# PUBLIC SCHOOL RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS MINUTES OF THE BOARD OF TRUSTEES REGULAR MEETING

# April 22, 2019

# I. ROLL CALL AND ANNOUNCEMENT OF A QUORUM

The April meeting of the Board of Trustees of the Public School Retirement System of the City of St. Louis (PSRSSTL) was called to order around 4:30 p.m., Monday, April 22, 2019. The meeting was held in the 2<sup>nd</sup> floor boardroom of the PSRSSTL office building located at 3641 Olive Street, St. Louis, Missouri. Joseph Clark, Chairman of the Board of Trustees, was the presiding officer.

Roll Call was taken and Trustees Angela Banks, Paula Bentley, Joseph Clark, Darnetta Clinkscale, Louis Cross, Bobbie Richardson and Justin Stein were present. The Board of Trustees had a quorum at the meeting. Trustees Sheila Goodwin and Yvette Levy joined the meeting in progress. Trustees Christina Bennett and Rick Sullivan were absent.

Executive Director, Andrew Clark, Accounting Specialist, Terry Mayes, PSRSSTL Attorney Representative, Matt Gierse, PSRSSTL Auditors Jeanne Dee, Thomas Helm and Brenda Shepherd, and an interested party were also in attendance.

# II. APPROVAL OF MINUTES FROM LAST MEETING

Louis Cross made a motion, seconded by Bobbie Richardson, to approve the minutes of the Board of Trustees Regular Meeting of February 25, 2019.

By voice vote, motion carried.

# III. READING OF COMMUNICATIONS TO THE BOARD OF TRUSTEES

None

# IV. PRESENTATIONS BY INTERESTED PARTIES

None

# V. CONSENT AGENDA

Louis Cross made a motion, seconded by Paula Bentley, to approve the Retirements and Benefits of March and April 2019.

By voice vote, motion carried.

Louis Cross made a motion, seconded by Bobbie Richardson, to approve the Refunds and Bills of February and March 2019.

By voice vote, motion carried.

# VI. UNFINISHED BUSINESS

The Chairman reminded the Trustees of the outstanding Investment Consulting Services RFP and suggested it might be prudent to cancel the RFP because it had been open since April 2017. A lengthy discussion ensued about RFP due diligence, scheduling, requirements and when to conduct another Investment Consulting Services RFP, until it appeared a consensus may have been reached by the Trustees on "how to" proceed with it.

Louis Cross made a motion, seconded by Bobbie Richardson, to cancel the Investment Consulting Services RFP and retain the services of NEPC, LLC (current consultant). There was discussion about the motion until the Chairman called the question.

A roll call vote was taken.

Angela Banks	No	Paula Bentley	Yes	Joseph Clark	Yes	
Darnetta Clinkscale	No	Louis Cross	Yes	Bobbie Richardson	Yes	
Justin Stein	Yes					

With five yes votes, and two no votes, motion failed.

Further discussion ensued about the failed motion until it appeared the Trustees reached a consensus on a reasonable course of action.

Darnetta Clinkscale made a motion, seconded by Louis Cross, to cancel the Investment Consulting Services RFP. There was brief discussion about the importance of conducting an Investment Consulting Services RFP at a future date until the Chairman called the question.

A roll call vote was taken.

Angela Banks	Yes	Paula Bentley	Yes	Joseph Clark	Yes
Darnetta Clinkscale	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Bobbie Richardson	Yes	Justin Stein	Yes		

With eight yes votes, motion carried.

# VII. REPORT OF THE CHAIRPERSON

The Chairman confirmed the 2019 Committees and Chair appointments with the Trustees for 2019 as follows.

- Benefits Louis Cross
- Trustee Business Sheila Goodwin
- Investment Joe Clark
- Legislative, Rules & Regulations Paula Bentley
- Professional Contracts Bobbie Richardson

# VIII. REPORT OF THE EXECUTIVE DIRECTOR

The Executive Director introduced auditors Thomas Helm, Jeannette Dee and Brenda Shepherd from the accounting firm, Anders Minkler Huber & Helm LLP, for a presentation on the retirement system's audited financial statements. The Auditor, Thomas Helm, announced his retirement at the end of the year and that Jeanette Dee, would assume his role as chief auditor and partner. The auditors presented the audited financial statements for December 31, 2018 and 2017, by reviewing and highlighting important information from the pages of the Financial Statements report distributed at the meeting. The auditors spent time explaining the firm's opinions and various line items in the financial statements until all questions and issues were addressed to the satisfaction of the Board of Trustees. Overall, the Auditor reported on a good, clean audit, and thanked the Trustees and staff for allowing the firm to conduct the audit. The Trustees thanked the auditors for the presentation.

The Executive Director then reported on the retirement system's fiduciary liability and crime insurance renewals through Arthur J. Gallagher Risk Management Services, Inc. from a Memorandum to the Board of Trustees. The Executive Director informed the Trustees that there could be a problem with binding the insurance due to a current lawsuit. All questions and issues were clarified by the Executive Director. The Executive Director recommended that the Board of Trustees accept the renewals as presented.

Louis Cross made a motion, seconded by Sheila Goodwin, to accept the renewal of the fiduciary liability and crime insurance with Travelers as presented by the Executive Director.

A roll call vote was taken.

Angela Banks	Yes	Paula Bentley	Yes	Joseph Clark	Yes
Darnetta Clinkscale	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Yvette Levy	Yes	Bobbie Richardson	Yes	Justin Stein	Yes

With nine yes votes, motion carried.

# IX. REPORT OF THE INVESTMENT CONSULTANT

None

# X. REPORT OF THE ACTUARY

The Executive Director informed the Trustees of the Actuary's absence and that the 2019 Actuarial Valuation Report should be presented at the next Board of Trustees Regular Meeting.

# XI. REPORTS OF COMMITTEES OF THE BOARD OF TRUSTEES

The Chairman asked for reports from the Committees.

# Benefits Committee

None

# Trustee Business Committee

None

# Investment Committee

Joe Clark, Chair of the Investment Committee, informed the Trustees that interviews of prospective money managers offering investment opportunities in Small Cap Emerging Markets equities would take place at the next meeting of the Investment Committee. The Chair also referred the Trustees to recent Investment Committee meeting minutes contained in the board meeting packet.

# Legislative, Rules & Regulations Committee

None

# **Professional Contracts Committee**

Although there was no report, Bobbie Richardson, Chair of the Professional Contracts Committee, reminded the Trustees of the action taken earlier in the meeting on the Investment Consulting Services RFP.

# XII. NEW BUSINESS

None

# XIII. REPORT OF THE ATTORNEY

The Attorney asked the Chairman for a motion to close the meeting to discuss legal matters.

Louis Cross made a motion, seconded by Bobbie Richardson, to close the meeting, and that all records and votes, to the extent permitted by law, pertaining to and/or resulting from this closed meeting be closed under R.S.Mo. § 610.021(1), for the purpose of having a confidential or privileged communication with the legal counsel for the PSRSSTL.

A roll call vote was taken.

Angela Banks	Yes	Paula Bentley	Yes	Joseph Clark	Yes
Darnetta Clinkscale	Yes	Louis Cross	Yes	Sheila Goodwin	Yes
Yvette Levy	Yes	Bobbie Richardson	Yes	Justin Stein	Yes

With nine yes votes, motion carried, and the meeting closed around 5:30 p.m.

Louis Cross made a motion, seconded by Bobbie Richardson, to open the meeting.

A roll call vote was taken.

Paula Bentley	Yes	Joseph Clark	Yes	Darnetta Clinkscale Yes	s
Louis Cross	Yes	Sheila Goodwin	Yes	Yvette Levy Yes	s
Bobbie Richardson	Yes	Justin Stein	Yes		

With eight yes votes, motion carried, and the meeting opened around 6:05 p.m.

# XIV. ADJOURNMENT

Louis Cross made a motion, seconded by Yvette Levy, to adjourn the meeting.

By voice vote, motion carried, and the meeting adjourned around 6:08 p.m.

Attachments:

Retirements & Benefits: March and April 2019 Refunds & Bills: February and March 2019 December 31, 2018 and 2017 Financial Statements Fiduciary & Crime Insurance Renewal Memorandum

# **APPLICATIONS FOR RETIREMENT**

NAME \ POSITION	RETIREI DATE	MENT TYPE	CREDITED SERVICE	FINAL AVG SALARY	MONTHLY BENEFIT
Viola Barnes Teacher Assistant	2/1/2019	Normal	30.0000	\$35,738.47	\$1,786.93
Carlise Barton Teacher	2/1/2019	Normal	20.9495	\$59,686.65	\$2,084.01
Jerelyn Burtis Teacher Assistant	2/1/2019	Early	11.4723	\$35,262.74	\$584.33
Thaha Menkara Teacher Assistant	2/1/2019	Normal	29.2899	\$39,204.93	\$1,913.85
William Rainer Jr. Spec Ed Instr Care Aide	2/1/2019	Normal	27.5389	\$40,823.56	\$1,873.72
Audrey Robinson School Nurse	2/1/2019	Early	5.1000	\$49,633.19	\$365.62
Martha Stegmaier Administrative Assistant	2/1/2019	Normal	15.4304	\$74,619.41	\$1,919.01
Wardell Thacker Jr. In-School Suspension Monitor	2/1/2019	Normal	22.1111	\$43,747.29	\$1,457.40

# **APPLICATIONS FOR RETIREMENT**

NAME \ POSITION	RETIREI DATE	MENT TYPE	CREDITED SERVICE	FINAL AVG SALARY	MONTHLY BENEFIT
Timothy Kelley Adult Ed Personnel	2/1/2019	Normal	24.8833	\$65,245.33	\$2,705.86
Peggy Brooks Spec Ed Instr Care Aide	3/1/2019	Normal	17.0167	\$30,573.12	\$867.09
Laurie Burian Social Worker	3/1/2019	Normal	6.7333	\$51,223.71	\$574.84
James Green Coordinator Spec Area	3/1/2019	Normal	23.1189	\$63,394.12	\$2,442.67
Donald Hauk Electrician	3/1/2019	Normal	29.2390	\$68,016.81	\$2,847.22
Linda Haynes-Smith Teacher	3/1/2019	Normal	30.0000	\$83,779.65	\$4,188.98
Cynthia Ingram Spec Ed Instr Care Aide	3/1/2019	Disability	17.3390	\$29,913.67	\$864.46
Ernest Lewis Custodian	3/1/2019	Early	7.5885	\$36,115.32	\$280.63
Harriet Woody Spec Ed Instr Care Aide	3/1/2019	Normal	5.2111	\$28,638.62	\$248.73

1010	D(eath)		(1,832.74) A S VOID & REISSUE	2,621.37 A S GCAA	9,332.23 A SLLIS	5,666.37 A S CA	2,226.48 A S KIPP	26,814.31 A S Z6,814.31 A S	2,084.40 A S			1,832.74 A S VOID & REISSUE		5,532.86 A S KIPP		2,330.88 A S S	2,217.34 A S	3,286.34 A S S	1,421.13 A S S	4,717.29 A S	3,293.08 A D DEC:JUANITA BALTON	S	1,247.86 A S CA	29,719.53 A S CCC GSA		4,026.15 A S SLPS IACM	10,012.07 A S S	77,494.16 A D DEC: LORI A DOSS	952.12 A S LCP	40,682.75 A S SLCP	-
	FEDERAL NET	TAXES W/H PAY	(458.18) (1,8		2,333.06 9,3	1,416.60 5,6	556.62 2,2	26,8	521.11 2,0	2,035.67 8,1	2,5	458.18 1,8	502.25 2,0	5,5	10,8	582.72 2,3	554.33 2,2	3,2	355.28 1,4	1,179.32 4,7	3,2	94.52 3	1,2	29,7	346.87 1,3	1,006.54 4,0	10,0	8,602.07 77,4	238.04	40,6	
	GROSS	РАҮ	(2,290.92)	2,621.37	11,665.29	7,082.97	2,783.10	26,814.31	2,605.51	10,178.35	2,564.46	2,290.92	2,511.24	5,532.86	10,839.72	2,913.60	2,771.67	3,286.34	1,776.41	5,896.61	3,293.08	472.60	1,247.86	29,719.53	1,734.31	5,032.69	10,012.07	86,096.23	1,190.16	40,682.75	
		FIRST NAME/MI	KENDRA	KASSONDRA	SALLY	NICOL	HANNAH	LAKENA	CHRISTINA	JERRY	MEAGAN	KENDRA	ROBERT	COURTNEY	TANYA	GRACE	TAMIKA	NELSON	TAMILA	ELSTON	VERNELL J	AMY	JOANNE	ADAM	RACHEL	ANDREA W	DAWNA	GEORGETTE D	MARK	MICHAEL	
			VAN DYKE		CHAMBERLAIN	FELDMANN	SHCKELFORD	CURTIS	GARMS		02/04/19 O'LEARY	VAN DYKE	BOWEN	JAMES	JUSSILA	BURNS	02/12/19 GALVIN	PEREZ	02/12/19 JONES-WADE	02/12/19 MCCOWAN	BALTON SR	1	02/27/19 COSTANTINOU	GUTSCHENRITTER	DOTHAGER	RATNER	WHARTON	GREGORY	FUNK	MALONE	
	CHECK	DATE	11/01/18	02/04/19	02/04/19	02/04/19	02/04/19	02/04/19	02/04/19	02/04/19	02/04/19	02/04/19	02/12/19	02/12/19	02/12/19	02/12/19	02/12/19	02/12/19	02/12/19	02/12/19	02/12/19	02/27/19	02/27/19	02/27/19	02/27/19	02/27/19	02/27/19	02/27/19	02/27/19	02/27/19	
	CHECK	NUMBER	074692	074968	074969	074970	074971	074972	074973	074974	074975	074976	075002	075003	075004	075005	075006	075007	075008	075009	075010	075039	075040	075041	075042	075043	075044	075045	075046	075047	

