

**EMPLOYEES RETIREMENT SYSTEM
OF THE CITY OF ST. LOUIS**

FINANCIAL STATEMENTS

September 30, 2016 and 2015

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

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Independent Auditors' Report

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

Report on the Financial Statements

We have audited the accompanying financial statements of the Employees Retirement System of the City of St. Louis (the System), a Pension Trust Fund of the City of St. Louis, Missouri, which comprise the statement of fiduciary net position as of September 30, 2016, and the related statement of changes in fiduciary net position for the year then ended and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of 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 System's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Employees Retirement System of the City of St. Louis as of September 30, 2016, and the changes in its fiduciary position for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

Prior Period Financial Statements

The financial statements of the Employees Retirement System of the City of St. Louis as of and for the year ended September 30, 2015, were audited by other auditors whose report dated February 29, 2016, expressed an unmodified opinion on these statements.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and the required supplementary information, as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements is required by the Governmental Accounting Standards Board, who considers it to be an essential part of the 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 auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the 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 an opinion on the System's financial statements as a whole. The Additional Financial Information, as listed in the table of contents, is presented for the purpose of additional analysis and is not a required part of the System's financial statements. Such information is the responsibility of the System's management and was derived from and relates directly to the underlying accounting and other records used to prepare the System's financial statements. The information has been subjected to the auditing procedures applied in the audit of the System's financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the information is fairly stated in all material respects in relation to the financial statements as a whole.

Kerber, Eck & Braeckel LLP

St. Louis, Missouri
February 27, 2017

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED

The following Management's Discussion and Analysis of the Employees Retirement System of the City of St. Louis (the System) provides an overview of the System's financial activities for the fiscal year ended September 30, 2016. This section should be read in conjunction with the System's financial statements and supplementary information.

Financial Highlights

The System's investments earned 10.03% for the fiscal year. This marked the fourth double-digit return in the last five years, reversing last year's (-3.1%) return. All market classes posted positive numbers for the fiscal year except hedge funds. This year's strong performance was highlighted by domestic and international equities both earning 13.5%. Energy master limited partnerships recouped some of their prior year's loss by recording a 12.5% return. Real estate continued its strong run with a 10.4% return. The System's fiduciary net position increased \$36.9 million to \$764.9 million.

Pension and retirement benefits increased 3.2% or \$1.9 million to \$60.9 million. The number of retirees and beneficiaries receiving a monthly benefit increased 1.8% to 4,486. Administrative expenses remained steady at \$722,000 when compared to the prior year.

Financial Statements

The financial report of the System consists of two financial statements: the Statement of Fiduciary Net Position and the Statement of Changes in Fiduciary Net Position. The Statement of Fiduciary Net Position provides the detail of the System's assets and related liabilities other than benefit obligations. The net position of the System reflects the resources available for future benefit payments. The Statement of Changes in Fiduciary Net Position provides the details of the System's activity during the year that lead to the change in plan fiduciary net position from the prior year.

In addition to the financial statements, the financial report contains the notes to the financial statements and supplemental information. These provide additional information for use in analyzing the financial statements and actuarial information related to the funded status of the System.

Financial Analysis

Total assets at September 30, 2016 of \$767.7 million were comprised of cash, investments, securities lending collateral and receivables. Investments increased \$37.1 million or 5.1% to \$764.5 million. Receivables remained steady and consisted of employer contributions and interest and dividend income. Currency exchange contracts ended FY 2016 as a net receivable compared to the net liability for FY 2015. The System continues to work with its master custodian, State Street Bank and Trust, to exit the securities lending program in a manner to minimize losses. The System continues to receive income from the assets on loan. Gross securities lending income was \$21,322 with assets on loan ending the fiscal year at \$2.2 million. However, the System incurred its first loss, \$15,662, on the sale of two securities in the lending pool based on State Street's recommendation that the market valuation on these securities have exceeded their intrinsic value.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED

Total liabilities at September 30, 2016 were \$2.8 million and consisted of accounts payable and securities lending collateral. The net decrease in liabilities of \$89,787 resulted from a reduction in accounts payable and the previously discussed balance of currency exchange contracts.

Net assets held in trust for pension benefits increased \$36.9 million to \$764.9 million.

Condensed Statement of Fiduciary Net Position

	September 30,		Total change	
	2016	2015	Amount	Percentage
Assets				
Cash	\$ 78,502	\$ 410,999	\$ (332,497)	-80.9%
Receivables	881,785	881,423	362	0.0%
Investments	764,509,199	727,399,504	37,109,695	5.1%
Securities lending collateral	2,201,107	2,198,427	2,680	0.1%
Currency exchange	33,914	-	33,914	100.0%
Total assets and deferred outflows	767,704,507	730,890,353	36,814,154	5.0%
Liabilities				
Accounts payable	602,327	662,100	(59,773)	-9.0%
Securities lending collateral liability	2,201,107	2,198,427	2,680	0.1%
Currency exchange	-	32,693	(32,693)	-100.0%
Total liabilities and deferred inflows	2,803,434	2,893,220	(89,786)	-3.1%
Net position held in trust for pension benefits	\$764,901,073	\$ 727,997,133	\$ 36,903,940	5.1%

Revenues – Additions to Fiduciary Net Position

The assets needed to finance retirement benefits are accumulated through the receipt of employer contributions, member purchases of creditable service and earnings on investments. Net investment income was \$66.5 million for the fiscal year. A solid investment performance generated sufficient earnings to cover retirement benefits and administrative expenses. Net investment income included custodial and investment management fees of \$3.2 million.

Employer contributions decreased \$3.4 million or 9.5% in FY 2016, almost entirely from a reduction in the recommended employer contribution rate. This rate reduction was primarily due to changes in the actuarial assumptions and methods adopted by the Board of Trustees after the actuarial experience study and new GASB standards. Member contributions were comprised entirely of purchase of creditable service by active members.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

MANAGEMENT'S DISCUSSION AND ANALYSIS - UNAUDITED

Expenses – Deductions from Fiduciary Net Position

The major expenses of the System include the payment of pension benefits to retirees and beneficiaries and administrative expenses. Other expenses within retirement benefits include refunds of member contributions and pension service transfer payments to other public plans within the State of Missouri which have a portability agreement with the System. Service transfer payments were \$38,375 and contribution refunds were \$528 in FY 2016. Administrative expenses slightly decreased \$630 in FY 2016 to \$722,132.

