# Peace of Mind for Your Family

PSRS/PEERS of MISSOURI 2015 COMPREHENSIVE ANNUAL FINANCIAL REPOR

Financial

Security

As a member of PSRS/PEERS, you are providing financial protection for your loved ones, right now and throughout your career. Disability benefits are available to members who qualify, and survivor benefits are available for the beneficiaries of members who die before reaching retirement. At retirement, you choose a benefit plan that fits your needs, providing the level of financial protection you desire for your loved ones.

### Financial Section

Independent Auditors' Report from Williams Keepers, LLC	13
Management's Discussion and Analysis	15
Basic Financial Statements	20
Statements of Fiduciary Net Position	20
Statements of Changes in Fiduciary Net Position	21
Notes to the Financial Statements	22
Required Supplementary Information	39
Schedules of Changes in the Employers' Net Pension Liability	39
Schedules of Employers' Net Pension Liability	39
Schedules of Employer Contributions	40
Schedules of Investment Returns	40
Notes to the Schedules of Required Supplementary Information	41
Staff Retiree Health Plan - Defined Benefit OPEB Plan	42
Schedules of Administrative Expenses	43
Schedules of Investment Expenses	44
Schedules of Professional Services.	44

### Independent Auditors' Report



2005 West Broadway, Ste. 100, Columbia, MO 65203 OFFICE (573) 442-6171 FAX (573) 777-7800

3220 West Edgewood, Ste. E, Jefferson City, MO 65109 OFFICE (573) 635-6196 FAX (573) 644-7240

www.williamskeepers.com

The Board of Trustees of the Public School and Public Education Employee Retirement Systems of Missouri

We have audited the accompanying financial statements of the Public School and Public Education Employee Retirement Systems of Missouri (the Systems), which comprise the statements of plan net position as of June 30, 2015, the related statements of changes in plan net position for the year then ended, and the related notes to the financial statements.

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

Management is responsible for the preparation and fair presentation of these financial statements in accordance with U.S. generally accepted accounting principles; 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 opinions on these financial statements based on our audit. We conducted our audit in accordance with U.S. generally accepted auditing standards. 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 auditors' 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 entity'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 entity'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 opinions.

#### **Opinions**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Public School and Public Education Employee Retirement Systems of Missouri as of June 30, 2015, and the respective changes in financial position for the year then ended, in conformity with U.S. generally accepted accounting principles.

#### Independent Auditors' Report, continued

#### Other Matters

Prior Year Information

The prior year combined total information has been derived from the Systems' 2014 financial statements and, in our report dated December 1, 2014, we expressed unqualified opinions on the respective financial statements of the Systems' net position.

#### Required Supplementary Information

U.S. generally accepted accounting principles require that the management's discussion and analysis on pages 15-19, schedules related to the defined benefit plans (schedules of changes in the employers' net pension liability, employers contributions, investment returns, and notes to schedules) on pages 39-41, and schedules related to the defined benefit OPEB plan (schedules of funding progress, employer contributions, and notes to schedules) on page 42 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 basic financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with U.S. generally accepted auditing standards, 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 audits of the basic 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 Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Public School and Public Education Employee Retirement Systems of Missouri basic financial statements. The introductory, investment, actuarial and statistical sections and the additional information presented on pages 43-44 are presented for purposes of additional analysis and are not a required part of the financial statements.

The additional information presented on pages 43-44 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 audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the 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 U.S. generally accepted auditing standards. In our opinion, the additional information presented on pages 43-44 is fairly stated in all material respects in relation to the basic financial statements as a whole.

The introductory, investment, actuarial and statistical sections have not been subjected 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.

October 30, 2015

# Management's Discussion and Analysis

#### Introduction

This discussion and analysis of the financial position of the Public School Retirement System of Missouri (PSRS) and the Public Education Employee Retirement System of Missouri (PEERS), collectively referred to as the Systems, provides an overview of the Systems' financial activities for the fiscal year ended June 30, 2015. We encourage you to consider the information presented here in conjunction with additional information presented in the financial statements and required supplementary information.

#### Financial Highlights

The following highlights are explained in more detail for each System later in this discussion.

- The net position of the combined Systems increased by \$0.6 billion. The net position of PSRS increased by \$0.5 billion while the net position of PEERS increased by \$137.1 million.
- The Systems earned an investment return of 4.3% (net of all investment expenses and fees) for the fiscal year ended June 30, 2015. The total plan return exceeded the total plan policy benchmark of 3.5% but fell short of the long-term objective (actuarial assumption) of 8.0%. However, over long periods of time, the Systems continue to produce investment returns that meet or exceed the Systems' objective. The annualized investment return for the Systems over the last five years is 11.3%, and 9.1% over the last 30 years.
- The investment return for fiscal year 2015 was lower than expected but far better than most other institutional investors. For example, the Systems' investment return for fiscal year 2015 exceeded 85% of the peer group as defined by the Wilshire TUCS universe of public pension plans with assets in excess of \$1 billion. Additionally, the Systems generated the fiscal year 2015 return (and longer-term investment returns) while taking less risk than approximately two-thirds of comparable public funds in the United States
- As of June 30, 2015, PSRS' fiduciary net position as a percentage of the total pension liability was 85.8% and the net pension liability approximated \$5.8 billion. PEERS' fiduciary net position as a percentage of the total pension liability was 88.3%

- and the net pension liability approximated \$528.9 million as of June 30, 2015.
- Total revenues for fiscal year 2015 were comprised of contribution revenue of \$1.56 billion and investment gains of \$1.61 billion, compared to contribution revenue of \$1.53 billion and investment gains of \$5.5 billion for fiscal year 2014.
- Expenses increased 4.5% over the prior year from \$2.5 billion to \$2.6 billion. Retirement benefits and member refunds increased by \$108.2 million from the prior year, while administrative expenses increased by \$1.9 million during the same time period.

#### Overview of the Financial Statements

This discussion and analysis is intended to serve as an introduction to the financial report of the Systems. The financial report consists of: the basic financial statements comprised of the Statements of Fiduciary Net Position and the Statements of Changes in Fiduciary Net Position, the notes to the basic financial statements, required supplementary information and other supplementary information.

The Statements of Fiduciary Net Position present information on the assets and liabilities of the Systems, with the difference between the two reported as net position. The net position of the Systems reflects the resources available to pay benefits to members when due. Over time, increases and decreases in net position measure whether the Systems' financial position is improving or deteriorating.

The Statements of Changes in Fiduciary Net Position present information detailing the changes in net position that occurred during the current fiscal year. All changes in net position are reported on an accrual basis. This means that the revenue or expense is recognized as soon as the underlying event giving rise to the change occurs, regardless of when the actual cash is received or paid. Thus, revenues and expenses are reported in this statement for some items that will not result in cash flows until future fiscal periods. For example, contributions due from an employer, even though not yet paid by year end, will be reflected as revenue. Earned vacation accruals will be reflected as an expense, even though they have not been paid to employees.

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements. The notes can be found on pages 22 through 38.

#### **FINANCIAL SECTION**

The report also contains required supplementary information in addition to the basic financial statements themselves. The required supplementary information consists of the following schedules and related notes:

- The Schedules of Changes in the Employers' Net Pension Liability include historical trend information about the annual changes of the net pension liability, including assumption changes and variances of assumed experience. These schedules were effective June 30, 2014, under GASB No. 67. Additional years of data will be displayed as they become available.
- The Schedules of Employers' Net Pension Liability include historical trend information about whether each System's net position is increasing or decreasing over time relative to the total pension liability. The schedules provide a long-term, ongoing perspective of the accumulation assets to pay benefits when due. These schedules were effective June 30, 2014, under GASB No. 67. Additional years of data will be displayed as they become available.
- The Schedules of Employer Contributions present historical trend information about the annual determined contributions of employers and the actual contributions made by employers.
- The Schedules of Investment Returns present historical annual money-weighted rate of returns.
   These schedules were effective June 30, 2014, under GASB No. 67. Additional years of data will be displayed as they become available.
- The Schedule of Funding Progress includes historical trend information about the actuarially funded status of the defined benefit other post-employment benefit (OPEB) plan from a long-term, ongoing perspective and the progress made in accumulating assets to pay benefits when due.
- The Schedule of Employer Contributions presents historical trend information about the annual required contributions of the employer and the actual employer contributions made for the defined benefit OPEB plan.
- The Notes to the Schedules of Required Supplementary Information provide additional information that is essential to a full understanding of the data provided in the schedules.

Other supplementary schedules are also included. The Schedules of Administrative Expenses present the overall cost of administering the Systems. The Schedules of Professional Services further detail this category of administrative expense. The Schedules of Investment

Expenses show the costs associated with investing the assets of the Systems. These expenses are shown as a reduction of revenue on the Statements of Changes in Fiduciary Net Position.

#### Financial Analysis of the Public School Retirement System of Missouri (PSRS)

PSRS is a mandatory cost-sharing multiple employer retirement system for full-time certificated employees and certain part-time employees of participating employers. PSRS members were required to contribute 14.5% of their annual covered salary during fiscal year 2015. The employer was required to match that amount. Most PSRS members do not contribute to Social Security, except for employees hired after 1986 who contribute to Medicare only. In some instances, positions may be determined not to be exempt from Social Security contributions. PSRS members required to contribute to Social Security are required to contribute two-thirds of the approved PSRS contribution rate and their employer is required to match the contribution. The members' benefits are further calculated at twothirds the normal benefit amount.

Public School Retirement System of Missouri Fiduciary Net Position (000's)							
	2015 2014 Change						
Cash & investments	\$ 35,420,157	\$ 34,978,991	\$ 441,166				
Receivables	1,694,592	1,764,424	(69,832)				
Other	26,100	24,244	1,856				
Total assets	37,140,849	36,767,659	373,190				
Total liabilities	2,303,169	2,387,050	(83,881)				
Fiduciary net position	\$ 34,837,680	\$ 34,380,609	\$ 457,071				

#### **Assets**

Total assets of PSRS as of June 30, 2015 were \$37.1 billion and were mostly comprised of cash, investments, investment sales receivables and contributions due from employers. Total assets increased by \$373.2 million or 1.0% from the prior year due to investment gains and contribution revenue exceeding benefit payments and other expenses.

#### Liabilities

Total liabilities as of June 30, 2015, were \$2.3 billion and were mostly comprised of payables from the purchase of investments and obligations under security lending arrangements. Total liabilities decreased by \$83.9 million from the prior year. This was due to a decrease of both investment purchase liabilities and obligations under security lending arrangements.

#### **Net Position**

PSRS assets exceeded liabilities at June 30, 2015, by \$34.8 billion. This was an increase of \$0.5 billion from the 2014 net position. This increase was a result of investment earnings that totaled \$1.5 billion for the year offset by benefit payments and other expenses which exceeded contribution revenue by \$1 billion.