Distributions - February, 2019

# Page 1 of 2

CHECK			GROSS	FEDERAL	NET	A(ctive)	D(eath)	
DATE	LAST NAME	FIRST NAME/MI	РАҮ	TAXES W/H	РАҮ	R(etired)	S(eparation)	NOTES
03/14/19	RATLIFF	JAMES	6,960.08	1,392.02	5,568.06	A	S	
/19	03/14/19 SMITH	JARRETT	11,058.17	2,211.64	8,846.53	A	S	
/19	03/14/19 THOMAS	REBEKAH M	4,870.96	974.20	3,896.76	A	S	
/19	03/14/19 ROTH	MELODY	944.81	188.97	755.84	A	S	EAGLE
/19	03/26/19 EGART	KATHRYN	4,592.43		4,592.43	A	S	CA
\$/19	03/26/19 GREEN		2,908.77	581.76	2,327.01	A	S	KIPP
\$/19	03/26/19 JACKSON	LATASHA	12,259.58	2,451.92	9,807.66	A	S	CA SLPS
/19	03/26/19 LANDRY	KHRISTIN	319.62	63.93	255.69	A	S	KIPP
\$/19	03/26/19 MALLICOAT	AMANDA	2,484.66		2,484.66	A	S	CA
\$/19	03/26/19 MCPEAK	NATHALIA	7,346.41		7,346.41	A	S	SLLIS
\$/19	03/26/19 NICKERSON	JEFFREY J	3,007.95	601.59	2,406.36	A	S	KIPP PRECLARUS
3/19	03/26/19 THORPE	MELANIE	2,081.40		2,081.40	A	S	CA
3/19	03/26/19 BANKS	MATTHEW	6,128.41	1,225.69	4,902.72	A	S	
03/26/19	FULTON	NICOLE	24,984.36		24,984.36	A	S	
3/19	03/26/19 KALMES	BRETT	9,064.68		9,064.68	A	S	
03/26/19	KOSTER	IAN	3,984.67	796.94	3,187.73	A	S	
6/19	03/26/19 STEWARD	ΓΑΤΥΓΓΙΑ	3,290.49	658.10	2,632.39	A	S	
6/19	03/26/19 TAWFIK	MARQUERITE	19,308.07	3,861.62	15,446.45	A	S	
6/19	03/26/19 TAYLOR	MELODY	9,792.88		9,792.88	A	D	DEC: SAMUEL TAYLOR
03/26/19	LACKEY	ALLISON	2,975.22		2,975.22	A	S	VOID AND REISSUE
3/19	03/26/19 FRANKENBERG-POWERS STACY M	STACY M	4,858.86	971.77	3,887.09	A	S	VOID AND REISSUE
		TOTAL	\$ 413,661.42	\$ 52,870.15	\$ 360,791.27			

# Distributions - March 2019

		ystem of the City of St. Louis e Month of February, 2019	
Payee		Description	<u>Amount</u>
Date Paid February 1, 2019			
Office Payroll	ACH	Office Payroll	10,025.30
AXA Equitable	ACH	457 Contributions	2,040.00
Date Paid February 5, 2019			
Ameren Missouri	74978	Electric Service	2,654.41
Office Essentials	74979	Office Supplies	491.71
OffsiteDataSync ACC Business	74980 74981	Online Backups Telephone Fiberoptics	321.50 529.76
Specialty Mailing	74981	Service - UDANs	1,632.82
Microetek Document Imaging Systems, Inc.	74983	Image Hosting for December 2018	406.80
FreedomVoice	74984	Telephone Service	388.13
Minuteman Press	74985	Envelopes, Business Cards R. Elam & R. Willis	602.89
Gregory F.X. Daly, Collector of Revenue	74986	Water - City	136.46
Prism Software Corporation	74987	Annual Maintenance Renewal	166.00
OTIS Elevator Company Causeway Capital Management LLC	74988 74989	Service Contract 4th Quarter 2018 Management Fee	2,520.40 68,834.71
Chicago Equity Partners, LLC	74989 74990	4th Quarter 2018 Management Fee	35,755.70
EARNEST Partners, LLC	74991	4th Quarter 2018 Management Fee	7,764.21
The Edgar Lomax Company	74992	4th Quarter 2018 Management Fee	39,513.85
Fidelity Institutional Asset Mgmt. Trust Co.	74993	4th Quarter 2018 Management Fee	64,354.16
INTECH Investment Management LLC	74994	4th Quarter 2018 Management Fee	27,611.12
Manulife Asset Management U.S. LLC	74995	4th Quarter 2018 Management Fee	32,317.19
Westfield Capital Management Company, LP	74996	4th Quarter 2018 Management Fee	58,154.66
US Bank Board of Education St. Louis Benefits Trust	74997 74998	4th Quarter 2018 Custodial Fee Office Employees Insurance - Dental	25,212.37 185.95
Board of Education St. Louis Benefits Trust	74998	Office Employees Insurance - Vision	11.65
Board of Education St. Louis Benefits Trust	75000	Office Employees Insurance - Dental	125.20
Specialty Mailing	75001	Postage - Insurance Letter	1,485.29
Date Paid February 15, 2019		-	
Office Payroll	ACH	Office Payroll	10,025.30
AXA Equitable	ACH	457 Contributions	2,040.00
Date Paid February 20, 2019			
Absopure Water Company	75011	Water Cooler Service	68.85
Blade Technologies, Inc.	75012	Professional Services	2,084.34
Crossroads Courier, Inc. Hartnett Gladney Hetterman, L.L.C.	75013 75014	Courier Service Legal Fees	5.84 7.191.00
Office Essentials	75014	Office Supplies	778.30
The Berwyn Group	75016	Death Check Verification Services	35.00
AT&T	75017	Monthly Service Charge	252.18
MSD	75018	Sewer Service	57.68
Gallagher Benefit Services, Inc.	75019	Group Ins. Consulting Services Monthly Fee	3,320.25
Buck Global, LLC	75020	Actuarial & Consulting Services - January 2019	19,966.00
BuildingStars STL Operations, Inc.	75021	Janitorial Services	1,386.00
Purchase Power Specialty Mailing	75022 75023	Postage Postage - Daily Pickup	500.00 200.00
Specialty Mailing	75023	Service - 1099R Mailing	661.25
Microtek Document Imaging Systems, Inc.	75025	Image Hosting, Document Prep and Scanning	827.52
BarnesCare	75026	Cynthia D. Ingram	100.00
Clayton Parking	75027	February 2019 Parking - 2 Employees	130.00
Above All Personnel	75028	Temporary Employee	866.06
CBRE - 608844	75029	Management Fee - January 2019	1,162.48
CBRE - 608844	75030	Engineer Services	796.75
St. Louis Mat & Linen Company Delta Pest Stl Inc.	75031 75032	Floor Mats Pest Control	138.00 50.00
Jarrell Mechanical Contractors	75032 75033	Repairs	237.00
Tech Electronics, Inc.	75034	Central Monitoring of Fire Alarm System	102.00
Loyet Landscaping Maintenance Inc.	75035	Snow and Ice Management	1,379.00
Mellon Capital Management Corporation	75036	4th Quarter 2018 Management Fee	60,791.12
Mellon Capital Management Corporation	75037	4th Quarter 2018 Management Fee	437.59
Specialty Mailing	75038	Postage - Winter 2019 Newsletters	2,240.90
		TOTAL	\$501,072.65

Public School R	Retirement Sy	ystem of the City of St. Louis									
Checks Written During the Month of March, 2019											
	Ck. Number	Description									
1, 2019											
	ACH	Office Payroll									

ACH

75048

75049

75050

75051

75052

75053

75054

75055

75056

75057

75058

75059

75060

75061

75062

75063

75064

ACH

ACH

75105

75106

ACH

#### Payee

Office Payroll

AXA Equitable

Above All Personnel

Republic Services #346

#### Date Paid March

**Charter Communications** Date Paid March 5, 2019 Ameren Missouri Office Essentials OffsiteDataSync ACC Business FreedomVoice Minuteman Press Shred-It USA Anders CPAs & Advisors Konika Minolta Business Solutions USA Inc. NEPC, LLC NEPC, LLC Board of Education St. Louis Benefits Trust Board of Education St. Louis Benefits Trust Board of Education St. Louis Benefits Trust

# Date Paid March 15, 2019

Office Payroll	
AXA Equitable	
Above All Personnel	
Pitney Bowes Global Financial Services LLC	

## Date Paid March 20, 2019

Absopure Water Company
Blade Technologies, Inc.
Crossroads Courier, Inc.
Hartnett Reyes-Jones, L.L.C.
Hartnett Reyes-Jones, L.L.C.
Office Essentials
AT&T
Gallagher Benefit Services, Inc.
Buck Global, LLC
BuildingStars STL Operations, Inc.
Purchase Power
Specialty Mailing
Specialty Mailing
Microtek Document Imaging Systems, Inc.
Above All Personnel
Gregory F.X. Daley, Collector of Revenue
Jupiter Consulting Services, LLC
Randy Elam
Tom Kinealy
CBRE - 608844
CBRE - 608844
Delta Pest Stl Inc.
Loyet Landscape Maintenance Inc.
Yardi Marketplace
Date Paid March 29, 2019

# Office Payroll AXA Equitable

Above All Personnel	
Gregory F.X. Daly, Collector of Revenue	
Republic Services #346	

Office Payroll 457 Contributions Temporary Employee Trash Pick-Up Charter Internet and Voice	10,014.45 2,060.00 854.44 177.55 189.96
Electric Service Office Supplies Online Backups Telephone Fiberoptics Telephone Service Winter Newsletters, Envelopes Document Shredding Audit of Financial Stmts., Non-Teacher Election Service - Copier C364E 4th Quarter 2018 Consulting Fee 4th Quarter 2018 Alt. Investment Mgmt. Fee Office Employees Insurance - Dental Office Employees Insurance - Vision Office Employees Insurance - Dental	$\begin{array}{c} 2,545.76\\ 507.00\\ 321.50\\ 528.08\\ 388.13\\ 1,886.89\\ 89.48\\ 11,200.00\\ 838.24\\ 31,250.00\\ 12,500.00\\ 185.95\\ 11.65\\ 125.20\\ \end{array}$
Office Payroll 457 Contributions Temporary Employee Lease Charges	10,014.45 2,060.00 871.88 1,410.00
Water Cooler Service	68.85

Water Cooler Service	68.85
Professional Services	2,075.84
Courier Service	7.22
Legal Fees	13,630.00
Lawsuit Legal Fees	13,042.50
Office Supplies	1,601.83
Monthly Service Charge	251.83
Group Ins. Consulting Services Monthly Fee	3,320.25
Actuarial & Consulting Services - February 2019	9,316.00
Janitorial Services & Supplies	2,093.74
Postage	500.00
Postage - Daily Pickup	180.00
Service - Insurance Ltr, Winter 2019 Newsletter	1,440.83
Image Hosting	414.00
Temporary Employee	871.88
Water - City	103.32
Programming Consulting	3,213.00
Annual License for Office 365	192.00
eFax Annual Subscription Fee	99.99
Management Fee - January & February 2019	2,324.96
Engineer Services	1,342.76
Pest Control	50.00
Snow and ice Management	3,534.00
Supplies	124.23
Office Payroll	10,352.19
457 Contributions	2,060.00
Temporary Employee	871.88

TOTAL	\$164,253.75
Trash Pick-Up	177.55
City Earnigs Tax - First Quarter 2019	962.49
Temporary Employee	871.88
457 Contributions	2,060.00
	10,002.10

<u>Amount</u>

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

FINANCIAL STATEMENTS WITH REQUIRED SUPPLEMENTARY INFORMATION AND OTHER SUPPLEMENTARY INFORMATION AND INDEPENDENT AUDITORS' REPORT YEARS ENDED DECEMBER 31, 2018 AND 2017

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# Independent Auditors' Report

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

# **Report on the Financial Statements**

We have audited the accompanying financial statements of Public School Retirement System of the City of St. Louis (the "System"), which comprise the statements of fiduciary net position as of December 31, 2018 and 2017, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

# Management's Responsibility for the Financial Statements

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

### Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits 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 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.

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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 Public School Retirement System of the City of St. Louis as of December 31, 2018 and 2017, and the changes in it's fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

# **Other Matters**

# **Required Supplementary Information**

Accounting principles generally accepted in the United States of America require that Management's Discussion and Analysis and the other required supplementary information, as listed in the Table of Contents, be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context.

We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our 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 Supplementary Information

Our audits were conducted for the purpose of forming an opinion on the System's basic financial statements. The other supplementary information on pages 45 - 50 is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The other supplementary information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to 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 auditing standards generally accepted in the United States of America. In our opinion, the other supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Anders Minkler Huber & Helm LLP

April 19, 2019

The Management Discussion and Analysis ("MD&A") for the Public School Retirement System of the City of St. Louis ("PSRSSTL") provides an overview of PSRSSTL financial activities for the fiscal year ended December 31, 2018. This MD&A is presented as required supplementary information to the financial statements and should be read in conjunction with the PSRSSTL financial statements, notes to the financial statements, required supplementary information, and other supplementary information.

The basic financial statements contained in this section of the MD&A consist of:

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

The System's fiduciary net position was \$819,449,893 at December 31, 2018, which represents a decrease of \$94,632,367 from December 31, 2017. This decrease was due to poor investment returns during the 2018 fiscal year that were far below the System's assumed rate of return. The poor performance results lowered the System's asset values for most investment categories at December 31, 2018.