Condensed Statement of Changes in Fiduciary Net Position

	September 30,		Total change	
	2016	2015	Amount	Percentage
Additions				
Net investment income	\$ 66,460,934	\$(28,435,879)	\$ 94,896,813	-333.7%
Employer contributions	32,127,591	35,493,615	(3,366,024)	-9.5%
Member contributions	10,093	232,337	(222,244)	-95.7%
Total additions	98,598,618	7,290,073	91,308,545	1252.5%
Deductions				
Retirement benefits	60,972,546	59,065,812	1,906,734	3.2%
Administrative expenses	722,132	722,762	(630)	-0.1%
Total deductions	61,694,678	59,788,574	1,906,104	3.2%
Changes in fiduciary net position	\$ 36,903,940	\$(52,498,501)	\$ 89,402,441	-170.3%

Summary

The System's investments resumed their growth with another year of strong earnings. Only last year's negative performance of (-3.1%) interrupted the string of positive investment returns dating back to FY 2010. Investment income and employer contributions exceeded retirement benefits and administrative expenses in each year except for FY 2015 and FY 2011. In those years the deficit was \$52.5 million in FY 2015 and \$7.5 million in FY 2011. The required employer rates recommended by the actuary are currently 12.51% for the City of St. Louis and 12.43% for the other participating employers for the period July 1, 2016 through June 30, 2017. The prior year's contribution rates were 13.93% and 13.86%, respectively. The dual contribution rates are a result of a legal settlement involving the Retirement System, the City of St. Louis and the other participating employers.

The System remains in a position to meet its current pension obligations, as confirmed by the recent actuarial valuation.

The System is a qualified governmental plan under Section 401(a) of the Internal Revenue Code.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

MANAGEMENT’S DISCUSSION AND ANALYSIS - UNAUDITED

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 System’s finances and to demonstrate the System’s accountability for its funds. If you have any questions about this report or need additional financial information, contact the Employees Retirement System of the City of St. Louis, 1114 Market Street, Suite 900, St. Louis, MO 63101.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

STATEMENTS OF FIDUCIARY NET POSITION

September 30,

	2016	2015
ASSETS		
Cash	\$ 78,502	\$ 410,999
Receivables		
Accrued interest receivable	532,408	569,487
Accrued dividend receivable	180,499	178,420
Employers contribution receivable	168,878	133,516
Total receivables	<u>881,785</u>	<u>881,423</u>
Investments at fair value		
Temporary cash investments	9,649,768	5,582,279
Fixed income securities	85,844,979	87,580,105
Common stocks	183,836,061	157,597,241
Managed master limited partnerships	72,050,815	67,542,856
Managed international equity funds	162,718,734	169,246,224
Real estate funds	92,764,744	86,803,989
Domestic bond funds	83,983,870	78,529,736
Managed hedge fund of funds	73,660,228	74,517,074
Total investments	<u>764,509,199</u>	<u>727,399,504</u>
Securities lending collateral	2,201,107	2,198,427
Total assets	<u>767,670,593</u>	<u>730,890,353</u>
DEFERRED OUTFLOWS OF RESOURCES		
Receivable under forward		
foreign currency exchange contracts	33,914	-
Total deferred outflows of resources	<u>33,914</u>	<u>-</u>
LIABILITIES		
Accounts payable	602,327	662,100
Securities lending collateral liability	2,201,107	2,198,427
Total liabilities	<u>2,803,434</u>	<u>2,860,527</u>
DEFERRED INFLOWS OF RESOURCES		
Payable under forward		
foreign currency exchange contracts	-	32,693
Total deferred inflows of resources	<u>-</u>	<u>32,693</u>
Net position held in trust for pension benefits	<u>\$ 764,901,073</u>	<u>\$ 727,997,133</u>

See notes to financial statements.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

Year ended September 30,

	2016	2015
ADDITIONS		
Contributions		
Employer contributions	\$ 32,127,591	\$ 35,493,615
Member contributions	10,093	232,337
Total contributions	<u>32,137,684</u>	<u>35,725,952</u>
Investment activity		
Interest and dividends	9,380,928	9,513,963
Net appreciation in fair value of investments	60,307,054	(34,462,709)
	<u>69,687,982</u>	<u>(24,948,746)</u>
Less investment expenses	3,227,048	3,487,133
Net investment income	<u>66,460,934</u>	<u>(28,435,879)</u>
Total additions	<u>98,598,618</u>	<u>7,290,073</u>
DEDUCTIONS		
Retirement benefits	60,972,546	59,065,812
Administrative expenses	722,132	722,762
Total deductions	<u>61,694,678</u>	<u>59,788,574</u>
NET INCREASE (DECREASE) IN NET POSITION	36,903,940	(52,498,501)
NET POSITION HELD IN TRUST FOR PENSION BENEFITS		
Beginning of year	<u>727,997,133</u>	<u>780,495,634</u>
End of year	<u>\$ 764,901,073</u>	<u>\$ 727,997,133</u>

See notes to financial statements.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

NOTE 1 – DESCRIPTION OF PLAN

The following description of the Employees Retirement System of the City of St. Louis is provided for general information purposes only. Participants should refer to the *Employees Retirement System Handbook* for a more complete description of the System's provisions.