Public School Retirement System of Missouri Changes in Fiduciary Net Position (000's)							
2015 2014 Change							
Additions							
Member contributions	\$ 689,187	\$ 679,391	\$ 9,796				
Employer contributions	656,925	643,990	12,935				
Investment income	1,447,144	4,927,192	(3,480,048)				
Other	26	6	20				
Total additions	2,793,282	6,250,579	(3,457,297)				
Deductions							
Monthly benefits	2,270,259	2,180,547	89,712				
Refunds of contributions	55,938	55,921	17				
Administrative expenses	10,012	8,903	1,109				
Other	2	16	(14)				
Total deductions	2,336,211	2,245,387	90,824				
Change in fiduciary	Change in fiduciary						
net position	\$ 457,071	\$4,005,192	\$(3,548,121)				

## Revenues – Additions to Fiduciary Net Position

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment earnings. Total contribution revenue for the year increased by \$22.7 million to \$1.3 billion. This was a 1.7% increase over the prior year. Retirement contributions were calculated at 14.5% of retirement salary for each member during fiscal year 2015. The employer matched this amount. Contribution rates were unchanged from the prior year. In addition to contributions on salary, members may also pay contributions to reinstate previously refunded service or to purchase various types of elective service. Such contributions for the year decreased by \$2.8 million. An increased salary base and the addition of over 5,400 new members resulted in the overall increase in contributions.

The net investment gain was \$1.5 billion as compared to a net investment gain of \$4.9 billion in 2014. The current year gains are reflective of a 4.3% net return on the Systems' diversified investment portfolio. All investment related expenses, such as fees paid to investment managers, are reflected as a reduction in revenue and are accounted for in this net figure.

# Expenses – Deductions from Fiduciary Net Position

The primary expenses of PSRS include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total expenses for fiscal year 2015 were \$2.3 billion, an increase of 4.0% over fiscal year 2014.

Benefit expenses increased by \$89.7 million to \$2.27 billion. This was a result of the addition of 2,645 new service and disability retirees. There were no changes to the benefit formula during 2015. Refunds of contributions of \$55.9 million were consistent with the prior year.

Administrative expenses increased by \$1.1 million to \$10.0 million. The increase in expenditures is related to software maintenance agreements on the newly implemented pension administration system. The cost of administrative items was charged 62% to PSRS and 38% to PEERS, unless the expense was determined to be of direct benefit to only one System. In such instance, the allocation of expense was 100% to the benefited System. As always, we will continue to look for ways to streamline costs when prudent.

# Financial Analysis of the Public Education Employee Retirement System of Missouri (PEERS)

PEERS is a mandatory cost-sharing multiple employer retirement system for non-certificated employees and certain part-time certificated employees of participating employers. PEERS members were required to contribute 6.86% of their annual covered salary during 2015. The employer was required to match that amount. PEERS members also contribute to Social Security.

Public Education Employee Retirement System of Missouri Fiduciary Net Position (000's)								
2015 2014 Change								
Cash & investments	\$4,053,592	\$ 3,912,377	\$ 141,215					
Receivables	193,689	201,609	(7,920)					
Other		30	(30)					
Total assets	4,247,281	4,114,016	133,265					
Total liabilities	263,871	267,693	(3,822)					
Fiduciary net position	\$3,983,410	\$ 3,846,323	\$ 137,087					

#### **Assets**

Total assets of PEERS as of June 30, 2015 were \$4.2 billion and were mostly comprised of cash, investments, investment sales receivables and contributions due from employers. Total assets increased by \$133.3 million or 3.2% from the prior year due to investment gains and contribution revenue exceeding benefit payments and other expenses.

#### Liabilities

Total liabilities as of June 30, 2015 were \$263.8 million and were mostly comprised of payables from the purchase of investments and obligations under security lending arrangements. Total liabilities decreased by \$3.8 million. This was due to a decrease of both investment purchase liabilities and obligations under security lending arrangements.

#### **Net Position**

PEERS assets exceeded liabilities at June 30, 2015 by \$3.98 billion. This was up from the 2014 net position of \$3.85 billion by \$137.1 million. This increase was a result of investment earnings that totaled \$163.7 million for the year offset by benefit payments and other expenses which exceeded contribution revenue by \$26.6 million.

Public Education Employee Retirement System of Missouri Changes in Fiduciary Net Position (000's)							
		2015		2014		Change	
Additions	_						
Member contributions	\$	110,444	\$	106,421	\$	4,023	
Employer contributions		103,624		100,700		2,924	
Investment income		163,718		544,154		(380,436)	
Total additions		377,786		751,275		(373,489)	
Deductions							
Monthly benefits		215,242		196,745		18,497	
Refunds of contributions		19,828		19,880		(52)	
Administrative expenses		5,629		4,838		791	
Other		-		2		(2)	
Total deductions		240,699		221,465		19,234	
Change in fiduciary net							
position	\$	137,087	\$	529,810	\$	(392,723)	

#### Revenues – Additions to Fiduciary Net Position

The reserves needed to finance retirement benefits are accumulated through the collection of employer and employee contributions and through investment earnings. Total contribution revenue for the year increased by \$6.9 million to \$214.1 million. Retirement contributions were calculated at 6.86% of retirement salary for each member during fiscal year 2015. The employer matched this amount. Contribution rates were unchanged from the prior year. Overall contribution revenue increased by 3.4%. In addition to contributions on salary, members may also pay contributions to reinstate previously refunded service or to purchase various types of elective service. Such contributions for the year increased by \$1.1 million. The remainder of increase in total contributions is attributable to a higher salary base and the addition of almost 8,000 new members.

The net investment gain was \$163.7 million as compared to a net investment gain of \$544.2 million in 2014. The current year gains are reflective of a 4.3% net return on the Systems' diversified investment portfolio. All investment related expenses, such as fees paid to investment managers, are reflected as a reduction in revenue and are accounted for in this net figure.

## Expenses – Deductions from Fiduciary Net Position

The primary expenses of PEERS include the payment of pension benefits to members and beneficiaries, refunds of contributions to former members, and the cost of administering the System. Total expenses for fiscal year 2015 were \$240.7 million, an increase of 8.7% over fiscal year 2014.

Benefit expenses increased by \$18.5 million to \$215.2 million. This was a result of the addition of 1,945 new service and disability retirees. There were no changes to the benefit formula during 2015. Refunds of contributions of \$19.8 million were consistent with the prior year.

Administrative expenses marginally increased by \$0.8 million. The increase in expenditures is related to software maintenance agreements on the newly implemented pension administration system. The cost of administrative items was charged 62% to PSRS and 38% to PEERS, unless the expense was determined to be of direct benefit to only one System. In such instance, the allocation of expense was 100% to the benefited System. As always, we will continue to look for ways to streamline costs when prudent.

#### Summary

The total net returns of 4.3% for PSRS and PEERS exceeded the total plan policy benchmark of 3.5% but fell short of the long-term objective (actuarial assumption) of 8.0%. Due to the long-term nature of defined benefit pension plans, it is important to look at the financial performance of the Systems over a period of years and not just at this single point in time. Over long periods of time, the Systems continue to produce investment returns that meet or exceed the Systems' objectives. The annualized investment returns for the Systems over the last 30 years is 9.1%.

The Systems' funding objective is to achieve a funded ratio of 100% over a closed 30-year period from fiscal year 2011 through fiscal year 2040. For this purpose, funded ratio is defined as the actuarial value of assets divided by the actuarial accrued liability determined under the entry age normal cost method and the actuarial assumptions adopted by the Board.

The actuary recommended the fiscal year 2017 contribution rates remain unchanged from the fiscal year 2016 rates. The recommended fiscal year 2017 contribution rate for PSRS remains 29.0%. The recommended fiscal year 2017 contribution rate for PEERS remains 13.72%. The fiscal year 2017 contribution rates are in compliance PSRS/PEERS' Board of Trustees' Funding Policy and represent the fifth consecutive year of stable contribution rates for employers and members.

The Board of Trustees, management and staff continually strive to improve the financial position of the Systems through a prudent investment program and long-term strategic planning.

#### Requests for Information

This financial report is designed to provide the Board of Trustees, our members, and other users of our financial report with a general overview of the Systems' finances and to demonstrate the Systems' accountability for the money it receives. If you have any questions about this report or need additional financial information, contact the Public School and Education Employee Retirement Systems of Missouri (PSRS/PEERS), P.O. Box 268, Jefferson City, MO 65102.

#### Public School Retirement System of Missouri Public Education Employee Retirement System of Missouri Statements of Fiduciary Net Position

as of June 30, 2015 with comparative totals for June 30, 2014

			Comb	oined Totals
	PSRS	PEERS	June 30, 2015	June 30, 2014
ASSETS				
Cash	\$ 94,627,025	\$ 13,810,904	\$ 108,437,929	\$ 142,995,948
Receivables				
Contributions	205,995,396	23,999,644	229,995,040	244,725,055
Accrued interest and dividends	62,831,778	7,158,024	69,989,802	62,869,837
Investment sales	1,425,644,974	162,514,953	1,588,159,927	1,656,340,649
Due from PEERS	103,806	-	103,806	1,901,569
Other	15,761	16,185	31,946	183,146
Total receivables	1,694,591,715	193,688,806	1,888,280,521	1,966,020,256
Investments, at fair value				
U.S. Treasuries and TIPS	6,060,862,509	692,481,487	6,753,343,996	5,749,468,584
U.S. public equities	10,661,524,996	1,219,893,482	11,881,418,478	12,203,981,764
Non-U.S. public equities	5,326,855,987	608,910,645	5,935,766,632	5,700,607,736
Short term investments	661,972,414	77,421,596	739,394,010	816,165,063
Public debt	2,191,690,487	250,023,109	2,441,713,596	2,976,993,599
Private equity	2,589,918,813	295,911,249	2,885,830,062	2,655,536,082
Private credit	265,880,301	30,378,161	296,258,462	386,216,087
Private real estate	2,494,626,713	285,023,647	2,779,650,360	2,633,564,746
Hedged assets	4,699,137,925	537,114,758	5,236,252,683	5,197,839,895
Total investments	34,952,470,145	3,997,158,134	38,949,628,279	38,320,373,556
Invested securities lending collateral	373,059,810	42,623,959	415,683,769	427,997,986
Prepaid expenses	85,515	-	85,515	412,545
Capital assets, net of accumulated depreciation	26,014,091	-	26,014,091	23,861,742
Total assets	37,140,848,301	4,247,281,803	41,388,130,104	40,881,662,033
LIABILITIES				
Accounts payable	15,921,395	1,840,032	17,761,427	18,564,986
Interest payable	108,438	12,029	120,467	162,904
Securities lending collateral	373,056,712	42,623,605	415,680,317	427,998,807
Investment purchases	1,911,620,392	217,909,234	2,129,529,626	2,202,808,421
Due to PSRS	-	103,806	103,806	1,901,569
Accrued medical claims	75,000	-	75,000	75,000
Net other post employment benefit obligation	1,051,271	646,329	1,697,600	1,452,400
Compensated absences	1,335,588	735,947	2,071,535	1,766,500
Total liabilities	2,303,168,796	263,870,982	2,567,039,778	2,654,730,587
NET POSITION - RESTRICTED				
FOR PENSIONS	\$ 34,837,679,505	\$ 3,983,410,821	\$ 38,821,090,326	\$ 38,226,931,446

See accompanying Notes to the Financial Statements.