The System's investment returns were (5.0%) in fiscal year 2018, 16.2% in fiscal year 2017, and 6.3% in fiscal year 2016. The System's investment return in fiscal year 2018, when compared to fiscal year 2017, represents a downturn in investment values for most asset categories as experienced by the financial markets during the one-year period. Predicting conditions in the marketplace is always challenging yet the Board of Trustees stands behind a sound Asset Allocation Policy by remaining focused on active monitoring of its money managers and long-term investment objectives. The actuarial assumed rate of return set by the Board of Trustees remained at 7.5% for fiscal year 2018.

Additions to fiduciary net position were \$21.4 million, \$178.5 million and \$96.7 million for fiscal years 2018, 2017 and 2016, respectively. The two highest additions to fiduciary net position in 2018 were employer contributions of \$48.8 million and member contributions of \$14.2 million. The main additions to fiduciary net position in 2017 were \$124.2 million of net investment income and \$41.1 million of employer contributions. The key additions to fiduciary net position during 2016 were net investment income of \$43.3 million and employer contributions of \$39.5 million.

Deductions from fiduciary net position were \$116.0, \$114.6 and \$115.2 million in fiscal years 2018, 2017 and 2016, respectively. More than half of the increase of \$1,426,832 in deductions from fiduciary net position between fiscal years 2018 and 2017 was due to the increase in contribution refunds paid to terminated or deceased members in fiscal year 2018. The \$598,746 decrease in deductions between fiscal years 2017 and 2016 was mostly due to decreased refunds paid to terminated or deceased members in fiscal year 2017.

# FINANCIAL STATEMENTS

The PSRSSTL financial report consists of two financial statements, (1) the Statements of Fiduciary Net Position, and (2) the Statements of Changes in Fiduciary Net Position. The Statements of Fiduciary Net Position provide details concerning PSRSSTL assets and liabilities other than long-term benefit obligations. However, PSRSSTL assets are the only source available to the System to pay pension benefits. The Statements of Changes in Fiduciary Net Position provide details regarding PSRSSTL financial activity during fiscal year 2018 that caused the change in fiduciary net position from fiscal year 2017 to fiscal year 2018.

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

# FINANCIAL ANALYSIS

On December 31, 2018, total assets and deferred outflow of resources of the System were \$822,032,535. Total assets consisted of cash, receivables, investments and an office building. When compared to fiscal year 2017, total assets and deferred outflows in fiscal year 2018 decreased by 10.2%, or \$93,755,800, and can be attributed to lower than expected investment returns.

On December 31, 2018, total liabilities and deferred inflow of resources of the System were \$2,582,642. Total liabilities consisted of accounts payable and accrued expenses and net pension liability. Total liabilities and deferred inflows in fiscal year 2018, when compared to fiscal year 2017, increased by 51.4%, or \$876,567, primarily because of the large increase in the System's net pension liability as required by GASB Statement No. 68.

On December 31, 2018, the fiduciary net position restricted for pensions was \$819,449,893, a decrease of 10.4%, or \$94,632,367, from fiscal year 2017.

On December 31, 2017, total assets and deferred outflow of resources for the System were \$915,788,335. Total assets consisted of cash, receivables, investments and an office building. Total assets and deferred outflows in fiscal year 2017 increased by 7.5%, or \$64,122,207, compared to fiscal year 2016, and can be attributed to higher than expected investment returns.

On December 31, 2017, total liabilities and deferred inflow of resources for the System were \$1,706,075. Total liabilities consisted of accounts payable and accrued expenses, and net pension liability. Total liabilities and deferred inflows in fiscal year 2017, when compared to fiscal year 2016, increased by 14.8%, or \$220,369, primarily because of the increase in the System's net pension liability as required by GASB Statement No. 68.

On December 31, 2017, the fiduciary net position restricted for pensions was \$914,082,260, an increase of 7.5%, or \$63,901,838, from fiscal year 2016.

Condensed Statements of Fluddary Net Position					
			-	FY 2018	FY 2017
	FY 2018	FY 2017	FY 2016	<u>% Change</u>	<u>% Change</u>
Assets					
Cash	\$ 9,850,121	\$ 10,108,913	\$ 9,815,722	(2.6)%	3.0 %
Receivables	847,357	803,961	1,816,539	5.4 %	(55.7)%
Investments	808,635,191	902,745,605	837,967,631	(10.4)%	7.7 %
Property and				( )	
building,net	1,680,266	1,747,704	1,815,142	(3.9)%	(3.7)%
Total Assets	821,012,935	915,406,183	851,415,034	(10.3)%	7.5 %
Deferred Outflows of Re					
Deferred outflows of	sources				
resources	1,019,600	382,152	251,094	166.8 %	52.2 %
Total Assets and					/ -
Deferred Outflows					
of Resources	822,032,535	915,788,335	851,666,128	(10.2)%	7.5 %
Liabilities Accounts payable and					
accrued expenses	708,970	800,653	780,536	(11.5)%	2.6 %
Net pension liability	1,727,361	876,434	649,399	97.1 %	35.0 %
Total Liabilities	2,436,331	1,677,087	1,429,935	45.3 %	17.3 %
Deferred Inflows of Res	ources				
Deferred inflows of	440.044	00.000	<b>-</b> - <b>/</b>		(40.0)0/
resources Total Liabilities and	146,311	28,988	55,771	404.7 %	(48.0)%
Deferred Inflows of					
Resources	2,582,642	1,706,075	1,485,706	51.4 %	14.8 %
100001000	2,002,012			0111 /0	11.0 /0
Fiduciary Net Position	<u>\$ 819,449,893</u>	<u>\$914,082,260</u>	<u>\$850,180,422</u>	(10.4)%	7.5 %

# **Condensed Statements of Fiduciary Net Position**

# **REVENUES – ADDITIONS TO FIDUCIARY NET POSITION**

The assets available to finance PSRSSTL pension benefits are accumulated through receipt of employer and member contributions as well as through earnings on investments. For fiscal year 2018, employer contributions were approximately \$48.8 million; member contributions were approximately \$14.2 million; and investments lost a net of approximately \$42.1 million. For fiscal year 2017, employer contributions were approximately \$41.1 million; member contributions were approximately \$41.1 million; member contributions were approximately \$41.1 million; member contributions were approximately \$12.6 million; and investments gained a net of approximately \$124.2 million.

Employer and member contributions combined increased by \$9.4 million in fiscal year 2018 compared to \$1.5 million in fiscal year 2017. This was due to the required employer contribution rates increasing from 15.73% of covered compensation in fiscal year 2017 to 19.10% in fiscal year 2018, and from 15.14% of covered compensation in fiscal year 2016 to 15.73% in fiscal year 2017. The PSRSSTL Actuary determines the amount of employer contributions required to maintain actuarial soundness of the System as part of the annual actuarial valuation report.

An active member contribution rate of 5.00% of covered compensation was effective from July 1, 1999 through December 31, 2017. In 2018, through legislation passed in 2017, the active member contribution rate was increased to 5.50% of covered compensation for members hired before January 1, 2018. This rate will increase by 0.50% per year until reaching 9.00%. After that, the contribution rate will remain at 9.00% of covered compensation. The legislation requires new active members hired on or after January 1, 2018, to immediately contribute at a rate of 9.00%.

Net investment income was \$166.3 million less in fiscal year 2018 than in fiscal year 2017 because investment earnings were negative 5.0% for fiscal year 2018 as compared to a positive 16.2% for fiscal year 2017. Net investment income was \$80.9 million more in fiscal year 2017 than in fiscal year 2016 because investment earnings were a positive 16.2% in fiscal year 2017 as compared to 6.3% for fiscal year 2016.

The net investment income or (loss) of \$(42,116,945), \$124,169,513 and \$43,310,266 in fiscal years 2018, 2017 and 2016, respectively, reflect gross investment income or (loss) less investment expenses, such as investment manager, investment advisor and custodial fees.

# **EXPENSES – DEDUCTIONS FROM FIDUCIARY NET POSITION**

The primary deductions from fiduciary net position were payments of retirement benefits, survivor benefits, disability benefits, retiree healthcare subsidies and refunds to members who have retired or terminated employment. PSRSSTL operating expenses in fiscal year 2018 were approximately 0.24% of assets, while operating expenses for both 2017 and 2016 were each approximately 0.18% of assets.

Condensed Statements of Changes in Fiduciary Net Position

Condensed Statements of Changes in Fluctuary Net Position					
		-	-	FY 2018	FY 2017
	FY 2018	FY 2017	FY 2016	<u>% Change</u>	<u>% Change</u>
Additions				-	-
Employer contributions	\$ 48,797,779	\$ 41,077,344	\$ 39,519,979	18.8 %	3.9 %
Member contributions	14,248,567	12,591,552	12,652,029	13.2 %	(0.5)%
Net investment income					
(loss)	(42,116,945)	124,169,513	43,310,266	(133.9)%	186.7 %
Rental income	157,219	153,544	150,427	2.4 %	2.1 %
Other income	288,646	473,862	1,031,395	(39.1)%	(54.1)%
Total Additions	21,375,266	178,465,815	96,664,096	(88.0)%	84.6 %
Deductions					
Retirement benefits	99,641,973	99,499,140	99,419,975	0.1 %	0.1 %
Survivor benefits	3,082,696	3,056,046	2,973,225	0.9 %	2.8 %
Disability benefits	3,616,435	3,512,352	3,479,852	3.0 %	0.9 %
Health care subsidies	2,381,857	2,442,339	2,515,000	(2.5)%	(2.9)%
Operating expenses	1,996,981	1,613,506	1,554,314	23.8 %	3.8 %
Refunds to members	5,287,691	4,440,594	5,220,357	19.1 %	(14.9)%
Total Deductions	116,007,633	114,563,977	115,162,723	1.3 %	(0.5)%
Change in Fiduciary					
Net Position	<u>\$(94,632,367)</u>	<u>\$ 63,901,838</u>	<u>\$ (18,498,627)</u>	(248.1)%	445.4 %

# FINANCIAL SUMMARY

For over 22 years, the PSRSSTL Investment Consultant has consistently calculated the System's investment performance; thereby, providing a valid basis on which performance can be compared with other public pension funds. For instance, the System's investments have provided consistent returns with cumulative PSRSSTL investment performance ranking in the top 25% of similar public pension plans for the last 22 years through the period ended December 31, 2018.

The fiduciary net position over this same timeframe has fluctuated from a low of \$780 million in fiscal year 1997 to a high of \$1.15 billion in fiscal year 2007. At the end of fiscal year 2018, the fiduciary net position was \$819.4 million. These fluctuations in the value of the System's fiduciary net position can be attributed to volatile financial market conditions that caused substantial losses of investment returns in several fiscal years followed by large investment gains in other fiscal years.

Until fiscal year 2017, using the Governmental Accounting Standards Board ("GASB") calculation method implemented in 1992, the funded status of PSRSSTL remained stable by fluctuating within the range of 80.5% to 88.6% for 25 fiscal years. The funded ratio of a plan compares its assets to its liabilities; thereby, on an actuarial basis, measuring a plan's ability to fulfill future financial obligations to its members. The funded ratios of the PSRSSTL for fiscal years 2018, 2017 and 2016 were 78.1%, 79.5%, and 84.9%, respectively. The large dip in the System's funded ratio from fiscal year 2016 to fiscal year 2017 was primarily due to the change in the System's actuarial assumed rate of return (discount rate) from 8.0% to 7.5%.

The Board of Trustees and the PSRSSTL Actuary assume that the PSRSSTL will continue to be funded on a sound actuarial basis provided required member and employer contributions are made as recommended, a prudent and well-diversified Asset Allocation Policy remains in place, quality investment managers continue to be selected, and the financial markets dodge sustained volatility. However, during fiscal year 2017, the Missouri General Assembly, in cooperation with then Governor Eric Greitens, enacted changes to the System's calculations for the required annual employer and member contributions that jeopardize the System's actuarial soundness. Unless this legislation is overturned or replaced, these changes will have adverse effects on the System and its ability to meet future financial obligations to its members. It is assumed that the Board of Trustees will fulfill its fiduciary duty to the System's membership by continuing to take the appropriate legal action against the legislation.