General

The System is a cost-sharing, multiple-employer, defined benefit public employees' retirement system for all non-uniformed employees of the City of St. Louis and certain other public entities funded by or providing services to residents of the City of St. Louis. These additional employee groups covered by the System are the employees of the St. Louis Public Library, the Art Museum of St. Louis, the St. Louis Zoological Park, the City of St. Louis Water Division, the Airport Authority, the City Mental Health Board, the Metropolitan Taxicab Commission, Tower Grove Park, the System, and civilian employees of the police department and police and fireman's retirement systems. The System became operative April 1, 1960 by municipal ordinance establishing the System under the authority of Senate Bill No. 329 of the 70th General Assembly of the State of Missouri. Responsibility for operation and administration of the System is vested in its Board of Trustees. The Board of Trustees consists of the Comptroller of the City of St. Louis, two members appointed by the Mayor of the City of St. Louis, two members elected by the membership of the System, and one member elected by the retired members of the System

Membership

Membership consisted of the following at September 30,:

	<u>2016</u>	<u>2015</u>
Retirees and beneficiaries		
Currently receiving benefits	4,486	4,408
Terminated employees entitled to but not yet receiving benefits	2,516	2,480
Current employees		
Fully vested	3,573	3,585
Non-vested	<u>1,730</u>	<u>1,774</u>
Total membership	<u><u>12,305</u></u>	<u><u>12,247</u></u>

Benefits

The System provides for defined benefit payments for retirement, death, or disability to eligible employees or their beneficiaries based upon creditable service, final average compensation, and a benefit compensation base. Benefits vest to employees covered by the System after the employee has attained five years creditable service.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

Employees retire with full retirement benefits after the age of 65 or if an employee's age and creditable service combined equal or exceed 85 years. Employees may retire and receive a reduced benefit after age 60 with five years of creditable service, age 55 with at least 20 years of creditable service, or any age with 30 years of creditable service.

The monthly pension benefits of all retirees or their beneficiaries are adjusted according to the changes in the Consumer Price Index of the U.S. Department of Labor. Increases are limited each year, with total increases to retirees or their beneficiaries limited to 25%.

Contributions

Employer contribution rates are established annually by the Board of Trustees based on an actuarial study. The required employer contribution rate recommended by the actuary is currently 12.51% for the City of St. Louis and 12.43% for the other participating employers for the period July 2016 through June 2017. Previously the contribution rates were 13.93% and 13.86% for July 2015 through June 2016 and 15.17% and 15.12% for July 2014 through June 2015. The dual contribution rates are a result of a legal settlement involving the Retirement System, the City of St. Louis and the other participating employers.

Employees who became members of the System prior to October 14, 1977 and continued to make contributions may make voluntary contributions to the System equal to 3% of their compensation until the compensation equals the maximum annual taxable earnings under the Federal Social Security Act. Thereafter, employees may contribute 6% of their compensation for the remainder of the calendar year.

Funding Policy

The System's funding policy provides for periodic employer contributions at actuarially determined rates that, expressed as percentages of annual covered payroll, are sufficient to accumulate assets to pay benefits when due. If contributions are necessary, level percentage of payroll employer contribution rates are determined using the entry age normal actuarial cost method.

Subsequent Events

Management has evaluated subsequent events through February 27, 2017, the date which the financial statements were available to be issued, for possible recognition or disclosure in the financial statements.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The following are the significant accounting policies followed by the System.

Basis of Accounting

The accompanying financial statements are prepared in accordance with accounting principles generally accepted in the United States of America as set forth by Governmental Accounting Standards Board (GASB).

The financial statements were prepared using the accrual basis of accounting except that retirement benefits are recorded when due to the beneficiary. Employee contributions are recognized as additions in the period in which employer payroll is paid. Administrative deductions are recorded when the corresponding liabilities are incurred, regardless of when payment is made.

Tax Status

The System has been determined to be exempt from federal income taxes under Section 115 of the Internal Revenue Code. In 2005, the System became a qualified retirement plan in accordance with Internal Revenue Service regulations.

Estimates

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

Investments

A list of allowable investments is included in Note 3. Investments are reported at fair value. Security transactions and any resulting realized gains or losses are accounted for on a completed transaction basis.

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date and in the principal and most advantageous market for the asset or liability. See Note 4 for a discussion of fair value measurement.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

The System participates in a securities lending program administered by State Street Bank and Trust, the custodian. Brokers who borrow the securities provide collateral equal to 102% for domestic securities loaned, resulting in no credit risk for the System. At September 30, 2016 and 2015, the term to maturity of the securities on loan is matched with the term to maturity of the investment of the cash collateral. These loans can be terminated on demand by either the lender or borrower. The System cannot pledge or sell non-cash collateral unless the borrower defaults.

The System had the following securities on loan at market value as of September 30,:

	<u>2016</u>	<u>2015</u>
U.S. corporate bond and equity		
Corporate bonds and equity	\$ 1,927,372	\$ 1,744,610
Non-cash	<u>226,931</u>	<u>434,363</u>
Total U.S. corporate bond and equity	<u>2,154,303</u>	<u>2,178,973</u>
U.S. Government		
Treasury	<u>19,032</u>	<u>5,137</u>
Total securities on loan	<u>\$ 2,173,335</u>	<u>\$ 2,184,110</u>

Furniture and Equipment

Acquisitions of furniture and equipment are charged to administrative expense.

Derivatives

The System currently retains Payden & Rygel Investment Counsel as a global fixed income investment manager. The System permits Payden & Rygel to utilize financial derivative instruments such as forwards, futures, and options. The use of these financial derivatives is defensive in nature; that is, used only to manage duration and foreign currency exposure and bond exposure. The System's investment policy requires that open currency exposure shall not exceed 10 percent of the global fixed income portfolio.

The System had the following amounts under forward foreign currency exchange contracts at September 30,:

	<u>2016</u>	<u>2015</u>
Receivable under forward foreign currency exchange contracts	\$ 33,914	\$ -
Payable under forward foreign currency exchange contracts	<u>-</u>	<u>(32,693)</u>
Net receivable (payable) under forward foreign currency exchange contracts	<u>\$ 33,914</u>	<u>\$ (32,693)</u>

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

The System utilizes forward contract hedging to reduce the volatility in foreign currencies. Hedging techniques are traditionally used to limit exposure to price fluctuations. Management recognizes that fluctuations in foreign currencies could have a negative effect on the System's financial statements. Accordingly, the System entered into forward contracts in order to hedge this exposure.