#### Public School Retirement System of Missouri Public Education Employee Retirement System of Missouri Statements of Changes in Fiduciary Net Position

for the year ended June 30, 2015 with comparative totals for the year ended June 30, 2014

**Combined Totals Year Ended PSRS** PEERS June 30, 2015 June 30, 2014 **ADDITIONS** Contributions Employer 656,924,899 103,624,310 760,549,209 744,689,604 Member 689,187,215 110,443,660 799,630,875 785,811,574 Total contributions 1,346,112,114 214,067,970 1,560,180,084 1,530,501,178 Investment income From investing activities: 1,504,338,299 169,311,476 1,673,649,775 5,686,283,837 Net appreciation in fair value of investments 177,276,639 Interest from investments 20,033,649 197,310,288 182,024,528 Interest from bank deposits 35,026 2,636 37,662 58,492 169,633,226 184,007,622 Dividends 165,308,030 18,699,592 Total investment income 1,846,957,994 208,047,353 2,055,005,347 6,038,000,083 Less investment expenses 403,375,033 44,732,485 448,107,518 570,401,971 1,443,582,961 163,314,868 1,606,897,829 5,467,598,112 Net income from investing activities From security lending activities: 1,188,380 139,154 1,327,534 1,187,404 Security lending gross income Net (depreciation) appreciation in fair value of security lending collateral 3,835 438 4,273 (11,688)Less security lending activity expenses: 890,224 98,914 989,138 860,732 Agent fees Broker rebates paid (received) (3,258,681)(362,076)(3,620,757)(3,433,266)Total security lending expenses (2,368,457)(263,162)(2,631,619)(2,572,534)Net income from security lending activities 3,560,672 402,754 3,963,426 3,748,250 163,717,622 Total net investment income 1,447,143,633 1,610,861,255 5,471,346,362 Other income Miscellaneous income 25,572 2,075 27,647 7,148 Total other income 25,572 2,075 27,647 7,148 Total additions 2,793,281,319 3,171,068,986 7,001,854,688 377,787,667 **DEDUCTIONS** Monthly benefits 2,270,258,828 215,242,490 2,485,501,318 2,377,291,640 Refunds of contributions 55,937,945 19,827,691 75,765,636 75,801,577 Administrative expenses 10,011,961 5,629,203 15,641,164 13,740,531 1,640 1,988 19,083 Other expenses 348 240,699,732 2,576,910,106 2,466,852,831 Total deductions 2,336,210,374 457,070,945 137,087,935 594,158,880 4,535,001,857 Net increase in net position **NET POSITION - RESTRICTED** FOR PENSIONS Beginning of year 34,380,608,560 3,846,322,886 38,226,931,446 33,691,929,589 End of year \$ 34,837,679,505 \$3,983,410,821 \$38,821,090,326 \$ 38,226,931,446

See accompanying Notes to the Financial Statements.

#### Notes to the Financial Statements

#### Note 1 - Plan Descriptions

The Board of Trustees of the Public School Retirement System of Missouri administers two separate retirement systems, the Public School Retirement System of Missouri (PSRS) and the Public Education Employee Retirement System of Missouri (PEERS). The Board of Trustees consists of seven members, three of whom are elected PSRS active members, one an elected active member of PEERS and three persons appointed by the governor, one of whom must be a retired member of either PSRS or PEERS.

The funds of the two Systems are managed simultaneously. Investments of the Systems are combined in a commingled investment pool as allowed by state statute. Each System owns an equity position in the pool and receives proportionate investment income from the pool in accordance with their respective ownership percentage. Each System's allocated share of each type of investment in the pool is shown on the Statements of Net Position. Investment gains and losses are reported in the Statements of Changes in Net Position. Each System's assets may be used only for the payment of benefits to the members of the separate System in accordance with the statutes governing that System as well as expenses required to administer the System.

### The Public School Retirement System of Missouri (PSRS)

PSRS is a mandatory cost-sharing multiple employer retirement system for all full-time certificated employees and certain part-time certificated employees of all public school districts in Missouri (except the school districts of St. Louis and Kansas City) and all public community colleges. The System also includes certificated employees of PSRS, Missouri State Teachers' Association, Missouri State High School Activities Association, and certain employees of the state of Missouri who elected to remain covered by PSRS under legislation enacted in 1986, 1987 and 1989. The majority of PSRS members are exempt from Social Security contributions. In some instances, positions may be determined not to be exempt from Social Security contributions. Any PSRS member who is required to contribute to Social Security comes under the requirements of Section 169.070 (9) RSMo, known as the "2/3's statute." PSRS members required to contribute to Social Security are required to contribute two-thirds of the approved PSRS contribution rate and their employer is required to match the contribution.

The members' benefits are further calculated at twothirds the normal benefit amount.

PSRS was established as an independent trust fund by an Act of the Missouri General Assembly effective August 1, 1945. Statutes governing the System are found in Sections 169.010-169.141 and Sections 169.560-169.595 RSMo. It is a defined benefit plan providing service retirement, death and disability benefits to its members. Members are vested for service retirement benefits after accruing five years of service. Individuals who (a) are at least age 60 and have a minimum of 5 years of service, (b) have 30 years of service, or (c) qualify for benefits under the "Rule of 80" (service and age total at least 80) are entitled to a monthly benefit for life, which is calculated using a 2.5% benefit factor. Actuarially age-reduced benefits are available for members with five to 24.9 years of service at age 55 or with 25 years of service (if not yet age 55). Members who are younger than age 55 and who do not qualify under the "Rule of 80" but have between 25 and 29.9 years of service may retire with a lesser benefit factor. Members that are three years beyond normal retirement can elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a onetime partial lump sum (PLSO) payment at retirement equal to 12, 24, or 36 times the Single Life benefit amount. Annual cost-of-living adjustments (COLAs) are provided for eligible service and disability retirees and for surviving beneficiaries receiving payments under optional benefit plans, up to a lifetime maximum of 80% of the original benefit amount.

Contributions – PSRS members were required to contribute 14.5% of their annual covered salary during fiscal year 2015. Employers were required to match the contributions made by employees. The contribution rate is set each year by the PSRS/PEERS Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions set in Section 169.030 RSMo. The annual statutory increase in the total contribution rate may not exceed 1% of pay. Administrative costs are financed through investment earnings. Contributions for employees of the state of Missouri were made by the state in accordance with the actuarially determined contribution rate needed to fund current costs and prior service costs of state employees as authorized in Section 104.342.8 RSMo.

*Members* – The number of PSRS members and benefit recipients served by the System at June 30, 2015:

Retirees and beneficiar	56,121		
Inactive members entit	7,664		
Active members:	Vested	58,788	
	Non-vested	19,530	
Total active members			78,318
Other inactive member	rs and terminated acco	ounts	8,596
Total			150,699

*Employers* – PSRS had 535 contributing employers during fiscal year 2015.

### The Public Education Employee Retirement System of Missouri (PEERS)

PEERS is a mandatory cost-sharing multiple employer retirement system for all public school district employees (except the school districts of St. Louis and Kansas City), employees of the Missouri Association of School Administrators, and community college employees (except the Community College of St. Louis). Employees of covered districts who work 20 or more hours per week on a regular basis and who are not contributing members of the Public School Retirement System of Missouri (PSRS) must contribute to PEERS. Employees of PSRS who do not hold Missouri educator certificates also contribute to PEERS.

PEERS was established as a trust fund by an Act of the Missouri General Assembly effective October 13, 1965. Statutes governing the System are found in Sections 169.600 - 169.715 and Sections 169.560-169.595 RSMo. The statutes place responsibility for the operation of PEERS on the Board of Trustees of the Public School Retirement System of Missouri.

PEERS is a defined benefit plan providing service retirement and disability benefits to its members. Members are vested for service retirement benefits after accruing five years of service. Individuals who (a) are at least age 60 and have a minimum of five years of service, (b) have 30 years of service, or (c) qualify for benefits under the "Rule of 80" (service and age total at least 80) are entitled to a monthly benefit for life, which is calculated using a 1.61% benefit factor. Members qualifying for "Rule of 80" or "30-and-out" are entitled

to an additional temporary .8% benefit multiplier until reaching minimum Social Security age (currently age 62). Actuarially age-reduced retirement benefits are available with five years of service at age 55. Members who are younger than age 55 and who do not qualify under the "Rule of 80" but have between 25 and 29.9 years of service may retire with a lesser benefit factor. Members that are three years beyond normal retirement can elect to have their lifetime monthly benefits actuarially reduced in exchange for the right to also receive a one-time partial lump sum (PLSO) payment at retirement equal to 12, 24, or 36 times the Single Life benefit amount. Annual cost-of-living adjustments (COLAs) up to a lifetime maximum of 80% of the original benefit amount are provided for eligible service and disability retirees and for surviving beneficiaries receiving payments under optional benefit plans.

Contributions – PEERS members were required to contribute 6.86% of their annual covered salary during fiscal year 2015. Employers were required to match the contributions made by their employees. The contribution rate is set each year by the PSRS/PEERS Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions in Section 169.620 RSMo. The annual statutory increase in the total contribution rate may not exceed 0.5% of pay. Administrative costs proportional to its membership size are reimbursed by PEERS to the Public School Retirement System of Missouri (PSRS) and are financed through investment earnings.

*Members* - The number of PEERS members and benefit recipients served by the System at June 30, 2015:

Retirees and beneficiari	26,298		
Inactive members entit	led to, but not yet rec	eiving benefits	6,157
Active members:	Vested	27,958	
	Non-vested	18,906	
Total active members			46,864
Other inactive member	rs and terminated acco	ounts	24,842
Total			104,161

*Employers* – PEERS had 532 contributing employers during fiscal year 2015.

# Note 2 – Summary of Significant Accounting Policies

Basis of Accounting –The financial statements of both Systems were prepared using the accrual basis of accounting. For both Systems, member and employer contributions are recognized when due, pursuant to formal commitments and statutory requirements. Benefits and refunds are recognized when due and payable in accordance with the statutes governing the Systems. Expenses are recognized when the liability is incurred, regardless of when payment is made. Administrative expenses are funded through investment earnings.

**Cash** – Cash includes cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

**Receivables** – Receivables consist primarily of contributions owed and yet to be remitted by employers, pending investment trades and interest and dividends payable to the Systems as of the end of each fiscal year.

*Method Used to Value Investments* – Investments are reported at fair value on a trade date basis. The fair value of investments is based on published market prices and quotations from major investment brokers at current exchange rates, as available. Many factors are considered in arriving at fair value. Fixed income securities not traded on a national or international exchange are based on equivalent values of comparable securities with similar yield and risk. The value of real estate investments is based on estimated current values and independent appraisals. The value of private equity investments that do not have an established market is determined based upon the most current net asset values and activities through year end. When values are not readily available, alternative investments are valued based on a good faith determination by the General Partner.

Capital Assets – The building and other capital assets are owned by PSRS and are stated at cost less depreciation accumulated since acquisition. The stated value does not purport to represent replacement or realized value. Costs of major additions and improvements are capitalized. Expenditures for maintenance and repairs are charged to operations as incurred. Depreciation is calculated using the straight-line method, with estimated lives ranging from three to 40 years in the following major classes: computers and software, three years; vehicles, five years; equipment, five years; building and land improvements, 15 years; building, 40 years.