# **REQUESTS FOR INFORMATION**

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

# Public School Retirement System of the City of St. Louis Statements of Fiduciary Net Position December 31, 2018 and 2017

#### Assets

		2018		2017
Cash	\$	9,850,121	\$	10,108,913
Receivables Accrued interest and dividends Other receivable		824,179 23,178		778,383 25,578
Total Receivables		847,357		803,961
Investments, at fair value Cash equivalents Bonds		36,721,304		40,773,921
U.S. Government and agency issues		28,998,131		28,241,695
Corporate Foreign investments (bonds and stocks)		32,811,378 73,501,212		33,283,520 91,518,408
Common and preferred stocks		185,412,081		216,329,735
Mutual and co-mingled funds		360,023,724		411,565,601
Real estate partnerships		48,471,908		55,324,668
Limited partnerships		42,695,453		25,708,057
Total Investments		808,635,191		902,745,605
Property and Building, net		1,680,266		1,747,704
Total Assets		821,012,935		915,406,183
Deferred Outflows of Resources	;			
Deferred Outflows of Resources Related to Pensions		1,019,600		382,152
Liabilities				
Accounts Payable and Accrued Expenses		708,970		800,653
Net Pension Liability		1,727,361		876,434
Total Liabilities		2,436,331		1,677,087
Deferred Inflows of Resources				
Deferred Inflows of Resources Related to Pensions		146,311		28,988
Net Position				
Net Position Restricted for Pensions	<u>\$</u>	819,449,893	<u>\$</u>	914,082,260

# Public School Retirement System of the City of St. Louis Statements of Changes in Fiduciary Net Position Years Ended December 31, 2018 and 2017

		2018		2017
Additions				
Employer contributions St. Louis Public Schools	\$	37,376,323	\$	30,459,434
Sick leave conversion	Ψ	302,222	Ψ	412,970
Charter Schools		11,018,669		10,130,296
Retirement System		100,565		74,644
Plan member contributions		,		,
St. Louis Public Schools		10,282,093		9,289,039
Charter Schools		3,935,567		3,275,759
Retirement System		30,907		26,754
		63,046,346		53,668,896
Investment income (loss)				
Cash equivalents		459,491		294,142
Bonds		222.020		4 405 000
U.S. Government and agency issues		333,930		1,165,283
Corporate		78,150 (12,802,444)		2,048,420 24,292,282
Foreign investments (bonds and stocks) Common and preferred stock		(12,002,444) (12,045,029)		48,544,033
Mutual and co-mingled funds		(12,045,029) (23,225,857)		47,184,871
Limited partnerships		6,387,880		2,622,170
Real estate partnerships		3,603,474		3,103,993
Venture capital partnerships				(26,146)
		(37,210,405)		129,229,048
Less investment expenses		4,906,540		5,059,535
Net investment income (loss)		(42,116,945)		124,169,513
Rental income		157,219		153,544
Other miscellaneous income		288,646		473,862
Net Additions		21,375,266		178,465,815
Deductions				
Benefits paid				
Retirement benefits		99,641,973		99,499,140
Survivor benefits		3,082,696		3,056,046
Disability benefits		3,616,435		3,512,352
Health care subsidies		2,381,857		2,442,339
		108,722,961		108,509,877
Operating expenses		1,996,981		1,613,506
Contribution refunds due to death or resignation		5,287,691		4,440,594
Total Deductions		116,007,633		114,563,977
Net Increase (Decrease) in Net Position		(94,632,367)		63,901,838
Net Position Restricted for Pensions, Beginning of Year		914,082,260		850,180,422
Net Position Restricted for Pensions, End of Year	<u>\$</u>	819,449,893	<u>\$</u>	914,082,260

# 1. Description of System

# General

The Public School Retirement System of the City of St. Louis (the "System") is the administrator of a cost-sharing multiple-employer defined benefit pension plan existing under provisions of the Revised Statutes of the State of Missouri (the "Statutes") to provide retirement benefits for all employees of the Board of Education of the City of St. Louis, of the Charter Schools located within the St. Louis School District, and of all employees of the System. The System issues a Comprehensive Annual Financial Report ("CAFR"), a publicly available financial report that can be obtained at www.psrsstl.org.

An eleven member Board of Trustees is responsible for general administration of the System and investing the System's assets. Trustees are appointed by plan members and the Board of Education of the City of St. Louis.

# Membership and Eligibility

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

	January 1, 2018	January 1, 2017
Active members Inactive members	5,138 2,791	5,101 2,554
Total members not retired	7,929	7,655
Retired members Service and survivors Disability	4,277 249	4,310 
	4,526	4,561
Total membership	12,455	12,216

# Vesting

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

# Funding Policy

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

# Benefits

Upon retirement at age 65, or at any age if age plus years of credited service equals or exceeds 80 (Rule of 80), or 85 (Rule of 85) if terminated prior to August 28, 2017, members receive monthly payments for life of yearly benefits equal to years of credited service multiplied by 2% of average final compensation or 1.75% of average final compensation if hired on or after January 1, 2018, but not to exceed 60% of average final compensation. Early retirement can occur at age 60 with five years of service. The service retirement allowance is reduced five ninths of one percent for each month of commencement prior to age 65 or the age at which the Rule of 80 (Rule of 85 if terminated prior to August 28, 2017) would have been satisfied had the employee continued working until that age, if earlier.

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

Members are eligible, after accumulation of five years of credited service, for disability benefits prior to eligibility of normal retirement. Survivor benefits are available for beneficiaries of members who die after at least 18 months of active membership.

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

Benefits are recorded when paid.

# Return of Contributions Upon Death

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

# **Contributions by Participants**

Active participants hired before January 1, 2018 contribute 5.50% of covered compensation for the year ended December 31, 2018. This rate increases 0.50% per year until it reaches 9.00%. After this, the contribution rate will remain at 9.00% of covered compensation. Active participants hired on or after January 1, 2018 contribute 9.00% of covered compensation. Active participants contributed 5.00% of covered compensation for the year ended December 31, 2017.

Accumulated contributions are credited at the rate of interest established by the Board of Trustees. The current crediting rate is 5.00%.

# **Contributions by Employers**

The System's contractually required contribution rate applied to St. Louis Public Schools and the Retirement System for the year ended December 31, 2018 was 19.10% of annual payroll, actuarially determined as an amount that, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. For all other employers, the System's contractually required contribution rate will be set at 16.00% of covered payroll for the year ended December 31, 2018. This contribution rate shall be decreased by 0.50% in each subsequent year until reaching 9.00% of covered payroll. After this, the contribution rate will remain at 9.00% of covered payroll. St. Louis Public Schools and the Retirement System will apply the contractually required contribution rate of 16.00% in the year ended December 31, 2019, which shall be decreased by 0.50% in each subsequent year until reaching 9.00% of covered payroll.

The System's contractually required contribution rate for the year ended December 31, 2017 was 15.73% of annual payroll, actuarially determined as an amount that, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability.

Contributions to the pension plan for System employees were \$100,565 and \$74,644 for the years ended December 31, 2018 and 2017, respectively.

# Expenses

Operating expenses are paid out of investment income.

# **Investment Policy**

The System's policy in regards to the allocation of invested assets is established and may be amended by the System's Board of Trustees. Investments are managed on a total return basis with a long-term objective of maintaining a fully funded status for the benefits provided through the pension plan. The following was the System's adopted asset allocation policy as of February 27, 2017:

		Long-term Expected Real
Asset Class	Target Allocation	Rate of Return
U.S. Equity	22.0 %	6.2 %
Non-U.S. Equity	19.0 %	7.4 %
Global Equity	5.0 %	6.7 %
Fixed Income	21.0 %	1.9 %
Real Estate	7.0 %	4.4 %
Private Markets	9.0 %	7.6 %
Hedge Funds	7.0 %	3.9 %
Global Asset Allocation	10.0 %	3.7 %
Total/Average	100.0 %	5.2 %

# 2. Summary of Significant Accounting Policies

# Basis of Presentation and Accounting

The financial statements of the System have been prepared in accordance with the criteria established by the Governmental Accounting Standards Board ("GASB"), which is the source of authoritative accounting principles generally accepted in the United States of America ("GAAP"), as applied to governmental units. The System's financial statements are prepared using the accrual basis of accounting.

# Use of Estimates

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

# Receivables

Receivables consist of pending interest and dividends payable on investments held at the end of the year. Other receivable is an amount due to the System from a member for overpaid benefits.

# **Investment Valuation and Income Recognition**

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. See Note 5 for discussion of fair value measurements. Short-term investments are reported at cost, which approximates fair value. Securities traded on national or international exchanges are valued at the latest reported sales price at current exchange rates.

# Limited Partnerships

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

# **Alternative Investments**

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

# Investment Income

Investment income includes: realized gains (losses), unrealized appreciation (depreciation), dividends, interest, and other investment income. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

# Investment Expenses

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

# Fair Value Measurements

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

# Furniture and Equipment

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

# Property and Building

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

# Long-Lived Asset Impairment

The System evaluates the recoverability of the carrying value of long-lived assets whenever events or circumstances indicate the carrying amount may not be recoverable. If a long-lived asset is tested for recoverability and the undiscounted estimated future cash flows expected to result from the use and eventual disposition of the asset are less than the carrying amount of the asset, the asset cost is adjusted to fair value and an impairment loss is recognized as the amount by which the carrying amount of a long-lived asset exceeds its fair value. No asset impairment was recognized during the years ended December 31, 2018 and 2017.

# **Deferred Outflows and Inflows of Resources**

In addition to assets and liabilities, the statements of fiduciary net position will sometimes include separate sections for deferred outflows and inflows of resources. These separate financial statement elements represent the use or acquisition of net position that applies to a future period or periods and will not be recognized as an outflow or inflow of resources until then. The System has deferred outflows and inflows in the statements of fiduciary net position that relate to pension related deferrals required by GASB Statement No. 68.

# Pensions

Pension-related expenses, liabilities, deferred outflows of resources, and deferred inflows of resources have been determined on the same basis as they are reported by the System. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms.

# Subsequent Events

The System has evaluated subsequent events through April 19, 2019, the date the financial statements were available to be issued.

# **Recent Accounting Pronouncements**

The following GASB Statements are effective for various reporting periods beginning after December 15, 2018.

- GASB Statement No. 83: Certain Asset Retirement Obligations
- GASB Statement No. 84: Fiduciary Activities
- GASB Statement No. 86: Certain Debt Extinguishment Issues
- GASB Statement No. 87: Leases
- GASB Statement No. 88: Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements
- GASB Statement No. 89: Accounting for Interest Cost Incurred before the End of a Construction Period
- GASB Statement No. 90: Majority Equity Interest an amendment of GASB Statements No. 14 and No. 61

Based on preliminary analysis, the System does not expect the new guidance to have a significant impact on its financial statements.

# 3. Adoption of New Accounting Standards

During the year ended December 31, 2018, the System adopted GASB Statement No. 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 deviations 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. The implementation of GASB Statement No. 82 did not significantly impact the System's financial statements.

During the year ended December 31, 2018, the System adopted GASB Statement No. 75: *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*. This Statement improves accounting and financial reporting by state and local governments for postemployment benefits other than pensions. GASB Statement No. 75 did not significantly impact the System's financial statements.

During the year ended December 31, 2018, the System adopted GASB Statement No. 85: *Omnibus 2017*. This Statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits. GASB Statement No. 85 did not significantly impact the System's financial statements.

# 4. Investments

At December 31, 2018 and 2017, investments consisted of the following:

	2018	
	Fair Value Cost	
Cash equivalents Bonds	\$ 36,721,304	\$ 36,721,304
U.S. Government and agency issues Corporate	28,998,131 32,811,378	29,592,471 34,097,511
Foreign investments (bonds and stocks)	73,501,212	78,763,546
Common and preferred stocks	185,412,081	168,088,999
Mutual and co-mingled funds	360,023,724	288,610,690
Real estate partnerships	48,471,908	32,418,615
Limited partnerships	42,695,453	41,044,416
	<u>\$808,635,191</u>	<u>\$709,337,552</u>

	2017		
	Fair Value Cost		
Cash equivalents	\$ 40,773,921	\$ 40,773,921	
Bonds			
U.S. Government and agency issues	28,241,695	35,684,055	
Corporate	33,283,520	33,198,524	
Foreign investments (bonds and stocks)	91,518,408	77,783,061	
Common and preferred stocks	216,329,735	159,263,388	
Mutual and co-mingled funds	411,565,601	312,847,221	
Real estate partnerships	55,324,668	40,567,585	
Limited partnerships	25,708,057	23,450,683	
	<u>\$902,745,605</u>	<u>\$723,568,438</u>	

# 5. Fair Value Measurements

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

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

Investments that are measured at fair value using the net asset value ("NAV") per share (or its equivalent) as a practical expedient are not classified in the fair value hierarchy.

The fair value amounts presented in the tables are intended to permit reconciliation of the fair value hierarchy to the line items presented in the statements of fiduciary net position. The instrument's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observable inputs and minimize the use of unobservable inputs.

Carrying amounts of certain financial instruments such as cash, receivables, accounts payable, and accrued expenses approximate fair value due to their short maturities or because the terms are similar to market terms. There have been no changes in the methodologies used at December 31, 2018 and 2017.

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

- Level 1 Investments consist of publicly traded common and preferred stocks and mutual funds. These investments are valued using the closing price reported on the active market on which the individual securities are traded.
- Level 2 Investments consist of corporate and foreign bonds and stocks, U.S. government securities and agency issues, and cash equivalent accounts. These securities are valued using pricing models maximizing the use of observable inputs for similar securities. This includes basing value on yields currently available on comparable securities of issuers with similar credit ratings.
- Level 3 Investments consist of real estate partnerships and limited partnerships. Real estate partnerships are valued at fair value as determined by the general partner. Limited partnerships are valued based on valuations of the underlying companies of the limited partnerships as reported by the general partner.

Investments also consist of co-mingled funds. These securities are valued at the NAV based on shares held by the System at year-end. The NAV is used as a practical expedient to estimate fair value.