NOTE 3 – CASH AND INVESTMENTS

The System is authorized to invest in:

- Short-term securities with a maximum maturity of one year including institutional liquid assets, U.S. Treasury obligations, Federal Agency obligations, discount and interest-bearing notes from corporations, and certificates of deposit;
- Fixed income securities including:
 - U.S. government securities;
 - Non-U.S. fixed income securities; and
 - Publicly-issued corporate bonds, debentures, notes, or other evidences of indebtedness assumed or guaranteed by corporations organized under the laws of the United States with ratings of "A" or better by Moody's Investors Service;
- Common stocks of corporations organized under the laws of the United States;
- Managed master limited partnerships composed primarily of domestic midstream or energy infrastructure publicly traded on U.S. equity exchanges;
- Common stocks of foreign corporations through separate accounts as commingled vehicles;
- Real estate through discretionary commingled vehicles;
- Hedge funds through either separate or commingled fund of funds vehicles.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

It is the System's current policy to invest in each of the asset classes as indicated below:

<u>Asset class</u>	<u>Target allocation</u>	<u>Long-term* expected real rate of return</u>
Private equity	5.00%	8.25%
Real estate	10.00%	5.00%
Hedge funds	10.00%	4.50%
Master limited partnerships	7.50%	6.00%
International equity	21.50%	6.84%
Domestic equity	21.00%	5.05%
Fixed income	25.00%	2.25%
	<u>100.00%</u>	

* *Arithmetic return*

The bank balances of the System at September 30, 2016 and 2015 were \$802,985 and \$1,692,241, respectively. These balances were insured by the Federal Deposit Insurance Corporation up to \$250,000. The remaining balances were collateralized by securities held by the pledging financial institution's trust department in the System's name.

The System has a significant amount of investments that are subject to market risk. Market risk is the possibility that future changes in market price may make a financial instrument less valuable.

All investments at September 30, 2016 and 2015 were held by the System's agent in the System's name.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

The System has the following concentrations, defined as “investments (other than those issued or guaranteed by the U.S. government)” in any one organization, that represent five percent or more of fiduciary net position at September 30,:

	2016	
Acadian Asset Management - Emerging Markets Fund	\$46,633,058	6.10%
INTECH Investment Management - U.S. Large Cap Core Equity	48,399,784	6.33%
LSV Asset Management - U.S. Large Cap Value Equity	38,927,513	5.09%
PNC Capital Advisors - U.S. Broad Market Core Fixed Income	54,811,330	7.17%
Principal Global Investors - Real Estate Group Annuity Contract	92,764,744	12.13%
Silchester International Advisors - International Value Equity Group Trust	75,518,115	9.87%
Evanston Weatherlow Offshore - Hedge Fund	39,676,400	5.19%
Walter Scott & Partners Limited Group Trust- International Equity Fund	40,567,561	5.30%
	2015	
Acadian Asset Management - Emerging Markets Fund	\$40,060,865	5.51%
INTECH Investment Management - U.S. Large Cap Core Equity	67,248,491	9.25%
LSV Asset Management - U.S. Large Cap Value Equity	36,157,718	4.97%
PNC Capital Advisors - U.S. Broad Market Core Fixed Income	56,802,875	7.81%
Principal Global Investors - Real Estate Group Annuity Contract	86,803,989	11.93%
Silchester International Advisors - International Value Equity Group Trust	69,696,175	9.58%
Evanston Weatherlow Offshore - Hedge Fund	39,150,986	5.38%

Foreign Currency Risk

Foreign currency risk is the risk that the change in exchange rates will adversely impact the fair value of an investment. The System does not have a formal policy to limit foreign currency risk. The following table demonstrates the System’s level of foreign currency exposure as of September 30,:

Currency	2016			2015		
	Short-Term	Debt	Total	Short-Term	Debt	Total
Polish Zloty	\$ 3,002	\$ 58,474	\$ 61,476	\$ 261	\$ 59,697	\$ 59,958
British Pound	80,321	1,752,722	1,833,043	29,288	2,024,705	2,053,993
Australian Dollar	25,786	556,146	581,932	41,130	510,903	552,033
Canadian Dollar	4,197	745,092	749,289	15,838	677,199	693,037
Euros	134,542	6,241,997	6,376,539	63,506	7,461,630	7,525,136
Japanese Yen	44,696	6,598,615	6,643,311	32,808	4,815,951	4,848,759
Mexican Peso	8,629	106,467	115,096	2,098	123,579	125,677
Danish Krone	2,869	70,191	73,060	1,797	64,819	66,616
Total	<u>\$ 304,042</u>	<u>\$ 16,129,704</u>	<u>\$ 16,433,746</u>	<u>\$ 186,726</u>	<u>\$15,738,483</u>	<u>\$15,925,209</u>

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

Credit Risk of Debt Securities

Credit risk is the risk that an issuer or other counter party to an investment will not fulfill its obligation to the System. Below is a list of fixed income credit quality ratings as of September 30,:

Quality rating	2016	2015
	Fair value	Fair Value
Aaa/U.S. Governments	\$ 84,319,481	\$ 83,092,737
Aa	8,196,529	8,824,954
A	25,521,778	28,905,736
Baa	4,446,259	25,964,624
Below Baa	47,545,868	20,404,713
Not rated	277,890	507,838
Total credit risk debt	<u>\$ 170,307,805</u>	<u>\$ 167,700,602</u>

Interest Rate Risk

The System does not have a formal policy to limit interest rate risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Duration is a measure of a debt instrument's exposure to a change in interest rates and the related sensitivity of market price to parallel shifts in the yield curve. It uses the present value of cash flows, weighted for those cash flows as a percentage of the instruments' full price. The following schedule provides a summary of interest risk assumed by the System as of September 30,:

Investment	2016		2015	
	Fair value	Effective duration	Fair value	Effective duration
Payden and Rygel	\$ 31,764,183	6.58 years	\$ 32,367,991	6.16 years
Allegiant (PNC)	54,559,755	6.58 years	56,802,875	5.48 years
SSGA	35,722,077	5.52 years	33,950,872	8.00 years
Loomis	27,789,116	4.36 years	25,391,885	4.52 years
Vanguard	20,472,674	6.80 years	19,186,979	5.44 years
Total credit risk debt	<u>\$ 170,307,805</u>		<u>\$ 167,700,602</u>	

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

NOTE 4 – INVESTMENTS AND DERIVATIVE INSTRUMENTS MEASURED AT FAIR VALUE

In fiscal year 2016, the System adopted GASB 72, *Fair Value Measurement and Application*. GASB 72 was issued to address accounting and financial reporting issues related to fair value measurements. The System categorizes its fair value measurements within the fair value hierarchy established by accounting principles generally accepted in the United States of America. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The System has the following recurring fair value measurements at September 30, 2016:

