           | 45.2%               | 5,010           | 47.3%               | 5,156           | 50.9%               | 5,549           | 57.2%               |
| Inactive                         | 1,543           | 13.8%               | 1,635           | 14.7%               | 1,488           | 14.1%               | 952             | 9.4%                | 548             | 5.6%                |
| Retired (includes Beneficiaries) | 4,570           | 40.8%               | 4,456           | 40.1%               | 4,084           | 38.6%               | 4,026           | 39.7%               | 3,606           | 37.2%               |
| <b>Total</b>                     | <b>11,198</b>   | <b>100%</b>         | <b>11,112</b>   | <b>100%</b>         | <b>10,582</b>   | <b>100%</b>         | <b>10,134</b>   | <b>100%</b>         | <b>9,703</b>    | <b>100%</b>         |

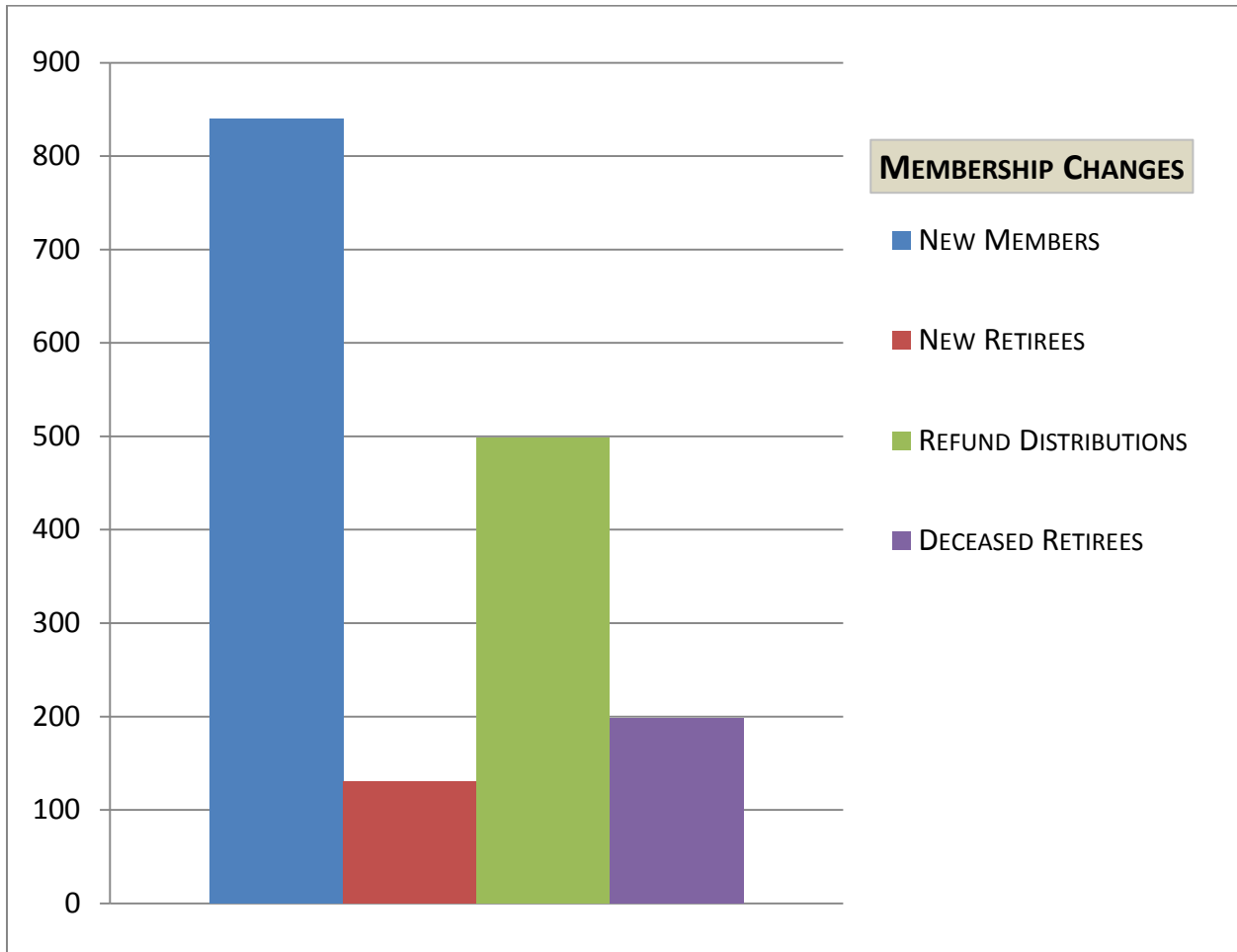
## Summary of Membership Changes

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### The Year in Review

During the fiscal year ended December 31, 2014, PSRSSTL added 840 new members and 131 new retirees to payroll, including 3 retirees who earned Supplemental Pension Benefits under the Sick Leave Conversion Program sponsored by St. Louis Public Schools. The retirement system processed 498 refund distributions for members who left the System and bid farewell to 198 retirees due to death.