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

The following table presents the fair value measurements of instruments recognized in the accompanying statements of fiduciary net position measured at fair value on a recurring basis and the level within the fair value hierarchy in which the fair value measurements are categorized at December 31, 2018 and 2017:

	2018			
	Fair Value Measurements			
	Total	Level 1	Level 2	Level 3
Cash equivalents	\$ 36,721,304	\$-	\$ 36,721,304	\$-
U.S. Government and agency				
issues	28,998,131	-	28,998,131	-
Corporate bonds	32,811,378	-	32,811,378	-
Foreign investments	73,501,212	-	73,501,212	-
Common and preferred stocks	185,412,081	185,412,081	-	-
Mutual funds	234,330,113	234,330,113	-	-
Real estate partnerships	48,471,908	-	-	48,471,908
Limited partnerships	42,695,453			42,695,453
Total assets in fair value				
hierarchy	682,941,580	<u>\$419,742,194</u>	<u>\$172,032,025</u>	<u>\$ 91,167,361</u>
Investments measured at NAV	125,693,611			
	<u>\$808,635,191</u>			

	2017				
	Fair Value Measurements				
	Total	Total Level 1		Level 3	
Cash equivalents	\$ 40,773,921	\$-	\$ 40,773,921	\$ -	
U.S. Government and agency					
issues	28,241,695	-	28,241,695	-	
Corporate bonds	33,283,520	-	33,283,520	-	
Foreign investments	91,518,408	-	91,518,408	-	
Common and preferred stocks	216,329,735	216,329,735	-	-	
Mutual funds	271,553,680	271,553,680	-	-	
Real estate partnerships	55,324,668	-	-	55,324,668	
Limited partnerships	25,708,057			25,708,057	
Total assets in fair value					
hierarchy	762,733,684	\$487,883,415	<u>\$193,817,544</u>	<u>\$ 81,032,725</u>	
Investment measured at NAV	140,011,921				
	<u>\$902,745,605</u>				

Investments measured at fair value based on NAV per share practical expedient as of December 31, are as follows:

December 31, 2018 Co-mingled funds	<u>Fair Value</u> \$ 125,693,611	Unfunded <u>Commitments</u> N/A	Redemption <u>Frequency</u> Daily	Redemption Notice Period 30 days
<u>December 31, 2017</u> Co-mingled funds	<u>Fair Value</u> \$ 140,011,921	Unfunded <u>Commitments</u> N/A	Redemption <u>Frequency</u> Daily	Redemption Notice Period 30 days

The following table provides a summary of changes in fair value of the System's Level 3 assets for the years ended December 31, 2018 and 2017, as follows:

	Ċ	enture Capital <u>merships</u>	Limited Partnerships	Real Estate Partnerships	Total
December 31, 2016	\$	220,624	\$ 19,649,576	\$ 52,710,452	\$ 72,580,652
Realized gains (losses)		(26,146)	625,641	33,219	632,714
Unrealized gains		-	1,570,404	729,140	2,299,544
Purchases, sales, issuances, and					
settlements (net)	(	(194,478)	3,436,311	-	3,241,833
Investment income, net		-	426,125	2,341,634	2,767,759
Management fees		_		(489,777)	(489,777)
December 31, 2017		-	25,708,057	55,324,668	81,032,725
Realized gains		-	4,178,202	109,066	4,287,268
Unrealized gains		-	1,167,100	1,296,210	2,463,310
Purchases, sales, issuances, and					
settlements (net)		-	10,599,516	(10,000,000)	599,516
Investment income, net		-	1,042,578	2,198,198	3,240,776
Management fees		-		(456,234)	(456,234)
December 31, 2018	\$	-	\$42,695,453	<u>\$48,471,908</u>	<u>\$ 91,167,361</u>

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

		Valuation	
December 31, 2018	Fair Value	Technique(s)	Unobservable Inputs
Limited Partnerships	\$ 42,695,453	Basis in LLC	Undistributed Income
Real Estate Partnerships	\$ 48,471,908	Basis in LLC	Undistributed Income
		Valuation	
December 31, 2017	Fair Value	Technique(s)	Unobservable Inputs
Limited Partnerships	\$ 25,708,057	Basis in LLC	Undistributed Income
Real Estate Partnerships	\$ 55,324,668	Basis in LLC	Undistributed Income

The significant unobservable inputs used in the fair value measurement of the System's investments in limited partnerships are the original cost of the investment in the partnership plus the cumulative net income of the partnership through the end of the most recent fiscal year. Significant increases or decreases in the partnership's cumulative net income as of December 31, 2018 and 2017 could result in a significantly higher or lower fair value measurement.

# 6. **Risks and Uncertainties**

# **Custodial Credit Risk**

Financial instruments that potentially subject the System to concentrations of custodial credit and market risk consist principally of cash and investments. The System places its temporary cash investments with major financial institutions. At December 31, 2018 and 2017, the System had approximately \$10,061,000 and \$10,581,000, respectively, in cash on deposit at US Bank. These balances were insured by the Federal Deposit Insurance Corporation ("FDIC") for \$250,000. The remaining balances are collateralized by US Bank's assets held jointly in the name of US Bank, N.A. and the System, held by the Federal Home Loan Bank of Cincinnati as Trustee. Regulations require that government entities, in case of bank failure, have collateral to cover losses that could exceed the FDIC limit of \$250,000. The fair value of the collateralized securities at December 31, 2018 and 2017 was \$11,000,000. A significant portion of the System's investments are held in trust by US Bank of St. Louis, N.A.

On December 28, 2018, and 2017, the System received \$37,678,545 and \$30,872,404, respectively, from the St. Louis Board of Education for the 2018 and 2017 St. Louis Public Schools' annual regular pension contribution and sick leave conversion contribution and held it in a cash equivalents account until investment allocations were implemented.

The System invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market 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 that such change could materially affect the amounts reported in the accompanying statements of fiduciary net position.

# **Concentration of Credit Risk**

At December 31, 2018, the System had the following concentrations, defined as investments (other than those issued or guaranteed by the U.S. Government) in any one organization that represent 5% or more of net position held in trust for pension benefits.

		Percentage of Total
Investments	 Fair Value	Net Assets
UBS Realty Investors, LLC Loomis Sayles Strategic Alpha	\$ 48,471,908	5.9%
Trust	\$ 44,802,896	5.5%

#### **Credit Risk of Debt Securities**

The System's debt investments as of December 31, 2018 were rated by Moody's Investor Services ("Moody's") and the ratings are presented using the Moody's rating scale. The System's policy to limit credit risk is that the overall average quality of each high-grade domestic fixed income portfolio shall be AA or better and the average quality rating of securities held in a domestic high-yield portfolio shall be B or better. The overall average quality of each global fixed income portfolio shall be A or better. Non-rated issues are allowed as long as the quality is sufficient to maintain the overall average rating noted.

As of December 31, 2018, the System held the following fixed income investments with respective Moody's quality ratings or equivalent rating. Obligations of the U.S. Government or obligations explicitly guaranteed by the U.S. Government are not considered to have credit risk. Foreign investments not considered to have credit risk such as stocks and cash equivalents are not included in the following:

			Foreign			
		g	overnment	U	.S. Government	
Quality	Corporate	an	d corporate		and agency	
Rating	 bonds		bligations		issues	 Total
Aaa	\$ 5,496,358	\$	338,360	\$	11,808,055	\$ 17,642,773
Aa1	150,740		-		96,251	246,991
Aa2	432,913		-		70,998	503,911
Aa3	396,182		105,853		207,191	709,226
A1	796,864		-		83,683	880,547
A2	732,916		246,476		-	979,392
A3	955,374		-		-	955,374
Baa1	1,580,449		-		-	1,580,449
Baa2	2,769,148		96,355		-	2,865,503
Baa3	4,415,266		895,499		-	5,310,765
Ba1	1,115,843		266,138		-	1,381,981
Ba2	513,248		355,343		-	868,591
Ba3	807,590		-		-	807,590
B1	378,213		24,094		-	402,307
B2	274,890		120,560		-	395,450
B3	529,920		102,900		-	632,820
Caa1	81,315		-		-	81,315
Caa2	194,633		33,950		-	228,583
Not rated	 <u>11,189,516</u>		1,973,031		<u> 16,731,953</u>	 29,894,500
Total	\$ 32,811,378	\$	4,558,559	\$	28,998,131	\$ 66,368,068

Quality Rating	Corporate bonds	Foreign Government and corporate obligations	U.S. Government and agency issues	Total
Aaa	\$ 4,694,128	\$ 146,472	\$ 9,937,511	\$ 14,778,111
Aa1	91,198	φ 1+0,+72	118,798	209,996
Aa2	568,208		76,511	644,719
Aa2 Aa3	491,667	106,524	111,206	709,397
Aas A1	1,049,992	100,524	,	1,140,936
		110 220	90,944	, ,
A2	359,558	119,239	-	478,797
A3	1,239,911	40,981	-	1,280,892
Baa1	2,149,809	-	-	2,149,809
Baa2	3,162,237	72,946	-	3,235,183
Baa3	4,302,446	538,239	-	4,840,685
Ba1	1,227,023	359,647	-	1,586,670
Ba2	659,964	71,557	-	731,521
Ba3	775,485	142,735	-	918,220
B1	418,644	85,000	-	503,644
B2	208,055	153,200	-	361,255
B3	454,304	40,200	-	494,504
Caa1	194,175	26,180	_	220,355
Caa2	59,468	20,100	_	59,468
Not rated	11,177,248	2 052 141	17,906,725	<u>31,136,114</u>
NUL TALEU	<u> </u>	2,052,141	17,900,725	51,130,114
Total	<u>\$ 33,283,520</u>	<u>\$                                    </u>	<u>\$ 28,241,695</u>	<u>\$ 65,480,276</u>

As of December 31, 2017, the System held the following fixed income investments with respective Moody's quality ratings or equivalent rating.

#### Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The System does not have a formal policy to limit foreign currency risk. The System's exposure to foreign currency risk in U.S. Dollars as of December 31, 2018 is as follows:

	Ca	ish				
Currency	Equivalents			Equities	Total	
Australian Dollar	\$	-	\$	319,764	\$	319,764
British Pound Sterling		1		16,172,686		16,172,687
Canadian Dollar		-		4,159,773		4,159,773
Danish Krone		-		208,230		208,230
Euro		-		14,292,430		14,292,430
Hong Kong Dollar		-		2,347,154		2,347,154
Israeli New Sheqel		-		76,132		76,132
Japanese Yen		-		9,678,124		9,678,124
Korean Won		-		1,872,655		1,872,655
Norweigan Krone		-		99,123		99,123
South African Rand		-		16,035		16,035
Swedish Krona		-		63,418		63,418
Swiss Franc		-		4,485,084		4,485,084
Thai Baht		-		82,773		82,773
Turkish Lira		-		150,539		150,539
	<u>\$</u>	1	<u>\$</u>	54,023,920		54,023,921
E analyze increasing a state of a second state of in-		_				40 477 004

Foreign investment denominated in U.S. Dollars

19,477,291

<u>\$ 73,501,212</u>

The System's exposure to foreign currency risk in U.S. Dollars as of December 31, 2017 is as follows:

	Cash	1			
Currency	Equivale	ents		Equities	Total
Australian Dollar	\$	-	\$	1,023,508	\$ 1,023,508
British Pound Sterling		1		19,751,162	19,751,163
Canadian Dollar		-		5,870,942	5,870,942
Danish Krone		-		480,209	480,209
Euro		-		17,558,114	17,558,114
Hong Kong Dollar		-		3,908,870	3,908,870
Japanese Yen		-		12,357,245	12,357,245
Korean Won		-		2,060,016	2,060,016
Singapore Dollar		-		34,867	34,867
South African Rand		-		27,952	27,952
Swedish Krona		-		494,944	494,944
Swiss Franc		-		6,924,710	6,924,710
Thai Baht		-		218,288	218,288
	<u>\$</u>	1	<u>\$</u>	70,710,827	70,710,828
Foreign investment denominated in U.S. Dollars					20,807,580
					<u>\$ 91,518,408</u>

#### Interest Rate Risk

Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The System's fixed income investments are managed in accordance with policies established by the Board that are specific as to the degree of interest rate risk that can be taken. The System's policies established by the Board manage the interest rate risk within the portfolio using various methods, including effective duration, option adjusted duration, average maturity, and segmented time distribution, which reflects total fair value of investments maturing during a given time period. The System does not have a specific investment policy on interest rate risk. However, domestic bond managers are limited to seven years average duration and global bond managers cannot differ from the passive benchmark by more than two years as a means of managing its exposure to fair value losses arising from increasing interest rates.

The segmented time distribution of the various investment types of the System's debt securities at December 31, 2018 is as follows:

Туре	2018 Fair Value	Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years
Corporate bonds	\$ 32,811,378	\$ 909,070	\$ 13,257,837	\$ 7,530,246	\$ 11,114,225
Foreign government and corporate obligations U.S. Government and	4,558,559	26,873	1,386,655	2,013,896	1,131,135
agency issues	28,998,131	371,779	2,219,744	5,380,334	21,026,274
Total	<u>\$ 66,368,068</u>	<u>\$ 1,307,722</u>	<u>\$ 16,864,236</u>	<u>\$ 14,924,476</u>	<u>\$ 33,271,634</u>

The segmented time distribution of the various investment types of the System's debt securities at December 31, 2017 is as follows:

Туре	2017 Fair Value	Less than 1 year	1 to 5 years	6 to 10 years	More than 10 years
Corporate bonds	\$ 33,283,520	\$ 390,972	\$ 12,748,167	\$ 8,057,221	\$ 12,087,160
Foreign government and corporate obligations U.S. Government and	3,955,061	-	856,096	1,569,985	1,528,980
agency issues	28,241,695		2,348,572	4,599,638	21,293,486
Total	<u>\$ 65,480,276</u>	<u>\$ 390,972</u>	<u>\$ 15,952,835</u>	<u>\$ 14,226,844</u>	<u>\$ 34,909,626</u>

#### 7. Property and Building

Property and building as of December 31, 2018 and 2017 consists of:

	2018	2017
Land	\$ 229,451	\$ 229,451
Building	2,065,061	2,065,061
Tenant improvements	158,120	158,120
	2,452,632	2,452,632
Less accumulated depreciation	772,366	704,928
Property and Building, net	<u>\$ 1,680,266</u>	<u>\$ 1,747,704</u>

Depreciation expense totaled \$67,438 for each of the years ended December 31, 2018 and 2017.

#### 8. Occupancy

The System occupies offices in a building it owns. Occupancy expenses for the years ended December 31, 2018 and 2017 were \$33,392 and \$28,112, respectively.