	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investments by fair value level				
Fixed income securities				
U.S. Government securities	\$ 23,680,590	\$ 20,438,688	\$ 3,241,902	\$ -
Corporate bonds	29,987,239	-	29,987,239	-
Domestic bond funds	20,472,674	20,472,674	-	-
International bonds and securities	31,538,093	1,275,993	30,262,100	-
Other debt obligations	10,288,825	10,288,825	-	-
Equity securities				
Common stocks	183,836,061	183,836,061	-	-
Managed master limited partnerships	46,154,213	46,154,213	-	-
Total investments by fair value level	<u>345,957,695</u>	<u>\$ 282,466,454</u>	<u>\$ 63,491,241</u>	<u>\$ -</u>
Investments measured at the net asset value (NAV)				
Loomis High Yield Conservative Trust (B)	27,789,119			
SSGA Passive Bond Market Index (NL) Fund	35,722,077			
Principal Real Estate Group Annuity Contract	92,764,744			
Acadian Emerging Markets Mutual Equity Fund II	46,633,058			
Kabouter International Opportunites Fund II	25,896,602			
Silchester International Value Equity Group Trust	75,518,115			
Walter Scott Group Trust International	40,567,561			
Entrust Capital Diversified Fund	33,983,828			
Weatherlow Offshore Fund I	39,676,400			
Total investments measured at NAV	<u>418,551,504</u>			
Total investments measured at fair value	<u>\$ 764,509,199</u>			
Investment derivative instruments				
Foreign exchange contracts	<u>\$ 33,914</u>		<u>\$ 33,914</u>	

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

The System has the following recurring fair value measurements at September 30, 2015:

	<u>Total</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>
Investments by fair value level				
Fixed income securities				
U.S. Government securities	\$ 27,366,884	\$ 25,000,461	\$ 2,366,423	\$ -
Corporate bonds	28,219,300	-	28,219,300	-
Mutual funds	19,186,979	19,186,979	-	-
International bonds and securities	32,209,070	1,177,811	31,031,259	-
Other debt obligations	5,367,130	5,367,130	-	-
Equity securities				
Common stocks	157,597,241	157,597,241	-	-
Managed master limited partnerships	<u>67,542,856</u>	<u>67,542,856</u>	<u>-</u>	<u>-</u>
Total investments by fair value level	<u>337,489,460</u>	<u>\$ 275,872,478</u>	<u>\$ 61,616,982</u>	<u>\$ -</u>
Investments measured at the net asset value (NAV)				
Loomis High Yield Conservative Trust (B)	25,391,885			
SSGA Passive Bond Market Index (NL) Fund	33,950,872			
Principal Real Estate Group Annuity Contract	86,803,989			
Acadian Emerging Markets Mutual Equity Fund II	40,060,864			
Mondrian International Small Cap Equity Fund	23,363,678			
Silchester International Value Equity Group Trust	69,696,175			
Walter Scott Group Trust International	36,125,507			
Entrust Capital Diversified Fund	35,366,088			
Weatherlow Offshore Fund I	<u>39,150,986</u>			
Total investments measured at NAV	<u>389,910,044</u>			
Total investments measured at fair value	<u>\$ 727,399,504</u>			
Investment derivative instruments				
Foreign exchange contracts (liabilities)	<u>\$ (32,693)</u>		<u>\$ (32,693)</u>	

The following is a description of the valuation methodologies used by the System to measure assets at estimated fair value. There were no changes in the methodologies used at September 30, 2016 and 2015.

Fixed income and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities.

Fixed income securities classified in Level 2 of the fair value hierarchy are valued using matrix pricing based on quotes from independent pricing services using recent trading activity information including market interest rate curves, dealer quotes, the U.S. Treasury yield curve and bond terms and conditions. Derivative instruments classified in Level 2 of the fair value hierarchy are valued using a market approach that considers foreign exchange rates.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

The valuation methods for investments measured at the net asset value (NAV) per share (or its equivalent) as provided by the investee entity or fund manager is presented on the following table.

	Fair value 2016	Fair value 2015	Unfunded commitments	Redemption frequency (if currently eligible)	Redemption notice period
Loomis High Yield Conservative Trust (B)	\$ 27,789,119	\$ 25,391,885	n/a	Daily	Daily
SSGA Passive Bond Market Index (NL) Fund	35,722,077	33,950,872	n/a	Monthly	15 days
Principal Real Estate Group Annuity Contract	92,764,744	86,803,989	n/a	Daily	7 days
Acadian Emerging Markets Mutual Equity Fund II	46,633,058	40,060,864	n/a	Daily	30 days
Kabouter International Opportunites Fund II	25,896,602	-	n/a	Daily	15 - 30 days
Mondrian International Small Cap Equity Fund	-	23,363,678	n/a	Monthly	15 days
Silchester International Value Equity Group Trust	75,518,115	69,696,175	n/a	Monthly	5 - 10 days
Walter Scott Group Trust International	40,567,561	36,125,507	n/a	Daily	10 days
Entrust Capital Diversified Fund	33,983,828	35,366,088	n/a	Quarterly	90 days
Weatherlow Offshore Fund I	39,676,400	39,150,986	n/a	Quarterly	65 days
Total investments measured at NAV	<u>\$ 418,551,504</u>	<u>\$ 389,910,044</u>			

Loomis High Yield Conservative Trust (B). The fund may invest up to 100% of its market value in fixed income securities of any credit quality, including lower rated fixed income securities and up to 20% of its market value in non-U.S. currencies. The fund may also invest in fixed income securities of any maturity. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

State Street Global Advisors Passive Bond Market Index (NL) Fund. The investment objective of the fund is to approximate as closely as practicable, before expenses, the performance of the Barclays U.S. Aggregate Bond Index over the long term. The fund attempts to achieve its investment objective by investing in other collective investment funds, each an underlying fund, managed by the Trustee, which have characteristics consistent with the fund's overall investment objective. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

Principal Global Investors Real Estate Group Annuity Contract. Is a pooled separate account for investment and reinvestment in owned real estate, such as office buildings, industrial buildings, shopping centers, retail stores and similar property and in accordance with applicable law. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments as reported by the fund manager. The fund reserves the right to defer payments that would exceed the amount of cash and other liquid assets held by the fund, reduced by amounts committed to purchase properties or needed for operating expenses. The fund will not defer requested payments for longer than three years.

