

February 22, 2021

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

We have audited the financial statements of the Employees Retirement System of the City of St. Louis (the "System") for the year ended September 30, 2020 and have issued our report thereon dated February 22, 2021. Professional standards require that we provide you with the following information about our responsibilities under generally accepted auditing standards and *Government Auditing Standards* as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated October 22, 2020. Professional standards also require that we communicate to you the following information related to our audit.

Our Responsibility under U.S. Generally Accepted Auditing Standards

As stated in our engagement letter dated October 22, 2020, our responsibility as prescribed by professional standards is to express an opinion about whether the financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles as related to governmental units. Our audit of the financial statements does not relieve you or management of your responsibilities.

Our responsibility, as prescribed by professional standards, is to plan and perform the audit to obtain reasonable, rather than absolute, assurance that the financial statements are free of material misstatement. An audit of financial statements includes consideration of internal control over financial reporting as a basis for designing 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 over financial reporting. Accordingly, as part of our audit, we considered the internal control of the System solely for the purpose to determine our audit procedures and not to provide any assurance concerning such internal control.

We are also responsible for communicating significant matters related to the audit that are, in our professional judgment, relevant to your responsibilities in overseeing the financial reporting process. However, we are not required to design procedures specifically to identify such matters.

Our responsibility for the supplementary information accompanying the financial statements, as described by professional standards is to evaluate the presentation of the supplementary information in relation to the financial statements as a whole and to report on whether the supplementary information is fairly stated, in all material respects, in relation to the financial statements as a whole.

Planned Scope and Timing of the Audit

We performed the audit according to the planned scope and timing previously communicated to you.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the System are described in Note 2 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during 2020. We noted no transactions entered into by the System during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimates affecting the financial statements were:

Management's estimate of the fair value of certain investments is based on quoted market values provided by the custodian of the investments. The various investments shown at fair values are fixed income and equity securities.

Management's estimate of the fair value of certain fixed income securities and the foreign exchange contracts is based on values provided by the custodian of the investments.

Management's estimate of employers' net pension liability is based upon actuarial reports received from the certified actuary.

Management's estimate of funding progress is based upon actuarial reports received from the certified actuary.

We evaluated the key factors and assumptions used to develop the aforementioned estimates in determining that they are reasonable in relation to the financial statements taken as a whole.

Certain financial statement disclosures are particularly sensitive because of their significance to financial statement users. The most sensitive disclosures affecting the financial statements were:

The disclosure of investments, as described in Note 4 to the financial statements, is based upon fair values, as determined by Government Standards Board Accounting Standards No. 72. These disclosures in the financial statements will be updated annually based on future investment fair value.

The disclosures relating to the System's debt investments, as described in Note 4 to the financial statements, were based on the ratings from Moody's Investor Services ("Moody's") and the ratings are presented using the Moody's rating scale. These disclosures in the financial statements will be updated annually based on future investment bond holdings.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated February 22, 2021.

Management Consultations with Other Independent Accountants

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the System's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the System's auditors. However, these discussions occurred in the normal course of our professional relationship, and our responses were not a condition to our retention.

Other Matters

With respect to the required and other supplementary information accompanying the financial statements, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with the Governmental Accounting Standards Board and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

This information is intended solely for the use of the Board of Trustees and management of Employees Retirement System of the City of St. Louis and is not intended to be and should not be used by anyone other than these specified parties.

Respectfully submitted,

 Anders Minkler Heber & Helms LLP

EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS

**FINANCIAL STATEMENTS
WITH REQUIRED SUPPLEMENTARY INFORMATION
AND OTHER SUPPLEMENTARY INFORMATION
AND
INDEPENDENT AUDITORS' REPORT
YEARS ENDED SEPTEMBER 30, 2020 AND 2019**

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Independent Auditors' Report

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

We have audited the accompanying financial statements of Employees Retirement System of the City of St. Louis (the "System"), a Pension Trust Fund of the City of St. Louis, Missouri, which comprise the statements of fiduciary net position as of September 30, 2020 and 2019, 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

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.

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 Employees Retirement System of the City of St. Louis as of September 30, 2020 and 2019, and the changes in its 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 32 - 38 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 basic 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.