On May 7, 2009, the System entered into an agreement to lease a portion of its building to an unrelated party. The initial lease term was five years with five one-year renewal options with annual rent ranging from \$144,047 to \$158,821 through May 2019. The lease agreement was renewed during the year ended December 31, 2018, extending the term to May 2021 with annual rent ranging from \$160,558 to \$166,208. Rental income received for the years ended December 31, 2018 and 2017 totaled \$157,219 and \$153,544, respectively.

#### 9. Tax Status of Plan

The Internal Revenue Service has determined and informed the System by a letter dated December 15, 2016, that the System and related trust and amendments are designed in accordance with the applicable sections of the Internal Revenue Code ("IRC"). Management believes that the System is designed and is currently being operated in compliance with the applicable requirements of the IRC and therefore believes that the System is qualified and the related trust is tax-exempt.

#### 10. Retirement Plan of the System

## Pension Liabilities, Pension Expense, Deferred Outflows and Deferred Inflows of Resources Related to Pensions

At December 31, 2018 and 2017, the System reported a liability of \$1,727,361 and \$876,434, respectively, as its proportionate share of the net pension liability. The net pension liability was measured as of December 31, 2017 and 2016, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

The System's proportionate share of the net pension liability was based on the System's actual employer's compensation relative to the actual compensation of all participating employers for the System's plan years ended December 31, 2017 and 2016. At December 31, 2017 and 2016, the System's portion was 0.23% and 0.21%, respectively.

Benefit changes effective as of August 28, 2017:

- 1. Reduce the "Rule of 85" to "Rule of 80."
- 2. Change the percent of pay benefit multiplier from 2.00 percent of Average Final Compensation to 1.75 percent of Average Final Compensation for members hired on or after January 1, 2018.

Contribution changes effective as of August 28, 2017:

- 1. Increase the employee contribution requirement from a flat 5.00 percent of compensation during 2017 to 9.00 percent in 0.50 percent annual increments for employees hired before January 1, 2018.
- 2. Set employee contribution rate to a flat 9.00 percent for employees hired on or after January 1, 2018.
- 3. Set the employer contribution rate to a flat 16.00 percent of covered payroll for plan year 2018 with annual decreases of 0.50 percent until reaching 9.00 percent of covered payroll.

Assumption changes effective as of January 1, 2017 are as follows:

1. Revised investment return assumption of 7.50 percent to a blended discount rate of 4.78 percent. Blended discount rate is a municipal bond rate of 3.16 percent and long-term rate of return of 7.50 percent.

As of December 31, 2017, cumulative impact of changes from the prior valuation was an increase in the Entry Age Normal Liability by approximately \$72.7 million.

For the year ended December 31, 2018, the System recognized pension expense of \$431,367 consisting of the current year contribution, pension liability adjustment, and amortization of deferred outflows and inflows of resources. At December 31, 2018, the System reported deferred outflows and inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources		h	Deferred nflows of esources
Difference between expected and actual	•		•	
experience	\$	7,274	\$	21,064
Changes in assumptions		746,330		-
Net difference between projected and actual				
earnings on pension plan investments		119,079		115,090
Changes in proportion and differences between employer contributions and proportionate share				
of contributions		46,352		10,157
System contributions subsequent to the		,		,
measurement date of December 31, 2017		100,565		-
Total	\$	1,019,600	\$	146,311

For the year ended December 31, 2017, the System recognized pension expense of \$143,838 consisting of the current year contribution, pension liability adjustment, and amortization of deferred outflows and inflows of resources. At December 31, 2017, the System reported deferred outflows and inflows of resources related to pensions from the following sources:

	Deferred Outflows of <u>Resources</u>		Ir	Deferred Inflows of esources
Difference between expected and actual	•		•	
experience	\$	10,108	\$	11,576
Changes in assumptions		111,534		-
Net difference between projected and actual earnings on pension plan investments		168,747		-
Changes in proportion and differences between employer contributions and proportionate share		,.		
of contributions System contributions subsequent to the		17,119		17,412
measurement date of December 31, 2016		74,644		
Total	<u>\$</u>	382,152	<u>\$</u>	28,988

The System's total pension liability in the December 31, 2017 and 2016 actuarial valuation was determined using the actuarial assumptions disclosed in Note 12.

Deferred outflows of resources of \$100,565 resulting from the System's contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended December 31, 2019. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in the System's year ending December 31 as follows:

Amortization Schedule							
Year	Amount						
2019	\$	314,856					
2020		300,663					
2021		176,930					
2022		(19,725)					
Total	<u>\$</u>	772,724					

#### **Discount Rate**

The discount rates used to measure the total pension liability were 4.78 percent and 7.50 percent at December 31, 2018 and 2017, respectively. The projection of cash flows used to determine the discount rate assumed that System contributions will continue to follow the funding policy established prior to the year ended December 31, 2018. Based on those assumptions, the System's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current plan members.

## Sensitivity of the System's proportionate share of the net pension liability to changes in the discount rate

The following presents the System's proportionate share of the net pension liability calculated using the discount rate of 4.78 percent and 7.50 percent for the years ended December 31, 2018 and 2017, respectively, as well as what the System's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current rate:

System's proportionate share			Cu	rrent Discount	
of the net pension liability for	1	% Decrease		Rate	1% Increase
the year ended December 31,		(3.78%)		(4.78%)	 (5.78%)
2018	\$	2,212,568	\$	1,727,361	\$ 1,358,300
System's proportionate share			Cu	rrent Discount	
of the net pension liability for	1	% Decrease		Rate	1% Increase
the year ended December 31,		(6.50%)		(7.50%)	 (8.50%)
2017	\$	1,136,291	\$	876,434	\$ 649,465

#### 11. Annual Money-Weighted Rate of Return

The annual money-weighted rate of return was (5.09) percent and 15.55 percent for the years ended December 31, 2018 and 2017, respectively. The annual money-weighted rate of return expresses investment performance, net of investment expense, and adjusted for the changing amounts actually invested.

#### 12. Funding Status

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

 2018		2017
\$ 899,816,911	\$	901,076,683
\$ 1,152,728,218	\$	1,133,555,454
\$ 252,911,307	\$	232,478,771
78.1 %		79.5 %
\$ 265,773,659	\$	260,223,066
95.2 %		89.3 %
\$ \$ \$	\$ 899,816,911 \$ 1,152,728,218 \$ 252,911,307 78.1 % \$ 265,773,659	\$ 899,816,911 \$ 1,152,728,218 \$ 252,911,307 78.1 % \$ 265,773,659 \$

The funded ratio decreased 1.4% from the previous year. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents similar information but uses a multi-year format to show trend information. These trends indicate whether the actuarial value of plan assets are increasing or decreasing over time relative to the actuarial accrued liability for benefits. The trend information was obtained from the annual valuation report of the independent actuary retained by the System.

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

Actuarial cost method	January 1, 2018 Frozen entry age	January 1, 2017 Frozen entry age
Rate of investment return	7.50%, net of expenses	7.50%, net of expenses
Participant account interest crediting rate Turnover or withdrawal rates	5.00% Various by age and year of membership based on actual	5.00% Various by age and year of membership based on actual
Mortality and death rates	a) RP-2014 Combined Healthy Mortality table (rolled back to 2006) for active Members, and deferred vested Members, projected fully generationally using projection scale MP-2015. b) RP-2014 Combined Healthy Mortality Table (rolled back to 2006) for Inactive (In Receipt) Members adjusted by an additional 10% to account for the higher mortality experienced by the Plan, projected fully generationally using projection scale MP-2015.	a) RP-2014 Combined Healthy Mortality table (rolled back to 2006) for active Members, and deferred vested Members, projected fully generationally using projection scale MP-2015. b) RP-2014 Combined Healthy Mortality Table (rolled back to 2006) for Inactive (In Receipt) Members adjusted by an additional 10% to account for the higher mortality experienced by the Plan, projected fully generationally using projection scale MP-2015.
Disability rates	RP-2014 Disability Mortality Table (rolled back to 2006), projected fully generationally using projection scale MP-2015	RP-2014 Disability Mortality Table (rolled back to 2006), projected fully generationally using projection scale MP-2015
Rates of retirement between the ages of 55 and 70	Various based on actual experience of the System	Various based on actual experience of the System
Rate of salary increases	Salaries are assumed to increase at the rate of 5.0% per year for the first 5 years of employment and at the rate of 3.5% per year thereafter	Salaries are assumed to increase at the rate of 5.0% per year for the first 5 years of employment and at the rate of 3.5% per year thereafter
Asset valuation method	The assumed yield method of valuing assets	The assumed yield method of valuing assets

#### 13. Annual Required Contribution

As determined by the actuary, the annual required contribution is as follows at January 1, 2018:

	Board of Education	F	Retirement System		Charter Schools	Total
Normal Cost contribution	\$ 15,508,017	\$	44,028	\$	5,486,930	\$ 21,038,975
Actuarial accrued liability contribution Annual required	19,206,986		54,530		6,795,672	26,057,188
contribution (ARC)	<u>\$ 34,715,003</u>	<u>\$</u>	98,558	<u>\$</u>	12,282,602	<u>\$ 47,096,163</u>
Covered payroll	\$195,904,143	\$	556,184	\$	69,313,332	\$265,773,659
ARC as % of covered payroll Statutory required	17.72 %		17.72 %		17.72 %	17.72 %
contribution rate	16.00 %		16.00 %		16.00 %	16.00 %
Statutory annual required contribution (ARC)	\$ 31,344,663	\$	88,989	\$	11,090,133	\$ 42,523,785

The actuarial determined contribution is determined from the prior year census; therefore the contributions are recognized one year in arrears.

As determined by the actuary, the annual required contribution is as follows at January 1, 2017:

	Board of Education	F	Retirement System		Charter Schools		Total
Normal Cost contribution Actuarial accrued liability	\$ 19,818,916	\$	53,325	\$	6,477,946	\$	26,350,187
contribution Annual required	17,557,407		47,240		5,738,755		23,343,402
contribution (ARC)	<u>\$ 37,376,323</u>	\$	100,565	<u>\$</u>	12,216,701	<u>\$</u>	49,693,589
Covered payroll ARC as % of covered	\$195,723,057	\$	526,616	\$	63,973,393	\$	260,223,066
payroll	19.10 %		19.10 %		19.10 %		19.10 %

The actuarial determined contribution is determined from the prior year census; therefore the contributions are recognized one year in arrears.

#### 14. Employers' Net Pension Liability

The components of the net pension liability (the retirement system's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) as of December 31, 2018, are shown in the *Schedule of Net Pension Liability* below.

Actuarial valuation of an ongoing plan involves estimates of the reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment mortality and future salary increases. Amounts determined regarding the net pension liability are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The last experience study was performed in 2016. The net pension liability as of December 31, 2018 and 2017 is \$838,901,660 and \$759,039,931, respectively, based on actuarial valuations. The 2018 valuation was performed as of June 2018, with a measurement date of January 1, 2018, rolled forward and updated to December 31, 2017, with a measurement date of January 1, 2017, rolled forward and updated to December 31, 2017, with a measurement date of January 1, 2017, rolled forward and updated to December 31, 2017, using generally accepted actuarial procedures.

#### Schedule of Net Pension Liability

The components of the net pension liability of all participating employers at December 31, 2018 and 2017, are as follows:

Total pension liability Less: Fiduciary net position	2018 \$ 1,658,351,553 819,449,893	2017 \$ 1,673,122,191 914,082,260
Employers' net pension liability	<u>\$838,901,660</u>	<u>\$ 759,039,931</u>
Plan net position as a percentage of total pension liability	49.41 %	54.63 %

#### Sensitivity of Net Pension Eligibility to Changes in the Discount Rate

The following presents the net pension liability at December 31, 2018 and 2017, calculated using the discount rate of 4.78 percent as well as what the net pension liability would have been if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage-point higher than the current rate:

	1% Decrease (3.78%)	Current Discount Rate (4.78%)	1% Increase (5.78%)
Net pension liability - 2018	\$ 1,038,507,504	\$ 838,901,660	\$ 673,166,844
Net pension liability - 2017	\$ 961,985,980	\$ 759,039,931	\$ 590,565,070

The projection of cash flows used to determine the discount rate assumed that System contributions will continue to follow the current funding policy. Based on those assumptions, the System's fiduciary net position was projected to be insufficient to make all projected future benefit payments of current plan members. A municipal bond rate of 3.64% was used in the development of the blended GASB discount rate after that point. The 3.64% rate is based on the S&P Municipal Bond 20 Year High Grade Rate Index as of December 31, 2018. Based on the long-term rate of return of 7.50% and the municipal bond rate of 3.64%, the blended GASB discount rate would be 4.78%. See page 49.

Under GASB Statement No. 68, employers participating in the plan would recognize a proportionate share of total pension expense of \$192,072,941 and \$193,026,507 for their fiscal years beginning after June 15, 2018 and 2017, respectively.

Required schedules of changes of employer net pension liability for the years ended December 31, 2018 and 2017, are provided on page 36.

A schedule of projected fiduciary net position is provided on page 50.

The System selected the assumptions used for the accounting results on page 36. Management believes that these assumptions are reasonable and comply with the requirements of GASB Statement No. 67 as applicable.