Acadian Emerging Markets Mutual Equity Fund II. The fund's objective is to seek long-term capital appreciation by investing primarily in common stocks of emerging markets issuers. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

Kabouter International Opportunities Fund II. The primary purpose of the fund is to provide diversification while still providing the opportunity for capital appreciation. A low correlation between stocks, bonds, hedge funds, and real estate creates reduced portfolio volatility. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

Mondrian International Small Cap Equity Fund. The fund's strategy is to invest in developed non-US securities below \$2.75 billion in market capitalization. The portfolio ranges from 70 to 120 securities that are typically benchmarked to the MSCI World ex US Small Cap Index. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

Silchester International Value Equity Group Trust. The trust principally invests in a diversified portfolio of equity securities of companies ordinarily incorporated in any country other than the United States. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments. The trust may delay payment if the investment manager determines that such delay is reasonably necessary to prevent such redemption from having a material adverse impact on the group trust and/or the remaining participating trusts.

Walter Scott Group Trust International. The investment manager is authorized to allocate the assets without limitation among geographic regions and individual countries (other than the United States) based on its analysis of global economic, political and financial conditions. Not more than 5% of the fund's assets shall be invested in stocks domiciled or listed on exchanges in countries not included in the MSCI World index other than Canada, the republic of South Africa and Chinese stocks listed on the Hong Kong exchange. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments. Under certain circumstances (including the inability of a fund to liquidate positions or the default or delay in payments due to a fund from brokers, banks, or other persons), a fund may delay payment to an investor requesting redemption of the proportionate part of the NAV of the units being redeemed which represents sums which are the subject of such default or delay, or the fund may distribute property in kind as determined by the investment manager in payment of a redemption of units.

Entrust Capital Diversified Fund. The Fund seeks to achieve above-average rates of return and long-term capital growth. The Fund seeks to achieve this objective by employing a multi-manager approach, maintaining investments through private investment entities and/or separately managed accounts with a broadly diversified group of investment management professionals specializing in alternative investment strategies. The Fund does not follow a rigid asset allocation policy but seeks diversification through a combination of managers trading a range of strategies, including but not limited to, hedging, distressed securities, arbitrage, and special situations. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

Weatherlow Offshore Fund I. The fund's investment objective is to achieve long-term returns commensurate with long term returns from a portfolio invested in the general equity markets, while experiencing volatility more like that of a portfolio invested in the general debt markets. The fund seeks to achieve this objective by investing predominantly in interests in portfolio funds - i.e., limited partnerships and similar pooled invested vehicles often referred to as "hedge funds" - managed by portfolio managers. The fair values of the investments in this fund have been determined using the NAV per share (or its equivalent) of the underlying investments.

NOTE 5 – PLAN TERMINATION

The System is administered in accordance with the provisions of the Revised Code of the City of St. Louis. There are currently no plans to terminate the System.

NOTE 6 – DEFERRED RETIREMENT OPTION PLAN

On June 8, 2000, the Mayor of the City of St. Louis approved an ordinance passed by the Board of Alderman, authorizing a Deferred Retirement Option Plan (DROP), which became effective January 1, 2001. This plan allows for members to work for an additional 5 years after reaching retirement age, and defer receipt of their retirement allowance. The calculation of average salary for retirement benefits will not include the additional years of service after normal retirement age. The amount that would have been received as retirement benefit is put in a special DROP account monthly. Total DROP expense was \$9,589,688 and \$9,109,924 for the years ended September 30, 2016 and 2015, respectively. The DROP account will not be adjusted for cost of living increases.

The DROP account earns interest at the actuarial valuation rate of return and at the 10 year U.S. Treasury Bond yield as of each September 30, for DROP participants enrolling February 1, 2003 and thereafter.

After a member completely terminates employment, the member can withdraw amounts from the DROP account in a lump sum or according to a deferred retirement payment plan. At September 30, 2016 and 2015, approximately 795 and 817 members, respectively, have elected DROP participation and have DROP account balances of approximately \$53,279,800 and \$55,116,000, respectively.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

NOTE 7 – ACTUARIAL METHODS AND SIGNIFICANT ASSUMPTIONS

Valuation date	October 1, 2016	October 1, 2015
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the year	Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the year
Actuarial cost method	Entry age normal	Entry age normal
Asset valuation method	5 year smoothing	5 year smoothing
Amortization method	Layered 20 year amortization of unfunded liability	Layered 20 year amortization of unfunded liability
Discount rate	7.50%	7.50%
Inflation	2.50%	3.00%
Salary increases	Varies by service, ranging from 3.00% to 4.25%	Varies by service, ranging from 3.00% to 4.25%
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA

The determination of the actuarial assumptions used for the October 1, 2016 valuation was changed based on an experience study of the System performed in April 2015.

A single discount rate of 7.50% was used to measure the pension liability. This single discount rate was based on the expected rate of return on the System’s investments of 7.50%. This single discount rate is net of investment expenses (investment manager and custodial fees). The projection of cash flows used to determine this single discount rate assumed the City of St. Louis and other participating employers would make the required contributions as defined by Statute. Based on these assumptions, the System’s fiduciary net position was projected to be available to make all projected future benefit payments of current members and their beneficiaries. Therefore, the long-term expected rate of return on the System’s investments was applied to all periods of projected benefit payments to determine the total pension liability.