PSRS allocates depreciation expense to PEERS for the use of capital assets.

*Estimates* – The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of net position restricted for pension benefits at June 30, 2015. Actual results could differ from those estimates.

**Total Columns:** The financial statements include total column information for the prior year. Such information does not include sufficient detail to constitute a presentation in conformity with U.S. generally accepted accounting principles. Accordingly, such information should be read in conjunction with both Systems' financial statements for the year ended June 30, 2014, from which the information was derived. Certain reclassifications have been made to the 2014 totals to conform with the classifications for 2015.

#### Note 3 - Designations of Net Position - Restricted for Pensions

The Systems designate the net position – restricted for pensions for the following specific purposes:

#### **Public School Retirement System of Missouri**

	2015
<b>Designated for Members' Contributions (Member Reserves)</b> – Accumulation of active and terminated member contributions plus interest.	\$ 7,714,058,304
<b>Designated for the Payment of Benefits to Present Retirees</b> – Transfers from Member Reserves at retirement and an actuarially determined transfer from Operating Reserves to fund the System's obligation for benefit payments and cost-of-living adjustments to current retirees and beneficiary recipients.	24,674,170,165
Designated for Operating Expenses/Benefits to Future Retirees (Operating Reserves) – Accumulation of employer contributions and investment income used to fund future benefit payments, interest on member accounts and, administration and maintenance expenses of the System.	2,989,451,036
Net Position – Restricted For Pensions	\$ 34,837,679,505

#### Public Education Employee Retirement System of Missouri

	2015
<b>Designated for Members' Contributions (Member Reserves)</b> – Accumulation of active and terminated member contributions plus interest.	\$ 925,802,264
<b>Designated for the Payment of Benefits to Present Retirees</b> – Transfers from Member Reserves at retirement and an actuarially determined transfer from Operating Reserves	
to fund the System's obligation for benefit payments and cost-of-living adjustments to current retirees and beneficiary recipients.	2,040,647,078
Designated for Operating Expenses/Benefits to Future Retirees (Operating Reserves) – Accumulation of employer contributions and investment income used to fund future	
benefit payments, interest on member accounts, and administration and maintenance expenses of the System.	 1,016,479
Net Position – Restricted For Pensions	\$ 3,983,410,821

# Note 4 – Deposits, Investments and Securities Lending Program

Custodial Credit Risks – Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, the Systems will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty to a transaction, the Systems would not be able to recover the value of investment or collateral securities that are in the possession of an outside party. To mitigate custodial credit risk, the Systems require that all deposits be 100% collateralized with securities held in the Systems' name and held by a third party agent.

**Deposits** – Cash balances include short-term securities held by the custodial bank in a pooled short-term investment fund and operating balances held by the depository banks.

At June 30, 2015, the PSRS carrying amount of deposits at the depository bank was \$9,573,214 and the bank balance was \$6,848,390. Of the bank balance, \$250,000 was covered by federal depository insurance. In addition the deposits were collateralized with U.S. agency securities held by a third-party institution in the System's name, totaling \$96,124,818. An additional \$2,717,251 was held in overnight repurchase agreements with a book value of \$2,717,251. The overnight repurchase agreements were collateralized with U.S. agency securities held by a third-party institution in the System's name totaling \$2,717,251.

At June 30, 2015, the PEERS carrying amount of deposits at the depository bank was \$967,109 and the bank balance was \$431,010. Of the bank balance, \$250,000 was covered by federal depository insurance. In addition the deposits were collateralized with U.S. agency securities held by a third-party institution in the System's name, totaling \$4,677,289. An additional \$566,466 was held in overnight repurchase agreements with a book value of \$566,466. The overnight repurchase agreements were collateralized with U.S. agency securities held by a third-party institution in the System's name totaling \$566,466.

**Investment Policy and Asset Allocation** – Funds for both Systems that are in excess of a safe operating balance are invested under policies and procedures established by the Board of Trustees. Chapter 169.040 RSMo as amended effective August 13, 1984, authorizes any investment which a prudent person acting in a like

capacity and familiar with similar matters would use in the conduct of an enterprise of a like character and with like aims. Any person with fiduciary responsibility with respect to the Systems is covered by this "prudent person" rule.

The Board of Trustees of PSRS and PEERS approved the commingling of assets for purposes of investment as allowed by state statute. In order to implement this change, PSRS and PEERS adopted the Missouri Education Pension Trust Agreement. The Missouri Education Pension Trust (MEPT) is managed by the PSRS and PEERS Board of Trustees and Investment Staff. Effective July 1, 2013, the invested assets of the Systems were pooled and invested in MEPT. All assets held by MEPT are for the exclusive benefit of PSRS and PEERS. Each of the Systems has equity in MEPT based on funds contributed and earnings allocated. Earnings of MEPT are allocated based on the average daily balances of each of the respective Systems. Individual investments in MEPT are not specifically identified to the respective Systems. For financial statement presentation, MEPT assets, liabilities, revenues, and expenses have been allocated to and presented in each respective system in the basic financial statements as required by investment pools. Due to the fact all invested assets are invested in MEPT, the rate of return for each of the Systems is approximately the same. The Systems' policy in regard to the allocation of invested assets is established and may be amended by the Board of Trustees. System assets are managed on a total return basis with a long-term objective of achieving and maintaining a fully funded status for the benefits provided by the Systems. The following was the Systems' Board of Trustees approved asset allocation as of June 30, 2015:

Investment Type	Long-term Target	Policy Ranges
Public Risk Asset Programs		
U.S. Public Equity	27.0%	16% - 48%
Public Credit	12.0%	0% - 20%
Hedged Assets	6.0%	0% - 25%
Non-U.S. Public Equity	<u>15.0%</u>	8% - 28%
Total Public Risk Assets	60.0%	35% - 75%
Safe Assets		
U.S. Treasuries	16.0%	0% - 40%
U.S. TIPS	4.0%	0% - 40%
Cash Equivalents	0.0%	0% - 10%
Total Safe Assets	20.0%	10% - 40%
Private Risk Asset Programs		
Private Equity	10.5%	4% - 14%
Private Real Estate	7.5%	4% - 10%
Private Credit	2.0%	<u>0% - 7%</u>
<b>Total Private Risk Assets</b>	20.0%	5% - 25%
Total Fund	<u>100.0%</u>	

#### Rate of Return

For the year ended June 30, 2015, the money-weighted rate of return, net of all investment expenses and fees was 4.5%. The money weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested. Time weighted returns (geometric return) for the year ended June 30, 2015 net of all investment expenses and fees, was 4.5%.

#### Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the Systems' investment in a single issue. To mitigate this risk, the Systems' investment policy prohibits investing more than 5% of the total investment portfolio into any single financial institution or issuer, excluding U.S. government securities. At June 30, 2015, the Systems did not have more than 5% of total investments in a single issue except for U.S. government securities.

#### **FINANCIAL SECTION**

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Systems do not have a single investment policy that restricts duration as a means of managing its exposure to fair value losses arising from increased interest rates; however, each manager must follow guidelines established relative to the duration of its benchmark. The portfolios are continually monitored to ensure compliance with these guidelines. The following table includes collateral pledged for securities lending collateral. The maturities of all debt securities are presented below:

Security Type	Fair Value at June 30, 2015	< 1 year to maturity	1 to 5 years to maturity	6 to 10 years to maturity	Over 10 years to maturity
U.S. treasuries Agencies	\$ 8,774,882,988 15,537,537	\$ 3,673,225,663 12,006,037	\$ 3,053,559,813 3,531,500	\$ 1,066,488,852 -	\$ 981,608,660
Collateralized mortgage obligation	s 24,094,038	-	-	-	24,094,038
Commercial mortgage backed secu	rities 1,661,267	-	-	-	1,661,267
Asset backed securities	4,311,211	-	1,495,527	904,945	1,910,739
Corporate bonds	2,175,102,031	47,081,879	1,168,202,462	815,256,790	144,560,900
Sovereign	47,839,546	803,972	6,527,700	21,215,276	19,292,598
Repurchase agreements	102,079,990	102,079,990	-	-	-
Commercial Paper	7,588,674	7,588,674	-	-	-
Certificate of Deposit	105,006,529	105,006,529	-	-	-
Time Deposits	11,000,000	11,000,000	-	-	-
Derivatives	58,103	(119,514)	(1,236,098)	283,005	1,130,710
Municipals	13,352,829	-	-	3,370,093	9,982,736
Commingled Funds (see note)					
JPM STIF	743,496,030	743,496,030	-	-	-
BlackRock TempFund	5,000,000	5,000,000	-	-	-
Bridgewater STIF II	35,866,142	35,866,142	-	-	-
Bridgewater US IL Bond Fund	13,238,910	-	-	13,238,910	-
Bridgewater International Bond Fund	16,422,862	-	-	-	16,422,862
PIMCO Developing Markets	161,573,119	161,573,119	-	-	-
PIMCO Short Term Floating NAV II	27,966,039	27,966,039	-	-	-
Currency	27,781,268	27,781,268	-	-	
Total	\$ 12,313,859,113	\$ 4,960,355,828	\$ 4,232,080,904	\$ 1,920,757,871	\$ 1,200,664,510
Percentage of Total Fixed Income	100%	40%	34%	16%	10%

Note: Commingled Funds are presented at the weighted average maturity. These funds do not have a single maturity date; however, the underlying securities have maturity dates. To more accurately reflect the interest rate risk of the Systems, these weighted averages are displayed.

The following table includes the debt maturities for the Systems' deposits and repurchase agreements collateral.

Security Type	Fair Value at June 30, 2015	< 1 year to maturity	1 to 5 years to maturity	6 to 10 years to maturity	Over 10 years to maturity
PSRS - Agencies	\$ 98,842,069	\$ -	\$ 80,701,428	\$ 1,417,598	\$ 16,723,043
PEERS - Agencies	5,243,755	-	135,457	699,978	4,408,320

#### Credit Risk

Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Systems do not have a single investment policy designating the minimum allowable credit rating; however, each manager must follow guidelines established specifically for its managed portfolio. The portfolios are continually monitored to ensure compliance with these guidelines. The following tables include collateral pledged for securities lending collateral. The Systems' debt investments by credit rating category as of June 30, 2015 are presented in the following tables.