#### Public School Retirement System of the City of St. Louis Required Supplementary Information Schedules of Changes of Employer Net Pension Liability For The Years Ended December 31,

	2018	2017	2016	2015	2014
Total pension liability Service cost Interest Changes of benefit terms Difference between expected and actual	\$ 41,332,913 79,257,906 -	\$ 19,950,269 92,276,865 18,979,978	\$ 19,260,511 92,358,115 -	\$ 19,136,245 93,242,628 -	\$ 18,728,870 93,305,719 -
experience Changes of assumptions	(21,350,805)	397,218,720	6,392,416 70,532,232	(10,065,347)	-
Benefit payments Net change in total pension liability	(114,010,652) (14,770,638)	<u>(112,950,471)</u> 407,259,991	<u>(113,608,409)</u> 74,934,865	(113,384,329) (11,070,803)	<u>(113,082,656)</u> (1,048,067)
Total pension liability - beginning Total pension liability - ending	<u>1,673,122,191</u> <u>\$ 1,658,351,553</u>	<u>1,265,862,200</u> <u>\$ 1,673,122,191</u>	<u>1,190,927,335</u> <u>\$ 1,265,862,200</u>	<u>1,201,998,138</u> <u>\$ 1,190,927,335</u>	<u>1,203,046,205</u> <u>\$ 1,201,998,138</u>
Plan fiduciary net position Employer contributions Employee contributions Net investment income Benefit payments including refunds of employee contributions	\$ 48,797,779 14,248,567 (41,671,079) (114,010,652)		\$ 39,519,979 12,652,029 44,492,088 (113,608,409)	\$ 40,708,503 11,664,711 (5,342,651) (113,384,329)	\$ 41,757,458 11,887,933 35,000,792 (113,082,656)
Administrative expense Other Net change in plan fiduciary net position	(114,010,052) (1,996,982) 	( / / /	(113,606,409) (1,554,314) (18,498,627)	(113,384,329) (1,466,261) (431,423) (68,251,450)	(113,082,696) (1,350,393) (25,786,866)
Plan fiduciary net position - beginning Plan fiduciary net position - ending Net pension liability - ending	914,082,260 \$ 819,449,893 \$ 838,901,660	850,180,422 914,082,260 759,039,931	868,679,049 \$ 850,180,422 \$ 415,681,778	936,930,499 <u>\$ 868,679,049</u> <u>\$ 322,248,286</u>	962,717,365 \$ 936,930,499 \$ 265,067,639
Total pension liability Less: Plan fiduciary net position Employer net pension liability	\$ 1,658,351,553 819,449,893 \$ 838,901,660	\$ 1,673,122,191 914,082,260 \$ 759,039,931	\$ 1,265,862,200 850,180,422 \$ 415,681,778	\$ 1,190,927,335 868,679,049 \$ 322,248,286	\$ 1,201,998,138 936,930,499 \$ 265,067,639
Plan fiduciary net position as a percentage of the total pension liability	49.41 %	54.63 %	67.16 %	72.94 %	77.95 %
Covered payroll	\$ 265,773,659	\$ 260,223,066	\$ 252,127,288	\$ 245,699,583	\$ 243,280,015
Employer net pension liability as a percentage of covered payroll	316 %	292 %	165 %	131 %	109 %

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

#### Public School Retirement System of the City of St. Louis Required Supplementary Information Schedules of Changes of Employer Net Pension Liability For The Years Ended December 31, 2018 and 2017

There were no benefit changes, contribution changes, or assumption changes for the year ended December 31, 2018.

Changes of Employer Net Pension Liability for the year ended December 31, 2017 were as follows:

#### Benefit Changes

- 1. Reduce the "Rule of 85" to "Rule of 80"
- Change the percent of pay benefit multiplier from 2.00 percent of Average Final Compensation to 1.75 percent of Average Final Compensation for members hired on or after January 1, 2018

#### **Contribution Changes**

- 1. Increase the employee contribution requirement from a flat 5.00 percent of compensation during 2017 to 9.00 percent in 0.50 percent annual increments for employees hired before January 1, 2018
- 2. Set employee contribution rate to a flat 9.00 percent for employees hired on or after January 1, 2018
- 3. Set the employer contribution rate to a flat 16.00 percent of covered payroll for plan year 2018 with annual decreases of 0.50 percent until reaching 9.00 percent of covered payroll

#### **Assumption Changes**

1. Revised investment return assumption of 7.50 percent to a blended discount rate of 4.78 percent. Blended discount rate is a municipal bond rate of 3.16 percent and long-term rate of return of 7.50 percent

#### Public School Retirement System of the City of St. Louis Required Supplementary Information Schedules of the System's Proportionate Share of the Net Pension Liability For The Years Ended December 31,

	 2018	 2017	 2016	 2015	2014
System's proportion of the net pension liability	0.23 %	0.21 %	0.20 %	0.22 %	0.22 %
System's proportionate share of the net pension liability	\$ 1,727,361	\$ 876,434	\$ 649,399	\$ 570,232	\$ 517,013
System's covered payroll	\$ 535,096	\$ 478,280	\$ 454,115	\$ 472,849	not available
System's proportionate share of the net pension liability as a percentage of its covered payroll	322.81 %	183.25 %	143.00 %	120.59 %	not available
Plan fiduciary net position as a percentage of the total pension liability	54.63 %	67.16 %	72.94 %	77.95 %	72.30 %

\* The amounts presented for each fiscal year were determined as of December 31 of the previous year.

The goal is to provide a full 10-year history as the information becomes available.

#### Public School Retirement System of the City of St. Louis Required Supplementary Information Schedules of Annual Money-Weighted Rate of Return on Investments For The Years Ended December 31,

The System began tracking the annual money-weighted rate of return during the fiscal year ended December 31, 2014. The annual money-weighted rate of return for future years will appear in the following schedule as they occur. The goal is to provide a full 10-year history as the information becomes available.

Year Ended December 31,	2018	2017	2016	2015	2014
Annual money-weighted rate of return, net of					
investment expense, adjusted for the					
changing amounts actually invested	(5.09)%	<u> 15.55 %</u>	5.52 %	(1.00)%	3.93 %

#### **Board of Education**

					Contributions Recognized
					by the Plan as
Year Ended	Actuarially	Contributions	Contributions		a Percentage
December	Determined	Recognized	Deficiency	Covered	of Covered
31	Contribution	by the Plan	(Excess)	Payroll	Payroll
2009	\$19,274,150	\$19,274,150	\$ -	\$202,754,929	9.51 %
2010	16,790,176	16,790,176	-	202,943,889	8.27 %
2011	19,933,761	19,933,761	-	198,775,945	10.03 %
2012	20,786,075	20,786,075	-	175,009,885	11.88 %
2013	27,962,472	27,962,472	-	185,606,968	15.07 %
2014	31,555,696	31,555,696	-	191,273,081	16.50 %
2015	31,072,850	31,072,850	-	195,853,519	15.87 %
2016	29,007,501	29,007,501	-	191,534,175	15.14 %
2017	30,459,434	30,459,434	-	193,647,262	15.73 %
2018	37,376,323	37,376,323	-	195,723,057	19.10 %

The actuarial determined contribution is determined from the prior year census; therefore the contributions are recognized one year in arrears.

#### **Retirement System**

					Contributions Recognized by the Plan as a
Year Ended	Actuarially	Contributions	Contributions		Percentage of
December	Determined	Recognized	Deficiency	Covered	Covered
31	<b>Contribution</b>	by the Plan	(Excess)	 Payroll	Payroll
2009	\$ 51,995	\$ 51,995	\$-	\$ 546,968	9.51 %
2010	48,617	48,617	-	587,617	8.27 %
2011	57,964	57,964	-	578,006	10.03 %
2012	73,902	73,902	-	622,220	11.88 %
2013	91,361	91,361	-	606,427	15.07 %
2014	85,590	85,590	-	518,799	16.50 %
2015	83,960	83,960	-	529,203	15.87 %
2016	79,497	79,497	-	524,915	15.14 %
2017	74,644	74,644	-	474,551	15.73 %
2018	100,565	100,565	-	526,616	19.10 %

The actuarial determined contribution is determined from the prior year census; therefore the contributions are recognized one year in arrears.

#### **Charter Schools**

Year Ended	Actuorially	Contributions	Contributions		Contributions Recognized by the Plan as a
	Actuarially			Courses	Percentage of
December	Determined	Recognized	Deficiency	Covered	Covered
31	<u>Contribution</u>	by the Plan	(Excess)*	Payroll	Payroll
2009	\$ 2,074,020	\$ 3,377,789	\$ (1,303,769) *	\$21,817,708	15.48 %
2010	2,568,929	3,843,486	(1,274,557) *	31,050,800	12.38 %
2011	4,272,457	4,521,680	(249,223) *	42,604,182	10.61 %
2012	5,068,681	5,533,481	(464,800) *	42,676,134	12.97 %
2013	7,313,765	6,765,907	547,858 *	48,546,696	13.94 %
2014	5,625,992	8,527,507	(2,901,515) *	34,101,634	25.01 %
2015	7,440,420	8,445,676	(1,005,256) *	46,897,293	18.01 %
2016	8,123,754	9,718,163	(1,594,409) *	53,640,493	18.12 %
2017	9,123,878	10,130,296	(1,006,418) *	58,005,475	17.46 %
2018	12,216,701	11,018,669	1,198,032 *	63,973,393	17.22 %

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

The actuarial determined contribution is determined from the prior year census; therefore the contributions are recognized one year in arrears.

#### Harris-Stowe College

					Contributions Recognized by the Plan as a
Year Ended	Actuarially	Contributions	Contributions		Percentage of
December	Determined	Recognized	Deficiency	Covered	Covered
31	Contribution	by the Plan	(Excess)	Payroll	Payroll
2009	\$ 6,784	\$ 6,746	\$ 38	\$ 71,363	9.45 %

Harris-Stowe College ceased participating in the plan in 2009.

The actuarial determined contribution is determined from the prior year census; therefore the contributions are recognized one year in arrears.

	Annual	
Year Ended	Required	Percent
December 31,	Contribution	<b>Contributed</b>
2009	\$21,406,949	133.6
2010	19,407,722	134.4
2011	24,264,182	118.4
2012	25,928,658	114.0
2013	35,367,598	104.7
2014	37,267,278	109.2
2015	38,597,230	102.4
2016	37,210,752	110.4
2017	39,657,956	123.0
2018	49,693,589	*

**Employer Contributions** 

\* To be determined at the end of the year

The information presented in the required supplemental schedules was determined as part of the actuarial valuation prepared by Buck Global, LLC (formerly known as Conduent Human Resource Services) as of January 1, 2018.

Additional information related to the actuarial valuation on the previous page follows:

Actuarial cost method: Rate of investment return:	Frozen entry age 7.5%, which includes a 2.75% allowance for inflation, net of expenses for 2018 and 2017
Participant account interest crediting rate:	5.00% for 2018 and 2017
Turnover or withdrawal rates:	Various by age and year of membership based on actual
Mortality and death rates:	Mortality tables issued by the SOA, the RP-2014 Combined Healthy Table (rolled back to 2006), projected fully generationally using projection scale MP-2015 for the 2018 and 2017 plan years. The mortality assumption for Inactive participants receiving benefits is increased by an additional 10% to account for the higher mortality experienced by the Plan for the 2018 and 2017 plan years.
Disability rates:	RP-2014 Disabled Mortality Table (rolled back to 2006) projected fully generationally using projection scale MP-2015 for the 2018 and 2017 plan years.
Rates of retirement between the ages of 55 and 70:	Various based on actual experience of the System
Rate of salary increases:	Salaries are assumed to increase at the rate of 5.0% per year for the first 5 years of employment and 3.5% thereafter for the 2018 and 2017 plan years.
Asset valuation method:	The assumed yield method of valuing assets

The UFAAL was originally determined and frozen as of January 1, 1981. Effective January 1, 2006, the UFAAL was re-determined and is being amortized over thirty (30) years.

There were no method or assumption changes made since the prior valuation.

#### Public School Retirement System of the City of St. Louis Required Supplementary Information Schedule of Funding Progress (in millions) December 31, 2018

		Act	uarial Accrued		
Actuarial	Actuarial Value	Lia	ability (AAL) -	Unfunded	
Valuation Date	of Assets	Fro	zen Entry Áge	AAL (UAAL	.)
January 1,	<u>(a)</u>		(b)	<u>(b - a)</u>	-
2009	\$ 963.9	\$	1,099.9	\$ 136.0	
2010	950.7		1,076.0	125.3	
2011	944.4		1,066.3	121.9	
2012	925.4		1,090.3	164.9	
2013	914.5		1,085.1	170.6	
2014	922.9		1,093.4	170.5	
2015	926.9		1,093.6	166.7	
2016	915.4		1,077.7	162.3	
2017	901.1		1,133.6	232.5	
2018	899.8		1,152.7	252.9	
				UAAL	
Actuarial	Funded		Annual	as a % of	
Valuation Date	Ratio	Co	overed Payroll	Covered Pay	roll
January 1,	<u>(a/b)</u>	<del>.</del>	(c)	<u>(b-a)/c)</u>	
2009		6\$	234.6	58.0	%
2010	88.4		242.0	51.8	
2011	88.6		218.3	55.8	
2012	84.9		234.8	70.3	
2013	84.3		225.9	75.5	
2014	84.4		243.3	70.1	
2015	84.8		245.7	67.8	
2016	84.9		252.1	64.4	
2017	79.5		260.2	89.3	
2018	78.1		265.8	95.2	

#### Public School Retirement System of the City of St. Louis Other Supplementary Information Schedules of Operating Expenses Years Ended December 31, 2018 and 2017