GASB 67 requires the disclosure of the sensitivity of the net pension liability to changes in the discount rate. For calculations of total pension liability the actuary has used an assumed long-term expected rate of return of 7.50%. The table below presents the net pension liability if the discount rate were 1% lower or 1% higher than the current rate.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

	1% decrease 6.50%	Discount rate 7.50%	1% increase 8.50%
Total pension liability	\$ 1,072,734,454	\$ 974,143,079	\$ 889,872,709
Fiduciary net position	<u>764,901,073</u>	<u>764,901,073</u>	<u>764,901,073</u>
Net pension liability	<u>\$ 307,833,381</u>	<u>\$ 209,242,006</u>	<u>\$ 124,971,636</u>
System fiduciary net position as a percentage of total pension liability	71.3%	78.5%	86.0%

NOTE 8 – COMMITMENTS AND CONTINGENCIES

The System has been served with a complaint filed by the unsecured creditor's committee of the bankrupt Tribune Company regarding the System's sale of Tribune Company securities during a leveraged takeover of the Tribune Company by an ESOP (Employee Stock Ownership Plan). The total proceeds of the sale were approximately \$306,000. The unsecured creditor's committee or its trustee has filed a petition alleging the sale of the securities to the ESOP or its affiliates worked a fraud upon the creditors who lent the ESOP the funds to purchase the securities based upon fraudulent or misrepresented information from other parties to the litigation. Certain senior note-holders of the Tribune Company and certain Tribune Company retirees have joined the litigation and made claims substantially similar to the unsecured creditor's committee. These claims have been consolidated into a federal multi-jurisdictional case in the U.S. District Court for the Southern District of New York. The note-holder's claims have been dismissed by the Court and that decision was upheld by the U.S. Second Circuit Court of Appeals. This decision is currently on appeal to the U.S. Supreme Court, which has yet to grant certiorari. Should the appeal by the note-holders be successful, the claims of the note-holders would be reinstated in the multi-jurisdictional case. The remaining bankruptcy claims have been dismissed by the Court for lack of scienter and the failure to state a claim upon which relief can be granted. However, this recent decision may be taken up on appeal. The System has engaged Armstrong Teasdale, LLP to represent the System's interests. Any evaluation of the potential outcome of such litigation would be speculative. However, in the event of an unlikely outcome most favorable to the plaintiffs, the System expects that the plaintiff's damages would be limited to the proceeds of the sales plus interest from date of judgement.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO FINANCIAL STATEMENTS

NOTE 9 – NEW ACCOUNTING STANDARDS ADOPTED

In fiscal year 2016 the System adopted GASB 72, *Fair Value Measurement and Application*. GASB 72 requires the System to use valuation techniques which are appropriate under the circumstances and are either a market approach, a cost approach, or an income approach. GASB 72 establishes a hierarchy of inputs used to measure fair value consisting of three levels. Level 1 inputs are quoted prices in active markets of identical assets or liabilities. Level 2 inputs are inputs, other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly. Level 3 inputs are unobservable inputs, and typically reflect management's estimate of assumptions that market participants would use in pricing the asset or liability. GASB 72 also contains note disclosure requirements regarding the hierarchy of valuation inputs and valuation techniques that was used for the fair value measurements. There was no material impact on the System's financial statements as a result of the implementation of GASB 72.

In fiscal year 2016 the system adopted GASB 82, *Pension Issues – an Amendment of GASB Statements No. 67, No. 68, and No. 73*. This statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviation from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements. Implementation of GASB 82 changed the definition of covered payroll to be “the payroll on which contributions to a pension plan are based” for GASB 67. This change is required to be implemented retroactively. The impact GASB 82 changed certain ratios presented in required supplementary information to conform to the revised definition of covered payroll.

While these new accounting pronouncements will affect the accounting measures, it does not have an effect on the actuarial methods and assumptions used by the System to determine the employers' contributions needed to fund the System.

NOTE 10 – RISKS AND UNCERTAINTIES

The System invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, foreign currency, regulatory, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term, and such changes could materially affect the amounts reported in the statements of fiduciary net position.

Total pension liability is reported based on certain assumptions pertaining to interest rates, inflation rates, and employee demographics, all of which are subject to change. Due to uncertainties inherent in the estimations and assumptions process, it is at least reasonably possible that changes in these estimates and assumptions in the near term would be material to the financial statements.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

SCHEDULE OF CHANGES IN EMPLOYER NET PENSION LIABILITY - UNAUDITED

	September 30,		
	2016	2015	2014
Total pension liability			
Service cost	\$ 13,703,072	\$ 13,067,553	\$ 10,591,910
Interest	69,893,488	73,825,307	72,012,146
Difference between expected and actual experience	(3,601,576)	(2,701,109)	(3,664,735)
Change of assumptions	-	(5,107,330)	-
Benefit payments	(60,972,546)	(59,065,812)	(56,317,073)
Net change in total pension liability	19,022,438	20,018,609	22,622,248
Total pension liability, beginning	955,120,641	935,102,032	912,479,784
Total pension liability, ending (a)	974,143,079	955,120,641	935,102,032
Plan fiduciary net position			
Employer contributions	32,127,591	35,436,141	36,788,260
Member contributions	10,093	289,810	129,164
Net investment income	66,460,934	(28,435,882)	70,076,027
Benefit payments	(60,972,546)	(59,065,812)	(56,317,073)
Administrative expenses	(722,132)	(722,758)	(670,957)
Net change in plan fiduciary net position	36,903,940	(52,498,501)	50,005,421
Plan fiduciary net position, beginning	727,997,133	780,495,634	730,490,213
Plan fiduciary net position, ending (b)	764,901,073	727,997,133	780,495,634
Net pension liability, ending = (a) - (b)	\$ 209,242,006	\$ 227,123,508	\$ 154,606,398
Plan fiduciary net position as a percentage of total pension liability	78.52%	76.22%	83.47%
Covered employee payroll	237,354,364	238,385,100	237,794,875
Net pension liability as a percentage of covered employee payroll	88.16%	95.28%	65.02%

Note: Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report and notes to the schedules of required supplementary information.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

SCHEDULE OF NET PENSION LIABILITY - UNAUDITED

	September 30,		
	2016	2015	2014
Total pension liability	\$ 974,143,079	\$ 955,120,641	\$ 935,102,032
Plan fiduciary net position	764,901,073	727,997,133	780,495,634
Net pension liability	\$ 209,242,006	\$ 227,123,508	\$ 154,606,398
Plan fiduciary net position as a percentage of total pension liability	78.52%	76.22%	83.47%
Covered employee payroll	\$ 237,354,364	\$ 238,385,100	\$ 237,794,875
Net pension liability as a percentage of covered employee payroll	88.16%	95.28%	65.02%