Security Type	Fair Value at June 30, 2015	%	AAA	AA	A	BBB	ВВ	В	CCC	Not Rated
U.S. treasuries	8,774,882,988	72%	\$8,774,882,988	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Agencies	15,537,537	0%	9,999,917	5,537,620	-	-	-	-	-	-
Collateralized mortgage obligations	24,094,038	0%	-	15,714,789	635,155	706,584	74,819	723,663	3,723,387	2,515,641
Commercial mortgage- backed securities	1,661,267	0%	959,519	217,708	105,662	378,378	-	-	-	-
Asset backed securities	4,311,211	0%	150,770	208,241	1,567,689	905,047	-	329,953	1,149,511	-
Corporate bonds	2,175,102,031	19%	45,455,108	146,319,048	778,003,051	758,100,476	191,257,395	229,033,702	6,814,179	20,119,072
Sovereign	47,839,546	0%	4,590,582	1,977,213	5,060,497	22,787,064	7,948,298	697,875	4,778,017	-
Repurchase agreements	102,079,990	1%	102,079,990	-	-	-	-	-	-	-
Commercial paper	7,588,674	0%	7,588,674	-	-	-	-	-	-	-
Certificates of deposit	105,006,529	1%	105,006,529	-	-	-	-	-	-	-
Time Deposits	11,000,000	0%	11,000,000	-	-	-	-	-	-	-
Derivatives	58,103	0%	-	-	-	-	-	-	-	58,103
Municipals	13,352,829	0%	-	792,314	217,752	-	2,712,690	9,630,073	-	-
Commingled Funds (se	e note)									
JPM STIF	743,496,030	6%	743,496,030	-	-	-	-	-	-	-
BlackRock TempFund	5,000,000	0%	5,000,000	-	-	-	-	-	-	-
Bridgewater STIF II	35,866,142	0%	35,866,142	-	-	-	-	-	-	-
Bridgewater US IL Bond Fund	13,238,910	0%	-	13,238,910	-	-	-	-	-	-
Bridgewater International Bond Fu	and 16,422,862	0%	16,422,862	-	-	-	-	-	-	-
PIMCO Developing Markets	161,573,119	1%	-	161,573,119	-	-	-	-	-	-
PIMCO Short Term Floating NAV II	27,966,039	0%	-	27,966,039	-	-	-	-	-	-
Currency	27,781,268	0%	-	-	-	-	-	-	-	27,781,268
Total	12,313,859,113	100%	\$ 9,862,499,111	\$373,545,001	\$785,589,806	\$782,877,549	\$201,993,202	\$240,415,266	\$16,465,094	\$50,474,084
Percentage of Total Fixe	ed Income	100%	80%	3%	6%	6%	2%	2%	0%	1%

Note: Commingled Funds are presented at the weighted average credit quality. These funds do not carry a rating in and of themselves; however, the underlying securities are all rated. To more accurately reflect the credit risk of the Systems, these weighted averages are displayed. Obligations of the U.S. government or obligations explicitly guaranteed by the U.S. government are not required to be disclosed; however, we feel it shows a more true picture of our fixed income holdings.

All collateral pledged in support of the Systems' deposits and repurchase agreements was held in agency securities with a quality rating of AA.

#### **FINANCIAL SECTION**

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit. The Systems do not have a single investment policy designating the allowable exposure to foreign currency; however, each manager must follow guidelines established specifically for its managed portfolio. The portfolios are continually monitored to ensure compliance with these guidelines. The Systems' exposure to foreign currency risk as of June 30, 2015 is presented in the following table.

Currency	Debt	Equity	Currency/Short Term	Total
Australian Dollar	\$ 4,105,332	\$ 124,904,743	\$ (64,759)	\$ 128,945,316
Brazilian Real	1,185,071	69,813,495	541,680	71,540,246
British Pound Sterling	23,970,492	422,316,056	(989,251)	445,297,297
Canadian Dollar	-	177,349,806	399,551	177,749,357
Chilean Peso	-	2,338,695	(50,537)	2,288,158
Czech Koruna	-	1,287,582	1,527	1,289,109
Danish Krone	-	36,729,019	367,338	37,096,357
Egyptian Pound	-	100,907	24,024	124,931
Euro Currency	113,583,209	914,117,079	9,516,962	1,037,217,250
Hong Kong Dollar	-	211,314,351	397,817	211,712,168
Hungarian Forint	-	1,650,437	(13,434)	1,637,003
Indian Rupee	-	51,898,278	243,880	52,142,158
Indonesian Rupiah	-	12,717,149	251,497	12,968,646
Israeli Shekel	-	6,653,884	74,095	6,727,979
Japanese Yen	-	448,346,162	2,137,668	450,483,830
Malaysian Ringgit	-	21,353,456	426,054	21,779,510
Mexican Peso	4,425,928	18,124,887	492,799	23,043,614
New Taiwan Dollar	-	49,768,549	210,299	49,978,848
New Turkish Lira	-	10,486,794	(16,685)	10,470,109
New Zealand Dollar	-	18,783,296	(24,556)	18,758,740
Norwegian Krone	-	908,977	59,871	968,848
Peruvian Nuevo Sol			(181)	(181)
Philippine Peso	-	10,533,535	16,692	10,550,227
Polish Zloty	-	13,618,611	134,431	13,753,042
Qatari Rial	-	5,518,699	-	5,518,699
Russian Ruble	-	102	-	102
Singapore Dollar	-	53,405,058	189,553	53,594,611
South African Rand	-	47,136,969	486,732	47,623,701
South Korean Won	-	63,289,053	233,834	63,522,887
Swedish Krona	-	66,901,846	316,468	67,218,314
Swiss Franc	745,939	172,167,425	144,110	173,057,474
Thailand Baht	-	5,823,780	165,334	5,989,114
UAE Dirham	-	390,072	21,671	411,743
Yuan Renminbi		1,290,208	1,146	1,291,354
Total	\$ 148,015,971	\$ 3,041,038,960	\$ 15,695,630	\$ 3,204,750,561

#### **Derivatives**

Derivatives are generally defined as investment instruments whose cash flows or fair values are derived from the value of some other asset or index. The Systems are parties to derivatives which have off-balance sheet risk. These derivative instruments are used in the normal course of business to generate earnings and reduce exposure to fluctuations in market conditions. The Systems are exposed to various types of credit, market and legal risk related to these investments. Investment staff monitors these types of investments with extreme care and is not aware of any undue risks at this time. All derivatives are considered investments. Derivatives are reported at fair value on the Statements of Fiduciary Net Position based on quoted market prices when available. In the instances that quoted market prices are unavailable, pricing is obtained via independent pricing sources.

The fair value balances and notional amounts of derivative instruments outstanding as of June 30, 2015, classified by type are as follows:

	Fair Value at June	Fair Value at June 30, 2015			
Investment Derivatives	Classification		Amount		Notional
Swaps					
Receive-fixed interest rate swap	Investments, at fair value	\$	77,283	\$	459,893,634
Credit default swaps	Investments, at fair value		(320,003)		97,694,940
Total return swaps - equity	Investments, at fair value		(51,697,954)		3,659,175,700
Total swaps			(51,940,674)		4,216,764,274
Futures					
Equity futures long	Investments, at fair value		-		124,901,927
Equity futures short	Investments, at fair value		-		69,088,934
Treasury futures long	Investments, at fair value		-		1,597,219
Treasury futures short	Investments, at fair value		-		5,333,061
Currency futures short	Investments, at fair value		-		81,306,800
Commodity futures long	Investments, at fair value		-		23,914,400
Total futures			-		306,142,341
Options					
Fixed income written call options	Investments, at fair value		(143,756)		35,278,988
Fixed income written put options	Investments, at fair value		(102,995)		40,682,622
Swaptions	Investments, at fair value		(192,745)		57,400,000
Total options			(439,496)		133,361,610
Foreign currency forwards net receivable/payable	Investment Sales and Purchases		(1,755,192)		-
Total Investment Derivatives		\$	(54,135,362)	\$	4,656,268,225

**Swaps** - The Systems' investment managers have entered into various swaps including interest rate swaps, credit default swaps and equity and total return swaps. Swaps represent an agreement between two parties to exchange sequences of cash flows over a period in the future. In the most common type of interest rate swap arrangement, one party agrees to pay fixed interest payments on designated dates to a counterparty who, in turn, agrees to make return interest payments that float with some reference rate. A credit default swap is a contract whereby the credit risk associated with an investment is transferred by entering into an agreement with another party, who in exchange for periodic fees, agrees to make payments in the event of a default or other predetermined credit event. A total return swap is a contract in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of the underlying asset. The underlying asset is typically an index, bond,

#### **FINANCIAL SECTION**

etc. Gains and losses on swaps are determined based on market values and are recorded in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Fiduciary Net Assets. Net gains on swaps of \$110.5 million were recognized for the fiscal year ended June 30, 2015.

**Futures** - Futures represent commitments to purchase (asset) or sell (liability) securities at a future date and at a specified price. Futures contracts are traded on organized exchanges (exchange traded) thereby minimizing the Systems' credit risk. The net change in the value of futures contracts is settled daily in cash with the exchanges. Net gains or losses resulting from the daily settlements are included in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Fiduciary Net Assets. The Systems recognized net losses on futures contracts of \$0.8 million during the fiscal year ended June 30, 2015.

**Options** - Options represent or give buyers the right, but not the obligation, to buy (call) or sell (put) an asset at a preset price over a specified period. The option's price is usually a small percentage of the underlying asset's value. As a writer of financial options, the Systems' investment managers receive a premium at the outset of the agreement and bear the risk of an unfavorable change in the price of the financial instrument underlying the option. As a purchaser of financial options, the Systems' investment managers pay a premium at the outset of the agreement and the counterparty bears the risk of

an unfavorable change in the price of the financial instrument underlying the option. Net gains or losses resulting from such obligations are included in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Fiduciary Net Position. The Systems recognized net gains on option contracts of \$0.4 million during the fiscal year ended June 30, 2015.

Currency forwards - Currency forwards represent forward foreign exchange contracts that are entered into in order to hedge the exposure to changes in foreign currency rate on the foreign currency dominated portfolio holdings. A forward foreign exchange contract is a commitment to purchase or sell a foreign currency at a future date at a negotiated forward rate. The gain or loss arising from the difference between the original contracts and the closing of such contracts is included in net appreciation (depreciation) in fair value of investments on the Systems' Statements of Changes in Fiduciary Net Position. The Systems recognized net gains on such contracts of \$36.3 million during the fiscal year ended June 30, 2015.

**Derivative Risk** - Derivatives that are exchange traded are not subject to credit risk. No derivatives held are subject to custodial credit risk.

At June 30, 2015 the counterparties' credit ratings for currency forwards, options and swaps are subject to credit risk as shown below:

Derivative Counterparty Credit Ratings						
Quality Rating	Swaps	Options	Forwards	Total		
AA	\$ (1,843)	\$ -	\$ 262,885	\$ 261,042		
A	(52,208,867)	(439,496)	(2,018,077)	(54,666,440)		
Total subject to credit risk	\$ (52,210,710)	\$ (439,496)	\$ (1,755,192)	\$ (54,405,398)		

The Systems are exposed to interest rate risk on their interest rate swaps. As the variable portion of the swaps move in the market, the Systems' exposure increases and decreases. The Systems are exposed to termination risk. The Systems' investment managers or their counterparties may terminate a derivative if the either party fails to perform under the terms of the contract.

The Systems' derivatives are governed by ISDA Master Agreements between the Systems and the Counterparties. These agreements set forth collateral requirements and applicable netting arrangements. Foreign currency risks are reflected on page 18.

The Systems could be exposed to risk if the counterparties to the contracts are unable to meet the terms of the contracts. The Systems' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. The Systems anticipate that the counterparties will be able to satisfy their obligations under the contracts.

The derivative financial instruments discussed involve, to varying degrees, elements of market risk to the extent of future market movements in excess of the amounts recognized in the Statements of Fiduciary Net Position. Market risk arises from the potential unfavorable change in the value of the underlying instruments. The contract or notional amounts of these instruments reflect the extent of the Systems' involvement in each class of financial instrument; however, these amounts do not represent the exposure to market loss. Additional derivatives may be held in limited partnerships and commingled funds that are not reflected above.