		2018		2017
Actuarial services	\$	139,075	\$	129,078
Accounting and auditing fees		69,533		80,335
Computer programming and consulting		107,981		99,855
Conventions, conferences, seminars				
Trustees (see below)		21,636		23,914
Depreciation expense		67,438		67,438
Dues and subscriptions		5,914		5,812
Employee benefits		3,192		2,960
Health insurance consulting		39,843		39,843
Insurance - group health		67,610		75,646
Insurance - casualty and bonding		92,974		92,654
Legal fees and expenses		128,598		85,051
Medical fees		700		800
Miscellaneous expense		20,404		8,500
Occupancy expense		33,392		28,112
Office repairs and maintenance		36,154		42,213
Office supplies and expenses		18,636		31,241
Payroll taxes		38,788		36,182
Pension expense		431,367		143,838
Postage		69,505		74,424
Printing and publishing		32,687		31,745
Salaries - administrative and clerical		524,826		472,967
Telephone		13,962		11,988
Utilities		32,766		28,910
	•	4 000 004	•	4 040 500
Total Operating Expenses	<u>\$</u>	1,996,981	<u>\$</u>	1,613,506

#### Trustees' Expenses

The Trustees attended conferences and business meetings in connection with business of the System. The Trustees received no salaries but were allowed expenses relating to their attendance at such events as follows:

		2018		2017
Lodging, meals, and miscellaneous	\$	9,791	\$	10,665
Transportation and registration		<u>11,845</u>		13,249
Total Trustees Expenses	<u>\$</u>	21,636	<u>\$</u>	23,914

#### Public School Retirement System of the City of St. Louis Other Supplementary Information Schedules of Investment Expenses Years Ended December 31, 2018 and 2017

Investment management fees		2018		2017
Ativo Capital Management	\$	86,353	\$	79,039
Arga Investment Management		92,986		87,520
Brown Capital Management Global		-		17,709
Brown Capital Management		22,434		2
Causeway Capital Management		312,167		321,400
Channing Capital Management		17,495		15,450
Chicago Equity Partners		163,020		163,247
Earnest Partners		30,586		30,408
Edgar Lomax Company		171,119		170,650
Entrust Capital Diversified Fund LTD		256,211		268,334
Fidelity Institutional Asset Management		284,865		284,479
Holland Capital Management		-		129,207
Intech Investment Management		129,963		123,709
Lazard Asset Management		226,965		229,675
Loomis Sayles & Company, LP		224,510		164,360
Manulife Asset Management		128,204		127,460
Mellon Capital Management		261,362		272,770
Mondrian Investment Partners		-		81,505
NCM Capital		34,450		33,926
OFI Global Asset Management		237,374		198,579
Passport II LP		-		335,200
Strategic Global		113,537		109,210
Systematic Financial Management		293,730		277,103
TCW Asset Management Company		213,531		194,741
UBS Realty Investors LLC		456,234		489,776
US Bank Trust		114,805		124,326
Westfield Capital Management		267,684		245,144
Whitebox Multi-Strategy Fund, L.P.		282,141		267,637
Total Investment Management Fees		4,421,726		4,842,566
NEPC, LLC		183,362		186,013
Limited partnerships initial interest		274,883		-
Banking services		26,569		30,956
Total Investment Expenses	<u>\$</u>	4,906,540	<u>\$</u>	5,059,535

#### Public School Retirement System of the City of St. Louis Other Supplementary Information Schedules of Professional/Consultant Fees Years Ended December 31, 2018 and 2017

		2018	 2017
Actuarial services	\$	139,075	\$ 129,078
Accounting and auditing fees		69,533	80,335
Building property management		33,392	28,112
Health insurance consulting		39,843	39,843
Legal expenses		128,598	85,051
Technology consulting		107,981	 99,855
Total Fees	<u>\$</u>	518,422	\$ 462,274

#### Public School Retirement System of the City of St. Louis Other Supplementary Information Schedules of Limited Partnerships Years Ended December 31, 2018 and 2017

Partnership Name BIG Real Estate Fund I, L.P. Brightwood Capital Fund IV, L.P. ElmTree U.S. Net Lease Fund III, L.P. Fort Washington Private Equity Investors IX, L.P. Landmark Equity Partners XIV, L.P. Landmark Equity Partners XV, L.P. Landmark Equity Partners XVI, L.P. Lighthouse Capital Partners VI, L.P. Mesirow Financial Private Equity Partnership Fund III, L.P. Monroe Capital Private Credit Fund II L.P. Monroe Capital Private Credit Fund III L.P. Siguler Guff Distressed Opportunities Fund II, L.P. SW Pelham Fund III, L.P. Vista Foundation Fund II, L.P.	Style Private Equity & Private Debt Private Equity & Private Debt	Investments at Fair Value as of December 31, 2018 2,356,420 4,437,878 6,464,914 5,454,336 1,058,754 4,185,944 426,988 131,297 1,021,122 8,394,289 2,770,084 1,313,060 47,886 173,181 4,459,300 \$ 42,695,453
Partnership Name Fort Washington Private Equity Investors IX, L.P. Landmark Equity Partners XIV, L.P. Landmark Equity Partners XV, L.P. Lighthouse Capital Partners VI, L.P. Mesirow Financial Private Equity Partnership Fund III, L.P. Monroe Capital Private Credit Fund II L.P. Pantheon Global Secondary Fund III B, L.P. Siguler Guff Distressed Opportunities Fund II, L.P. SW Pelham Fund III, L.P. Vista Foundation Fund II, L.P.	Style Private Equity & Private Debt Private Equity & Private Debt	Investments at Fair Value as of December 31, 2017 \$ 2,841,231 1,638,796 3,814,561 338,287 1,422,412 8,461,843 1,433,961 96,453 620,688 5,039,825 \$ 25,708,057

### Public School Retirement System of the City of St. Louis Other Supplementary Information Schedule of Actuarial Present Values of Projected Benefit Payments 000's omitted December 31, 2018

Benefit Payments								Present Value of Benefit Payments						
														Using a
														Single
Fiscal Year	В	eginning								Funded	U	nfunded	I	Discount
Ending		uciary Net		Benefit		Funded	U	nfunded	F	Portion at	Р	ortion at		Rate of
12/31		Position	Р	ayments		Portion		Portion		7.50%		3.64%		4.78%
2019	\$	819,450	\$	110,970	\$	110,970	\$	-	\$	107,029	\$	-	\$	108,409
2020	\$	815,574	\$	110,426	\$	110,426	\$	-	\$	99,074	\$	-	\$	102,957
2021	\$	806,611	\$	109,049	\$	109,049	\$	-	\$	91,013	\$	-	\$	97,035
2022	\$	794,440	\$	108,790	\$	108,790	\$	-	\$	84,462	\$	-	\$	92,388
2023	\$	778,597	\$	108,852	\$	108,852	\$	-	\$	78,614	\$	-	\$	88,224
2024	\$	759,160	\$	108,369	\$	108,369	\$	-	\$	72,804	\$	-	\$	83,825
2025	\$	736,740	\$	108,087	\$	108,087	\$	-	\$	67,549	\$	-	\$	79,793
2026	\$	711,094	\$	106,980	\$	106,980	\$	-	\$	62,193	\$	-	\$	75,373
2027	\$	682,942	\$	106,848	\$	106,848	\$	-	\$	57,782	\$	-	\$	71,845
2028	\$	650,542	\$	106,246	\$	106,246	\$	-	\$	53,448	\$	-	\$	68,181
2029	\$	614,245	\$	105,639	\$	105,639	\$	-	\$	49,435	\$	-	\$	64,699
2030	\$	573,897	\$	106,199	\$	106,199	\$	-	\$	46,230	\$	-	\$	62,075
2031	\$	528,112	\$	104,949	\$	104,949	\$	-	\$	42,498	\$	-	\$	58,546
2032	\$	478,481	\$	104,273	\$	104,273	\$	-	\$	39,279	\$	-	\$	55,515
2033	\$	424,229	\$	104,225	\$	104,225	\$	-	\$	36,521	\$	-	\$	52,958
2034	\$	364,436	\$	104,175	\$	104,175	\$	-	\$	33,957	\$	-	\$	50,518
2035	\$	299,138	\$	104,383	\$	104,383	\$	-	\$	31,651	\$	-	\$	48,310
2036	\$	227,700	\$	102,656	\$	102,656	\$	-	\$	28,958	\$	-	\$	45,343
2037	\$	151,704	\$	102,844	\$	102,844	\$	-	\$	26,985	\$	-	\$	43,354
2038	\$	68,879	\$	101,707	\$	-	\$	101,707	\$	-	\$	50,648	\$	40,919
2039	\$	(19,863)	\$	102,131	\$	-	\$	102,131	\$	-	\$	49,074	\$	39,215
2040	\$	(116,539)	\$	101,073	\$	-	\$	101,073	\$	-	\$	46,859	\$	37,038
2041	\$	(220,175)	\$	99,368	\$	-	\$	99,368	\$	-	\$	44,451	\$	34,752
2042	\$	(330,582)	\$	100,163	\$	-	\$	100,163	\$	-	\$	43,233	\$	33,432
2043	\$	(450,809)	\$	98,770	\$	-	\$	98,770	\$	-	\$	41,134	\$	31,463

#### Public School Retirement System of the City of St. Louis Other Supplementary Information Schedule of Projection of Fiduciary Net Position 000's omitted December 31, 2018

	E	Projected Beginning	Dr	ciected Total		Projected Benefit		Projected	<b>-</b>	Projected Ending
Veer		duciary Net		ojected Total				Investment	Г	iduciary Net
Year		Position		ontributions	_	Payments	_	Earnings	_	Position
2019	\$	819,450	\$	49,314	\$	110,970	\$	57,780	\$	815,574
2020	\$	815,574	\$	43,960	\$	110,426	\$	57,502	\$	806,611
2021	\$	806,611	\$	39,999	\$	109,049	\$	56,880	\$	794,440
2022	\$	794,440	\$	36,970	\$	108,790	\$	55,977	\$	778,597
2023	\$	778,597	\$	34,624	\$	108,852	\$	54,791	\$	759,160
2024	\$	759,160	\$	32,594	\$	108,369	\$	53,355	\$	736,740
2025	\$	736,740	\$	30,754	\$	108,087	\$	51,686	\$	711,094
2026	\$	711,094	\$	29,024	\$	106,980	\$	49,805	\$	682,942
2027	\$	682,942	\$	26,772	\$	106,848	\$	47,675	\$	650,542
2028	\$	650,542	\$	24,704	\$	106,246	\$	45,245	\$	614,245
2029	\$	614,245	\$	22,767	\$	105,639	\$	42,524	\$	573,897
2030	\$ \$	573,897	\$	20,956	\$	106,199	\$	39,457	\$	528,112
2031	\$	528,112	\$	19,269	\$	104,949	\$	36,050	\$	478,481
2032	\$	478,481	\$	17,686	\$	104,273	\$	32,334	\$	424,229
2033		424,229	\$	16,183	\$	104,225	\$	28,249	\$	364,436
2034	\$ \$	364,436	\$	15,129	\$	104,175	\$	23,748	\$	299,138
2035	\$	299,138	\$	14,119	\$	104,383	\$	18,825	\$	227,700
2036	\$	227,700	\$	13,146	\$	102,656	\$	13,515	\$	151,704
2037	\$	151,704	\$	12,226	\$	102,844	\$	7,793	\$	68,879
2038	\$	68,879	\$	11,355	\$	101,707	\$	1,609	\$	(19,863)
2039	\$	(19,863)	\$	10,532	\$	102,131	\$	(5,076)	\$	(116,539)
2040	\$	(116,539)	\$	9,737	\$	101,073	\$	(12,300)	\$	(220,175)
2041	\$	(220,175)	\$	8,982	\$	99,368	\$	(20,021)	\$	(330,582)
2042	\$	(330,582)	\$	8,279	\$	100,163	\$	(28,343)	\$	(450,809)
2043	\$	(450,809)	\$	7,612	\$	98,770	\$	(37,318)	\$	(579,285)
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# MEMORANDUM

Public School Retirement System of the City of St. Louis 3641 Olive Street, Suite 300 St. Louis, MO 63108-3601 Voice: (314) 534-7444 Fax: (314) 533-0531

To:	Angela Banks
	Joe Clark
	Sheila Goodwin
	Justin Stein

Christina Bennett Darnetta Clinkscale Yvette Levy Rick Sullivan Paula Bentley Louis Cross Bobbie Richardson

FROM: Andrew Clark

#### RE: Fiduciary Liability & Crime Insurance Renewals

DATE: April 22, 2019

The insurance broker, Arthur J. Gallagher Risk Management Services, Inc., has submitted the renewal of the retirement system's Fiduciary Liability Insurance for the period from May 20, 2019 - May 20, 2020. The Crime Insurance annual premium was negotiated in 2017 for three annual terms ending in 2020. If accepted by the Board of Trustees, the insurance carrier and coverage for both types of insurance will remain the same for 2019 according to this summary:

Carrier	Coverage Type	Coverage Limit	Coverage Retention	Current (2018) Premium/Fee	Renewal (2019) Premium/Fee
Travelers	Fiduciary Liability	\$10,000,000	\$0	\$58,144	\$63,100
Travelers	Crime	\$2,000,000 / \$100,000	\$15,000 / \$5,000	\$ 1,881	\$ 1,881
Broker Fee				\$15,000	\$15,000
Total Cost				\$75,025	\$79,981

The 2019 total renewal cost for the three components above is 6.6% or \$4,956 more than the 2018 cost, and 3.7% or \$2,921 more than the budgeted amount for 2019. The increase can probably be attributed to the carrier being alerted to a potential claim by the system resulting from a pending lawsuit.

Regardless, Arthur J. Gallagher Risk Management Services, Inc., in cooperation with Travelers Casualty and Surety Co., continues to constrain the system's annual liability insurance premium cost, especially when the 2019 cost of \$63,100 is compared to the system's highest premium cost of \$71,518 in 2008 for the same coverage.

**<u>Recommendation</u>**: To accept the renewal of the Fiduciary Liability & Crime Insurance with Travelers as presented by the Executive Director.