Note: Schedule is intended to show information for 10 years. Additional years will be displayed

See accompanying independent auditors' report and notes to the schedules of
required supplementary information.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

SCHEDULE OF EMPLOYER CONTRIBUTIONS - UNAUDITED

<u>System year ended September 30,</u>	<u>Actuarially determined contribution</u>	<u>Contribution in relation to the actuarially determined contribution</u>	<u>Contribution deficiency (excess)</u>	<u>Covered employee payroll</u>	<u>Contribution as a percentage of covered payroll</u>
2014	\$34,060,798	\$36,788,260	\$(2,727,462)	\$237,794,875	15.47%
2015	31,605,493	35,436,141	(3,830,648)	238,385,100	14.87%
2016	28,534,042	32,127,591	(3,593,549)	237,354,364	13.54%

Note: Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report and notes to the schedules of required supplementary information.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST.LOUIS

**SCHEDULE OF ANNUAL MONEY-WEIGHTED RATE OF RETURN
ON INVESTMENTS - UNAUDITED**

<u>System year ended September 30,</u>	<u>Annual money weighted rate of return net of investment expense</u>
2014	9.71%
2015	-3.79%
2016	9.45%

Note: Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report and notes to the schedules of required supplementary information.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

NOTES TO THE SCHEDULES OF REQUIRED SUPPLEMENTARY INFORMATION

NOTE 1 – METHODS AND ASSUMPTIONS USED IN CALCULATIONS OF ACTUARIALLY DETERMINED CONTRIBUTIONS

Actuarial Methods and Assumptions

The actuarially determined contribution rates in the schedule of the System's contributions are calculated based on the actuarial valuation at the beginning of the plan year. The following actuarial methods and assumptions were used to determine contribution rates reported in that schedule.

	<u>September 30, 2016</u>
Actuarial cost method	Entry age normal
Asset valuation method	5 year smoothing
Amortization method	Layered 20-year amortization of unfunded liability
Discount rate	7.50%
Inflation	2.50%
Salary increases	3% plus merit component based on years of service
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA
	<u>September 30, 2015</u>
Actuarial cost method	Projected unit credit method
Asset valuation method	5 year smoothing
Amortization method	Rolling 30-year level dollar amortization of unfunded liability
Discount rate	8.00%
Inflation	3.125%
Salary increases	3.50% plus merit component based on years of service
Mortality	Healthy: 1994 Group Annuity Mortality Table Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table
	<u>September 30, 2014</u>
Actuarial cost method	Projected unit credit method
Asset valuation method	5 year smoothing
Amortization method	Rolling 30-year level dollar amortization of unfunded liability
Discount rate	8.00%
Inflation	3.125%
Salary increases	Varies by age from 3.50% to 7.017%
Mortality	Healthy: 1994 Group Annuity Mortality Table Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table

Note: Periods prior to September 30, 2016 were audited by other auditors and this information from these actuary reports were not obtained.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

ANALYSIS OF FINANCIAL EXPERIENCE

Gain and loss in unfunded actuarial liability during years ended September 30 resulting from differences between assumed experience and actual experience

	Year Ending September 30,					
	2016	2015	2014	2013	2012	2011
Investment experience	\$ 553,258	\$ (2,743,842)	\$ 17,899,526	\$ (87,586)	\$(42,041,794)	\$(44,736,952)
Liability experience	3,695,678	6,114,189	7,265,891	8,391,763	7,779,666	12,671,467
Gain (loss) during year from financial experience	4,248,936	3,370,347	25,165,417	8,304,177	(34,262,128)	(32,065,485)
Non-recurring gain (loss) items	-	20,389,054	-	-	-	-
Composite gain (loss) during year	<u>\$ 4,248,936</u>	<u>\$ 23,759,401</u>	<u>\$ 25,165,417</u>	<u>\$ 8,304,177</u>	<u>\$ (34,262,128)</u>	<u>\$ (32,065,485)</u>

See accompanying independent auditors' report.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

SOLVENCY TEST - AGGREGATE ACTUARIAL LIABILITIES

Valuation date October 1,	Active member contributions	Retirees & beneficiaries	Active member employer financed contributions	Actuarial value of reported assets	Portion of actuarial liabilities covered by reported assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2016	\$ -	\$ 517,161,890	\$ 456,981,189	\$ 797,664,391	100%	100%	61%
2015	-	501,123,197	453,997,444	770,006,025	100%	100%	59%
2014	-	494,664,459	417,314,687	737,967,928	100%	100%	58%
2013	-	475,937,321	413,511,258	685,397,323	100%	100%	51%
2012	-	460,581,077	406,310,985	653,001,852	100%	100%	47%
2011	-	441,520,555	400,242,766	661,932,240	100%	100%	55%
2010	-	419,717,802	400,951,838	671,608,995	100%	100%	63%

Note: Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

See accompanying independent auditors' report.

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

SCHEDULE OF FUNDING PROGRESS

Actuarial valuation date	Actuarial value of assets	Actuarial liability	Unfunded actuarial liability	Funded ratio	Covered pension payroll	Percentage of covered pension payroll
10/1/2007	\$ 646,569,478	\$ 732,576,024	\$ (86,006,546)	88.26%	\$ 231,029,237	37.23%
10/1/2008	674,016,719	765,842,026	(91,825,307)	88.01%	238,701,628	38.47%
10/1/2009	667,667,205	794,686,379	(127,019,174)	84.02%	240,409,390	52.83%
10/1/2010	671,608,995	820,669,641	(149,060,646)	81.84%	232,451,661	64.13%
10/1/2011	661,932,240	841,763,321	(179,831,081)	78.64%	223,060,719	80.62%
10/1/2012	653,001,852	866,890,445	(213,888,593)	75.33%	224,822,252	95.14%
10/1/2013	685,397,323	889,448,579	(204,051,256)	77.06%	224,623,445	90.84%
10/1/2014	737,967,928	911,979,146	(174,011,218)	80.92%	227,039,143	76.64%
10/1/2015	770,006,025	955,120,641	(185,114,616)	80.62%	228,422,585	81.04%
10/1/2016	797,664,391	974,143,079	176,478,688	81.88%	226,907,701	77.78%

See accompanying independent auditors' report.