Security Lending Activity – Under the "prudent person" authority of the governing statutes and in accordance with the policies set by the Board of Trustees, the Systems lend securities to broker-dealers and banks pursuant to a form of loan agreement. The Systems' custodial bank is authorized to act as the Systems' agent to lend available securities to approved broker-dealers and banks subject to the receipt of acceptable collateral.

During the fiscal year, the Systems' custodial bank lent, on behalf of the Systems, securities to participating broker-dealers. The broker-dealers must provide collateral in the form of cash. The Systems did not impose restrictions during the fiscal year on the amount

of loans that the custodial bank made on their behalf. Borrowers were required to deliver collateral for each loan equal to: (1) in the case of loaned securities denominated in U.S. dollars or whose primary trading market was located in the United States, or sovereign debt issued by foreign governments, 102% of the fair value of the loaned securities and (2) in the case of loaned securities not denominated in U.S. dollars or whose primary trading market was not located in the United States, 105% of the fair value of the loaned securities.

Pursuant to the lending agreement, the custodial bank has an obligation to provide a form of indemnification to the Systems in the event of default by a borrower. There were no violations of the contractual provisions nor were there any borrower or lending agent default losses during the fiscal year.

The market value of securities on loan as of June 30, 2015 was \$403,643,058. On June 30, 2015 the Systems had no credit risk exposure to borrowers as the cash and securities collateral amounts received exceeded amounts on loan. Loans are generally terminable on demand. However, with the prior approval of the Systems, loans may be made on the basis of a specified termination date, with or without providing for the right of the Systems to terminate or substitute equivalent securities. As of June 30, 2015, there were no term loans.

Cash collateral is invested in separately managed accounts in accordance with the investment guidelines approved by the Systems. The primary investment objective is the preservation of principal. As of June 30, 2015, the cost basis of the invested cash collateral totaled \$415,680,317 and the estimated market value totaled \$415,683,769.

PSRS recognized net depreciation of \$4,273 for the year ended June 30, 2015 on the invested collateral account. Such is reported as net appreciation (depreciation) in fair value of security lending collateral on the Statements of Changes in Fiduciary Net Position.

The weighted average duration of invested collateral as of June 30, 2015 was 14 days and an average final maturity of approximately 24 days. Because the loans were terminable at will, their duration did not match the duration of the investments made with cash collateral.

#### Note 5 - Net Pension Liability of Employers

The components of the net pension liability of the Systems' employers at June 30, 2015 are as follows:

	Total Pension Liability (TPL) (a)	Fiduciary Plan Net Position-Restricted for Pensions (b)	Net Pension Liability (NPL) (a - b)	Fiduciary Plan Net Position as a % of TPL (b/a)	Covered Employee Payroll (c)	Employers' NPL as a % of Covered Payroll ((b-a)/c)
PSRS	\$ 40,610,539,616	\$34,837,679,505	\$5,772,860,111	85.8%	\$ 4,508,241,581	128.1%
PEERS	\$ 4,512,316,979	\$ 3,983,410,821	\$ 528,906,158	88.3%	\$ 1,469,771,528	36.0%

**Actuarial Assumptions** - Actuarial valuations of the Systems involve estimates of the reported amount and assumptions about 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 conducted in 2011 and the next experience study is scheduled for 2016.

The Schedules of Employer's Net Pension Liability presents multi-year trend information about whether the plan net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the required supplementary information following the notes to the financial statements. The total pension liability was determined by an actuarial valuation as of June 30, 2015. A summary of the actuarial assumptions as of June 30, 2015 are shown below.

Measurement Date	June 30, 2015
Valuation Date	June 30, 2015
Actuarial Cost Method	Entry Age Normal
Investment Rate of Return	8.00%
Inflation	2.50%
<b>Total Payroll Growth</b> PSRS	3.50% per annum, consisting of 2.50% inflation, 0.50% additional inflation due to the inclusion of health care costs in pension earnings, and 0.50% of real wage growth.
PEERS	3.75% per annum, consisting of 2.50% inflation, 0.75% additional inflation due to the inclusion of health care costs in pension earnings, and 0.50% of real wage growth.
Future Salary Increases	
PSRS	4.00% - $10.00%$ , depending on service and including $2.50%$ inflation, $0.50%$ additional inflation due to the inclusion of health care costs in pension earnings, and real wage growth of $1.00%$ to $7.00%$ .
PEERS	5.00% - 12.00%, depending on service and including 2.50% inflation, 0.75% additional inflation due to the inclusion of health care costs in pension earnings, and real wage growth of 1.75% to 8.75%.
Cost-of-Living Increases	
PSRS	2.0% compounded annually, beginning on the second January after retirement and capped at 80% lifetime increase.
PEERS	2.0% compounded annually, beginning on the fourth January after retirement and capped at 80% lifetime increase.
Mortality Assumption Actives:	
PSRS	RP 2000 Mortality Table set back one year for males and six years for females, then projected to 2016 using Scale AA.
PEERS	RP 2000 Mortality Table set back one year for males and six years for females, then projected to 2016 using Scale AA.
Non-Disabled Retirees, Beneficiaries and Survivors:	
PSRS	RP 2000 Mortality Table set back one year for both males and females, then projected to 2016 using Scale AA.
PEERS	RP 2000 Mortality Table set forward one year for males and no set back/forward for females, then projected to 2016 using Scale AA.
Disabled Retirees:	RP 2000 Disabled Mortality Table

The sensitivity of the net pension liability of employers to changes in the discount rate is presented below. The net pension liability of employers calculated using the discount rate of 8.0% is presented as well as what the employers' net pension liability would be using a discount rate that is 1.0% lower (7.0%) or 1.0% higher (9.0%) than the current rate.

		1% Decrease (7.0%)	Current Rate (8.0%)	1% Increase (9.0%)	
PSRS	Net Pension Liability (Asset)	\$ 10,617,339,855	\$ 5,772,860,111	\$ 1,704,037,041	
PEERS	Net Pension Liability (Asset)	\$ 1,067,774,408	\$ 528,906,158	\$ 73,339,657	

The long-term expected rate of return on the Systems' investments was determined using a building-block method in which best-estimate ranges of expected future real rates of returns (expected returns, net of investment expense and inflation) were developed for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Systems' target allocation as of June 30, 2015 are summarized below along with the long term geometric return. Geometric return (also referred to as the time weighted return) is considered standard practice within the investment management industry. Geometric returns represent the compounded rate of growth of a portfolio. The method eliminates the effects created by cashflows.

Asset Class	Target Asset Allocation	Long-term Expected Real Return Arithmetic Basis	Weighted Long-term Expected Real Return Arithmetic Basis	
U.S. Public Equity	27.0 %	5.85 %	1.58 %	
Public Credit	12.0 %	2.44 %	0.29 %	
Hedged Assets	6.0 %	5.22 %	0.31 %	
Non-U.S. Public Equity	15.0 %	6.64 %	1.00 %	
U.S. Treasuries	16.0 %	1.01 %	0.16 %	
U.S. TIPS	4.0 %	1.12 %	0.04 %	
Private Credit	2.0 %	7.61 %	0.15 %	
Private Equity	10.5 %	8.61 %	0.90 %	
Private Real Estate	7.5 %	4.60 %	0.35 %	
Total	100.0 %		4.78 %	
		Inflation	2.50 %	
	Long term as	Long term arithmetical nominal return effect of covariance matrix		
	Long term	8.09 %		

The discount rate used to measure the total pension liability was 8.0% as of June, 30, 2015, and is consistent with the long-term expected geometric return on plan investments. The projection of cash flows used to determine the discount rate assumed that employer contributions would be made at the actuarially calculated rate computed in accordance with assumptions and methods stated in the funding policy adopted by the Board of Trustees, which requires payment of the normal cost and amortization of the unfunded actuarially accrued liability in level percent of employee payroll installments over 30 years utilizing a closed period, layered approach. Based on this assumption, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members.

#### Note 6 - Retirement Plans

#### Section 401(a) Defined Benefit Plan

All full-time System employees holding valid Missouri educator certificates are covered by PSRS. All other eligible employees are members of PEERS. Both Systems provide retirement and disability benefits, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. Chapter 169 RSMo contains the statutory provisions of both Systems.

PSRS members were required to contribute 14.5% of their annual covered salary during fiscal years 2015, 2014 and 2013. PSRS, as the employer, was required to match that amount. The contribution rate is set each year by the Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions set in Section 169.030 RSMo. Employer contributions to PSRS totaled \$24,712 for the 2015 fiscal year, \$24,975 for the 2014 fiscal year and \$30,474 for the 2013 fiscal year. The amounts for these years are equal to the required contributions.

PEERS members were required to contribute 6.86% of their annual covered salary during fiscal years 2015, 2014 and 2013. PSRS, as the employer, was required to match that amount. The contribution rate is set each year by the Board of Trustees upon the recommendation of the independent actuary within the contribution restrictions in Section 169.620 RSMo. Employer contributions to PEERS totaled \$669,966 for the 2015 fiscal year, \$625,876 for the 2014 fiscal year and \$595,935 for the 2013 fiscal year. The amounts for these years are equal to the required contributions.

PSRS and PEERS, as the administrators for the defined pension plans, are also participating employers of the Systems. The administrative expenses of the Systems are included in the deductions to the Systems' fiduciary net position. While the employer contributions of the other participating employers are funded from outside revenue sources, the employer contributions of PSRS and PEERS are funded from sources already recognized as revenues, such as earnings on plan investments or contributions paid by the other participating employers. Attempting to allocate a portion of the net pension liability to PSRS and PEERS would result in an allocation of the net pension liability to the other participating employers.

Accordingly, PSRS and PEERS will exclude its contributions from the employer proportionate share

calculation for the reporting of a net pension liability, by assigning itself a proportionate share of 0%. This exclusion in essence shifts the portion of the net pension liability that would accrue to PSRS and PEERS to the other participating employers.

#### Section 457 Deferred Compensation Plan

A voluntary Section 457 deferred compensation plan is administered to provide additional retirement benefits for employees. The plan provides for employer-matching contributions up to a set maximum. The total contributions are subject to the limitations established in IRC Section 457. The Board of Trustees has authority to establish the employer contribution levels. For most employees, the System will match \$50 plus 0.52% of salary per month. For certain employees, the System will make employer-paid contributions of \$18,000 per year plus \$6,000 in catch up contributions, if eligible. This is governed by individual employment contracts as approved by the Board of Trustees.

All employees immediately vest in the employer-matching and employer-paid contributions. Employer-matching contributions totaled \$107,756 and employer-paid contributions totaled \$64,250 for the 2015 fiscal year. Employee contributions totaled \$313,395 for the 2015 fiscal year.

Maintenance of individual member accounts and custody of assets have been contracted to a third-party administrator and investment custodian. Total contributions are sent directly to the third-party administrator by the employer. Employees can self-direct investments of their contributions and their respective share of matching contributions in a number of investment options. Because the System does not hold the plan's assets and does not have significant administrative responsibilities, the plan's assets and changes in net assets are not reported in the Systems' financial statements..