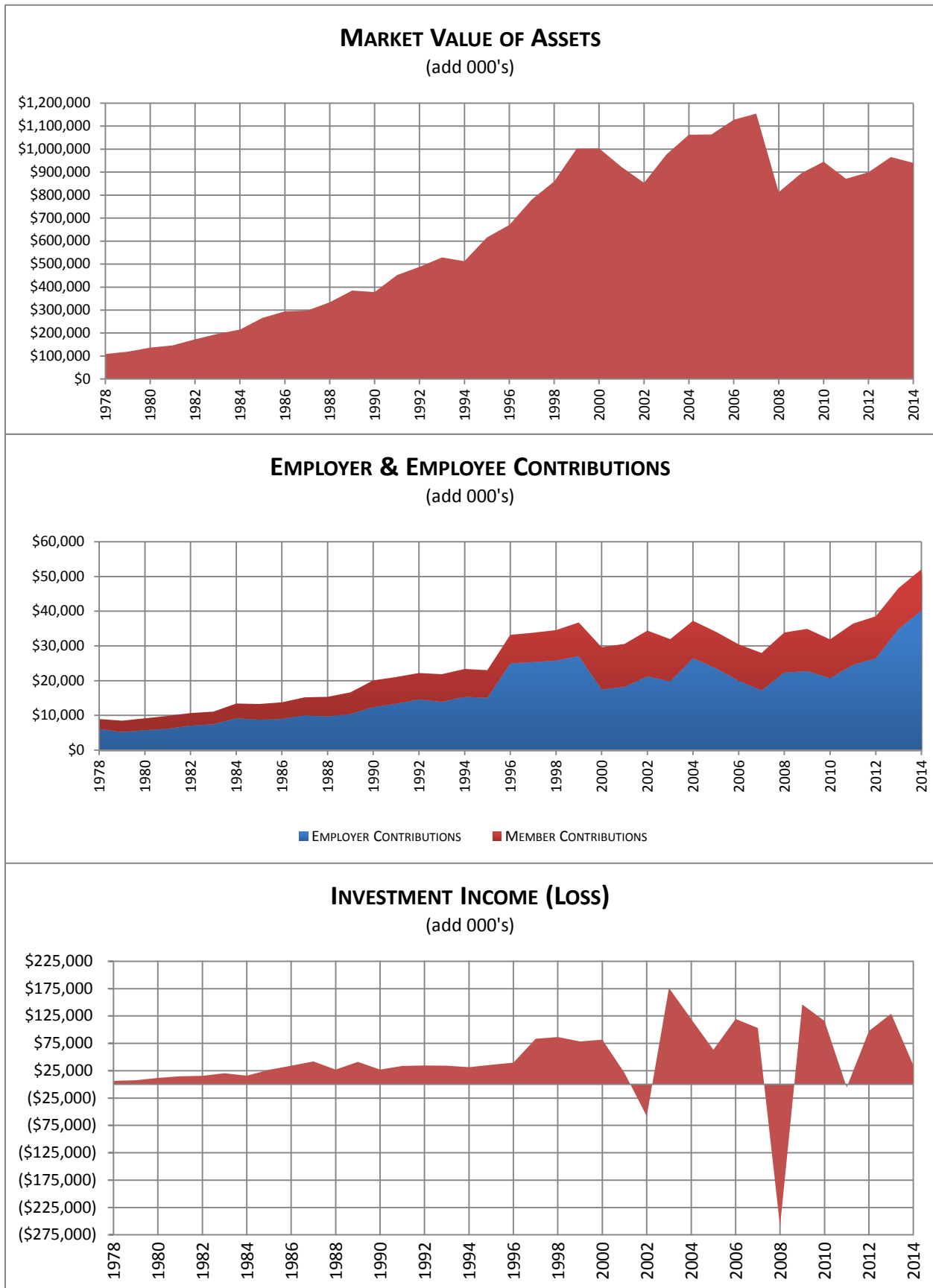
### Fiscal Year 2014





## Charts and Graphs

These charts and graphs show changes in market value of assets, contributions, and investment earnings since the late 1970's when the plan's assets first hit \$100 million.



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

- 1944 - Missouri General Assembly formed the retirement system for all full-time employees of the St. Louis Board of Education
- 1961 - Plan provisions revised for all future employees, active participants given option to remain in the "old plan" or upgrade to the "new plan"
- 1969 - Credited Service allowed for time lost from 1944 - 1947
- 1972 - Various Credited Service options added, "old plan" participants granted another opportunity to upgrade to the "new plan," introduction of survivor, disability and minimum benefits
- 1975 - First increase in benefits granted to certain teacher retirees
- 1978 - 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
- 1979 - 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
- 1981 - 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
- 1984 - Survivor and disability benefits upgraded, second back-to-work provision added for certain retirees
- 1985 - First supplemental early retirement benefit added for certain retirees
- 1987 - "Old plan" participants granted another opportunity to join "new plan," increased the minimum retirement benefit, several administrative changes made
- 1988 - Survivor and supplemental benefits enhanced
- 1989 - Certain plan provisions were improved
- 1990 - Supplemental benefits extended for certain retirees
- 1993 - Supplemental benefits enhanced for certain retirees
- 1996 - Credited service purchase allowed for certain periods of lay-offs, investment trustee position replaced with school administrator trustee position, COLA provisions added
- 1997 - COLA provision added for certain retirees
- 1998 - 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
- 1999 - Employee contribution rate set at 5%
- 2001 - 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
- 2002 - 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
- 2007 - 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
- 2009 - State reporting requirements revised for all Missouri retirement plans
- 2014 - General provisions revised for all Missouri retirement plans



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