# Note 7 – Other Post-Employment Benefit Plans

#### Post-Employment Staff Retiree Healthcare Plan

Plan Description and Funding Policy – The Public School Retirement System of Missouri Staff Retiree Healthcare Program (SRHP) is a single-employer defined benefit other post-employment benefit (OPEB) plan administered by PSRS. SRHP provides a healthcare premium implicit rate subsidy to eligible staff retirees and their dependents provided they pay 100% of the blended healthcare premium. The blended healthcare premium is based on all active and retired employees. Retiree healthcare benefits are funded on a pay-as-yougo basis, with premiums determined annually. The PSRS/PEERS Board of Trustees determines the funding of benefits and any benefit amendments. There is no continuing obligation to provide benefits beyond each calendar year. SRHP does not issue a stand-alone public financial reportt.

Annual OPEB Cost and Net OPEB Obligation – PSRS' annual OPEB cost (expense) is calculated based on the annual required contribution (ARC) of the employer, an amount actuarially determined in accordance with the parameters of Governmental Accounting Standards Board (GASB) Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed 30 years.

PSRS' annual OPEB cost, the amount actually contributed to the plan and changes in the net OPEB obligation are as follows:

Annual required contribution Interest on net OPEB obligation	\$ 314,000 47,900
Amortization of net OPEB obligation Annual OPEB cost Contributions made	(47,100) 314,800 69,600
Increase in net OPEB obligation Net OPEB obligation - beginning of year Net OPEB obligation - end of year	245,200 1,452,400 \$ 1,697,600

PSRS' annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year 2014 and the two preceding years are as follows:

Fiscal Year Ended	Annual OPEB Cost (AOC)	% of AOC Contributed	Net OPEB Obligation
6/30/2013	\$ 305,800	18.2 %	\$ 1,199,300
6/30/2014	\$ 316,900	20.1 %	\$ 1,452,400
6/30/2015	\$ 314,800	22.1 %	\$ 1,697,600

Funded Status and Funding Progress - SRHP's funded status and funding progress are summarized below:

Actuarial	Actuarial	Actuarial Accrued	Unfunded	Funded	Covered	UAAL as a
Valuation	Value of	Liability	AAL (UAAL)	Ratio	Payroll	% of
Date	Assets (a)	(AAL) (b)	(b - a)	(a/b)	(c)	Payroll ((b-a)/c)
6/30/15	\$ -	\$3,422,000	\$3,422,000	0.0%	\$9,046,100	37.8%

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality and healthcare cost trends. Amounts determined regarding the funded status of the plan and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Actuarial Method and Assumptions- Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the efforts of short—term volatility in actuarially accrued liabilities and the actuarial value of assets, consistent with the long-term perspectives of the calculations.

In the June 30, 2015 actuarial valuation, the following assumptions and method were used:

Actuarial Cost Method	Entry Age Normal
Actuarial Value of Assets	No Assets (pay-as-you-go)
Amortization Method	Level Percent Open
Remaining Amortization Period	30 Years
Actuarial Assumptions:	
Investment Rate of Return	3.3 % per year
Wage Inflation	3.5 % per year
Healthcare Trend	7.5% in fiscal year 2015, decreasing by one-half percentage point
	per year to an ultimate of 4.5% in fiscal year 2021 and after

#### Post-Employment Health Plan

PSRS maintains a Post-Employment Health Plan ("PEHP") for employees. Upon termination, an employee will receive payment at the rate of one day of pay for each two days of accrued sick leave up to 100 days of accrued sick leave (50 days paid). Any days above 100 will be forfeited. All payments under the PEHP in excess of \$1,000 will be transferred into a PEHP account which can be used to pay health insurance premiums for the employee or dependent at any time in the future. If an employee is retiring, the payments can be transferred back to PSRS on a monthly basis to cover the cost of health insurance for the retiree. The amount paid into the PEHP was \$2,178 for one employee during 2015. The cost was charged 62% to PSRS and 38% to PEERS.

#### Note 8 – Risk Management

The Systems are exposed to various risks of loss related to natural disasters, errors and omissions, loss of assets, torts, etc. The Systems have chosen to cover such losses through the purchase of commercial insurance. There have been no material insurance claims filed or paid during the past three years.

The Systems have a disaster recovery plan that provides for continued computer operations at a remote location should the retirement office be unavailable for normal operations.

# Note 9 – Commitments and Contingencies

Commitments to the future purchase of investments at June 30, 2015 totaled \$2,129,529,626.

Total unfunded capital commitments to private real estate, private equity and other alternative investments totaled approximately \$3.9 billion as of June 30, 2015. The unfunded commitments are not recorded in the Statements of Fiduciary Net Assets.

As discussed in Note 4 – Deposits, Investments and Securities Lending Program, the System's custodial bank is authorized to act as the Systems' agent regarding security lending transactions. The required collateral is then invested in collective investment pools, which are governed by Trust agreements. The Systems and their previous custodial bank are in dispute regarding the terms of the Trust agreement for the Quality D Short-Term Investment Fund (Quality D Fund). The previous

custodial bank believes the Trust Agreement provides them the ability to re-value the Systems' investments in the Quality D Fund based on a series of prior, System authorized, Custodial bank approved, redemptions. The Systems strongly contest such action. On October 14, 2009, the custodial bank revalued the Systems' investments in the Quality D Fund by reducing the value by approximately \$96 million. The Systems were then provided their revalued portion of the Quality D Fund as an in-kind distribution. The in-kind distribution was utilized to fund a customized collective investment pool to facilitate securities lending activity. The revaluation was based on net asset values as of October 13, 2009. The Systems strongly oppose such action and anticipate recovery of such amounts. The Systems filed a lawsuit in Cole County, Missouri Circuit Court against the custodial bank on September 18, 2009 in an attempt to prevent the custodial bank from taking such action. The Systems are proceeding with litigation to recover any amounts lost as a result of the custodial bank's action. The Systems terminated their custodial relationship with the previous custodian on October 1, 2010.

Certain other legal proceedings are pending with PSRS and PEERS arising from normal activities. Although unable to predict the outcome of these matters, the Systems believe the final outcome of these actions will not have a material adverse effect on the Systems' financial statements.

Required Supplementary Information

Schedules of Changes in the Employers' Net Pension Liability

	PS	RS	PE	ERS
Year Ended:	June 30, 2015	June 30, 2014	June 30, 2015	June 30, 2014
Total pension liability				
Service cost	\$ 836,085,151	\$ 849,712,130	\$ 156,599,641	\$ 159,672,364
Interest cost	3,019,050,250	2,885,182,982	333,780,285	315,131,402
Difference between actual and expected experience Assumption changes	598,417,056 -	226,591,816	45,518,402	(14,308,876)
Plan amendments/benefit changes	-	-	-	-
Benefit payments	(2,326,196,773)	(2,236,468,407)	(235,070,181)	(216,624,810)
Net change in total pension liability	2,127,355,684	1,725,018,521	300,828,147	243,870,080
Total pension liability - beginning of year	38,483,183,932	36,758,165,411	4,211,488,832	3,967,618,752
Total pension liability - end of year (a)	\$40,610,539,616	\$38,483,183,932	\$ 4,512,316,979	\$ 4,211,488,832
Plan Fiduciary Net Position				
Employer contributions	\$ 656,924,899	\$ 643,989,869	\$ 103,624,310	\$ 100,699,735
Member contributions	689,187,215	679,390,918	110,443,660	106,420,656
Net investment return	1,447,169,205	4,927,198,588	163,719,526	544,154,941
Benefit payments, including refunds of				
member contributions	2,326,196,773)	(2,236,468,407)	(235,070,010)	(216,624,810)
Administrative and other expenses	(10,013,601)	(8,919,201)	(5,629,551)	(4,840,432)
Net change in plan fiduciary net position	457,070,945	4,005,191,767	137,087,935	529,810,090
Plan fiduciary net position - beginning of year	34,380,608,560	30,375,416,793	3,846,322,886	3,316,512,796
Plan fiduciary net position - end of year (b)	\$ 34,837,679,505	\$34,380,608,560	\$ 3,983,410,821	\$ 3,846,322,886
Net pension liability - end of year (a-b)	\$ 5,772,860,111	\$ 4,102,575,372	\$ 528,906,158	\$ 365,165,946

 $Note: This schedule is intended \ to \ show \ information \ for \ ten \ years. \ Additional \ years \ will \ be \ displayed \ as \ they \ become \ available.$ 

#### Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri

Required Supplementary Information

Schedules of Employers' Net Pension Liability

#### Public School Retirement System of Missouri

Year Ended	Total Pension Liability (TPL) (a)	Plan Fiduciary Net Position- Restricted for Pensions (b)	Net Pension Liability (NPL) (a - b)	Plan Fiduciary Net Position as a % of TPL (b/a)	Covered Employee Payroll (c)	Employers' NPL as a % of Covered Payroll ((b-a)/c)
6/30/14	\$ 38,483,183,932	\$ 34,380,608,560 \$	4,102,575,372	89.3%	\$ 4,425,567,630	92.7%
6/30/15	40,610,539,616	34,837,679,505	5,772,860,111	85.8%	4,508,241,581	128.1%

#### Public Education Employee Retirement System of Missouri

Year Ended	Total Pension Liability (TPL) (a)	nn Fiduciary Net ion- Restricted for Pensions (b)	• ]	Net Pension Liability (NPL) (a - b)	Plan Fiduciary Ne Position as a % of TPL (b/a)	t Covered Employee Payroll (c)	Employers' NPL as a % of Covered Payroll ((b-a)/c)
6/30/14	\$ 4,211,488,832	\$ 3,846,322,886	\$	365,165,946	91.3%	\$ 1,442,700,979	25.3%
6/30/15	\$ 4,512,316,979	\$ 3,983,410,821	\$	528,906,158	88.3%	\$ 1,469,771,528	36.0%

Note: This schedule is intended to show information for ten years. Additional years will be displayed as they become available.

Required Supplementary Information Schedules of Employer Contributions

Public School Retirement System of Missouri

Actuarially Determined Contribution	Actual Employer Contributions	Contribution Excess/ (Deficiency) <sup>1</sup>	Actual Covered Member Payroll	Contributions as a Percentage of Covered Payroll
\$ 608,134,319	\$ 429,578,911	\$(178,555,408)	\$ 3,735,468,791	11.50%
644,969,214	472,216,630	(172,752,584)	3,935,138,583	12.00%
656,347,298	521,241,501	(135,105,797)	4,169,932,008	12.50%
669,643,988	563,454,487	(106,189,501)	4,334,265,285	13.00%
658,161,150	594,326,122	(63,835,028)	4,402,415,719	13.50%
684,366,766	594,732,137	(89,634,629)	4,248,086,693	14.00%
720,303,976	620,214,231	(100,089,745)	4,277,339,524	14.50%
507,232,268	634,040,335	126,808,067	4,372,691,966	14.50%
608,459,393	643,989,869	35,530,476	4,441,309,441	14.50%
666,438,984	656,924,899	(9,514,085)	4,530,516,545	14.50%
	Determined Contribution  \$ 608,134,319 644,969,214 656,347,298 669,643,988 658,161,150 684,366,766 720,303,976 507,232,268 608,459,393	Determined Contribution         Employer Contributions           \$ 608,134,319         \$ 429,578,911           644,969,214         472,216,630           656,347,298         521,241,501           669,643,988         563,454,487           658,161,150         594,326,122           684,366,766         594,732,137           720,303,976         620,214,231           507,232,268         634,040,335           608,459,393         643,989,869	Determined Contribution         Employer Contributions         Excess/ (Deficiency) <sup>1</sup> \$ 608,134,319         \$ 429,578,911         \$ (178,555,408)           644,969,214         472,216,630         (172,752,584)           656,347,298         521,241,501         (135,105,797)           669,643,988         563,454,487         (106,189,501)           658,161,150         594,326,122         (63,835,028)           684,366,766         594,732,137         (89,634,629)           720,303,976         620,214,231         (100,089,745)           507,232,268         634,040,335         126,808,067           608,459,393         643,989,869         35,530,476	Determined Contribution         Employer Contributions         Excess/ (Deficiency) <sup>1</sup> Member Payroll         Covered Member Payroll           \$ 608,134,319         \$ 429,578,911         \$ (178,555,408)         \$ 3,735,468,791           644,969,214         472,216,630         (172,752,584)         3,935,138,583           656,347,298         521,241,501         (135,105,797)         4,169,932,008           669,643,988         563,454,487         (106,189,501)         4,334,265,285           658,161,150         594,326,122         (63,835,028)         4,402,415,719           684,366,766         594,732,137         (89,634,629)         4,248,086,693           720,303,976         620,214,231         (100,089,745)         4,277,339,524           507,232,268         634,040,335         126,808,067         4,372,691,966           608,459,393         643,989,869         35,530,476         4,441,309,441

Public Education Employee Retirement System of Missouri

Year Ended June 30	Actuarially Determined Contribution	Actual Employer Contributions	Contribution Excess/ (Deficiency) <sup>1</sup>	Actual Covered Member Payroll	Contributions as a Percentage of Covered Payroll
2006	\$ 79,707,834	\$ 61,745,505	\$ (17,962,329)	\$ 1,122,645,545	5.50%
2007	89,945,503	69,235,160	(20,710,343)	1,204,089,739	5.75%
2008	90,727,016	77,988,839	(12,738,177)	1,299,813,983	6.00%
2009	96,775,289	85,915,562	(10,859,727)	1,374,648,992	6.25%
2010	95,560,084	91,478,725	(4,081,359)	1,407,365,000	6.50%
2011	90,816,155	90,816,155	-	1,369,776,094	6.63%
2012	95,094,785	95,094,785	-	1,386,221,356	6.86%
2013	87,013,816	97,059,313	10,045,497	1,414,858,790	6.86%
2014	98,497,846	100,699,735	2,201,889	1,467,926,166	6.86%
2015	105,739,092	103,624,310	(2,114,782)	1,510,558,455	6.86%

<sup>&</sup>lt;sup>1</sup>The annual statutory increase in the total contribution rate may not exceed 1% of pay for PSRS and 0.5% of pay for PEERS. The limitation on contribution increases resulted in a deficiency for some of the years presented. Contributions were funded to the maximum statutory limit each year.

### Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri

Required Supplementary Information
Schedules of Investment Returns

Year ended:20152014Annual money-weighted rate of return, net of all investment expenses4.3%16.7%Time-weighted rate of return, net of all investment expenses4.3%16.7%

Note: This schedule is intended to show information for ten years. Additional years will be displayed as they become available.

Notes to the Schedules of Required Supplementary Information

The information presented in the required supplementary schedule was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Changes in benefit terms:

PSRS: The 25-and-Out and 2.55% provisions were extended in 2007 through 2013. In 2013 the state legislature

provided a permanent extension of the 25-and-Out provision and extended the 2.55% provision to 2014.

PEERS: The 25-and-Out was extended in 2007 through 2013. In 2013 the state legislature provided a permanent

extension of the 25-and-Out provision.

Changes of assumptions: In 2006 and 2011, payroll growth, salary increases, assumed life expectancies and mortality were adjusted

to more closely reflect actual experienced. In 2011, the inflation rate was adjusted to 2.5% from 3.25% and annual cost- of-living adjustments were calculated in accordance with the newly adopted

funding policy.

Actuarially Methods

and Assumptions:

The actuarially determined contribution rates in the schedule of employers' contributions are calculated

as of June 30, two years prior to the end of the fiscal year in which contributions are reported. The following actuarial methods and assumptions were used to determine contribution rates reported in the schedule.

Actuarial Cost Method Entry Age Normal Level Percent of Payroll

**Amortization Method** Closed, level percent for 30 years

Remaining amortization period

PSRS 22.1 years PEERS 23.2 years

**Asset valuation method** 5-year smoothing of actual returns above or below expected returns

Inflation 2.50%

**Total Payroll Growth** 

PSRS 3.50% per annum, consisting of 2.50% inflation, 0.50% additional inflation due to the inclusion of

health care costs in pension earnings, and 0.50% of real wage growth.

PEERS 3.75% per annum, consisting of 2.50% inflation, 0.75% additional inflation due to the inclusion of

health care costs in pension earnings, and 0.50% of real wage growth.

**Future Salary Increases** 

PSRS 4.00% - 10.00%, depending on service and including 2.50% inflation, 0.50% additional inflation due to

the inclusion of health care costs in pension earnings, and real wage growth of 1.00% to 7.00%.

PEERS 5.00% - 12.00%, depending on service and including 2.50% inflation, 0.75% additional inflation due to

the inclusion of health care costs in pension earnings, and real wage growth of 1.75% to 8.75%.

Cost-of-Living Increases

PSRS 2.0% compounded annually, beginning on the second January after retirement and capped at 80%

lifetime increase.

PEERS 2.0% compounded annually, beginning on the fourth January after retirement and capped at 80%

lifetime increase.

**Mortality Assumption** 

Actives:

PSRS RP 2000 Mortality Table set back one year for males and six years for females, then projected to 2016

using Scale AA.

PEERS RP 2000 Mortality Table set back one year for males and six years for females, then projected to 2016

using Scale AA.

Non-Disabled Retirees, Beneficiaries and Survivors:

PSRS RP 2000 Mortality Table set back one year for both males and females, then projected to 2016 using

Scale AA.

PEERS RP 2000 Mortality Table set forward one year for males and no set back/forward for females, then

projected to 2016 using Scale AA.

Disabled Retirees: RP 2000 Disabled Mortality Table

**Investment Rate of Return** 8.0% net of investment and administrative expresses

Required Supplementary Information

Staff Retiree Health Plan - Defined Benefit OPEB Plan

	Schedule of Funding Progress							
Actuarial Valuation Date	Actuar Value Assets	of	Actuarial Accrued Liability (AAL)– (b)	Unfunded AAL (UAAL) (b - a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a % of Payroll ((b-a)/c)	
6/30/2013	\$	-	\$ 3,192,700	\$ 3,192,700	0.0%	\$8,425,400	37.9%	
6/30/2014	\$	-	\$ 3,340,100	\$ 3,340,100	0.0%	\$8,803,200	37.9%	
6/30/2015	\$	-	\$ 3,422,000	\$ 3,422,000	0.0%	\$ 9,046,100	37.8%	

Schedule of Employer Contributions					
Year Ended	Annual Required Contribution (ARC)	Employer Contributions	Percentage Contributed		
6/30/2013	\$ 305,300	\$ 55,700	18.2%		
6/30/2014	\$ 316,200	\$ 63,800	20.2%		
6/30/2015	\$ 314,000	\$ 69,600	22.2%		

#### Notes to the Schedules of Required Supplementary Information

The information presented in the required supplementary schedule was determined as part of the actuarial valuation at the date indicated. Additional information as of the latest actuarial valuation follows:

Entry Age Normal
No Assets (pay-as-you-go)
Level Percent Open
30 Years
3.3% per year
3.5% per year
7.5% in fiscal year 2015, decreasing by one-half percentage point per year to an ultimate of 4.5% in fiscal year 2021 and after

#### Schedules of Administrative Expenses

for the year ended June 30, 2015

	PSRS	PEERS	Combined Total
Personnel services	\$ 5,898,327	\$ 3,706,968	\$ 9,605,295
Professional services			
Actuarial services	149,288	94,785	244,073
Legal services	134,927	17,759	152,680
Technology consulting	191,724	117,509	309,233
Financial audit services	51,339	31,466	82,80
Legislative consulting	27,900	17,100	45,000
Other consultants	14,347	8,793	23,140
Insurance consulting	3,720	2,280	6,000
Total professional services	573,245	289,692	862,937
Communications			
Information and publicity	211,044	135,710	346,75
Postage	351,044	229,876	580,92
Member education	18,746	10,662	29,40
Telephone	30,463	18,664	49,12
Total communications	611,297	394,912	1,006,20
Miscellaneous			
Building and utilities	180,964	110,914	291,87
Insurance	145,060	1,026	146,08
Office	1,565,041	959,404	2,524,44
Staff development	149,350	91,576	240,92
Miscellaneous	166,898	74,711	241,60
Total miscellaneous	2,207,313	1,237,631	3,444,94
Depreciation expense	721,779	-	721,77
Total administrative expenses	\$ 10,011,961	\$ 5,629,203	\$ 15,641,16

#### Schedules of Investment Expenses

for the year ended June 30, 2015

	PSRS	PEERS	Combined Totals
Investment management expenses			
U.S. Treasuries and TIPS	\$ 4,118,346	\$ 457,594	\$ 4,575,940
U.S. public equities	67,462,957	7,495,884	74,958,841
Non-U.S. public equities	18,202,990	2,022,555	20,225,545
Public debt	6,676,994	741,888	7,418,882
Private equity	146,740,536	16,304,504	163,045,040
Private credit	171,010	19,001	190,011
Private real estate	47,447,200	5,271,911	52,719,111
Hedged assets	101,043,130	11,227,065	112,270,195
Total investment management expenses	391,863,163	43,540,402	435,403,565
Investment consultant fees	4,203,460	467,051	4,670,511
Custodial bank fees	494,739	54,971	549,710
Investment staff expenses	7,036,461	695,184	7,731,645
Commission recapture income	(222,790)	(25,123)	(247,913)
Total investment expenses	\$ 403,375,033	\$ 44,732,485	\$ 448,107,518
Security lending expenses			
Agent fees	\$ 890,224	\$ 98,914	\$ 989,138
Broker rebates	(3,258,681)	(362,076)	(3,620,757)
Total security lending expenses (income)	\$ (2,368,457)	\$ (263,162)	\$ (2,631,619)

### Public School Retirement System of Missouri and Public Education Employee Retirement System of Missouri

#### Schedules of Professional Services

for the year ended June 30, 2015

	 PSRS	PEERS	Comb	ined Totals
Actuarial services	\$ 149,288	\$ 94,785	\$	244,073
Legal expenses	134,927	17,759		152,686
Technology consulting	191,724	117,509		309,233
Financial audit services	51,339	31,466		82,805
Legislative consulting	27,900	17,100		45,000
Other consulting	14,347	8,793		23,140
Insurance consulting	3,720	2,280		6,000
Total fees	\$ 573,245	\$ 289,692	\$	862,937