February 22, 2021

**Employees Retirement System of the City of St. Louis
Management's Discussion and Analysis - Unaudited
Years Ended September 30, 2020 and 2019**

The following Management's Discussion and Analysis for the Employees Retirement System of the City of St. Louis ("the System") provides an overview of the System's financial activities for the fiscal year ended September 30, 2020 and 2019. This section should be read in conjunction with the the System's financial statements and supplementary information.

FINANCIAL HIGHLIGHTS

The System's investments earned 6.4% for FY 2020 during very turbulent times. Total assets actually increased by \$3.7 million during FY 2020 and ended at \$802.2 million. The System's investments experienced a 10% decrease or \$77 million in March 2020 alone while hitting a low point of \$705.1 million due to the impact of the COVID-19 pandemic on worldwide financial markets. The investment markets started recovering in April and continued to show signs of improving beyond the end of FY 2020. Domestic equities returned 9.2% but lagged the benchmark for FY 2020. International equities outperformed their benchmark and earned 5.3%. Fixed income had a very solid year with a 7.3% return.

The System's investments earned 1.7% during FY 2019. The market experienced a sharp downturn in the first quarter of FY 2019 and the System posted a (8.5%) overall return. The market recovered in the next three quarters of FY 2019 allowing the System to record an 11.2% return during that time frame. Domestic and international equities were the key components in both the downturn and recovery. Domestic equities returned (15.2%), 18.1%, and 0.2% for the first quarter, the last three quarters and overall annual, respectively. International equities showed performance of (10.7%), 9.2%, and (2.5%) for the same time periods. Real estate continued its steady run with a 7.0% return. Energy master limited partnerships continued to struggle and the positions were liquidated during FY 2019. The System's net assets after deductions decreased by \$29.6 million to \$797.8 million.

Pension and retirement benefits increased by 3.9% or \$2.7 million to \$70.6 million and 1.65% or \$1.1 million to \$67.9 million during FY 2020 and 2019, respectively. The number of retirees and beneficiaries receiving a monthly benefit increased by 2.2% to 4,895 and 1.2% to 4,789 during FY 2020 and 2019, respectively. Administrative expenses increased \$45,000 to \$920,268 in FY 2020 and decreased by \$86,909 to \$875,268 in FY 2019.

FINANCIAL STATEMENTS

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

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

**Employees Retirement System of the City of St. Louis
Management's Discussion and Analysis - Unaudited
Years Ended September 30, 2020 and 2019**

FINANCIAL ANALYSIS

Total assets and deferred outflows at September 30, 2020 and 2019 of \$802.2 million and \$798.4 million, respectively, were comprised of cash, investments and receivables. Investments slightly increased by nearly \$3.0 million or 0.4% to \$799.7 million and decreased by nearly \$30.0 million or 3.6% to \$796.8 million during FY 2020 and FY 2019, respectively. Receivables decreased by \$50,054 and increased by \$52,235 and consisted of employer contributions and interest and dividend income at September 30, 2020 and 2019, respectively. Currency exchange contracts ended both FY 2020 and FY 2019 as a net receivable and decreased by \$33,068 and increased by \$471,355 during FY 2020 and FY 2019, respectively. The System does not participate in a securities lending program with its master custodian, U.S. Bank.

Total liabilities at September 30, 2020 and 2019 were \$896,337 and \$647,856, respectively, and consisted of accounts payable, accrued expenses and global lending collateral. The increase in liabilities is attributed by global lending collateral in the amount of \$263,920 during FY 2020. The net decrease in liabilities of \$211,017 during FY 2019 is attributed to reduced accrued investment expenses.

The System received contribution in advance from the City Employers in the amount of \$974,801 due to early deposit in the final quarter of FY 2020.

Net assets held in trust for pension benefits increased by \$2.5 million to \$800.3 million and decreased by \$29.6 million to \$797.8 million during FY 2020 and FY 2019, respectively.

	Condensed Statements of Fiduciary Net Position						
	2020	September 30 2019	2018	Total Change FY 2020		Total Change FY 2019	
				Amount	Percentage	Amount	Percentage
Assets							
Cash	\$ 897,869	\$ 59,712	\$ 386,227	\$ 838,157	1,403.7 %	\$ (326,515)	(84.5)%
Receivables	849,114	899,167	846,933	(50,053)	(5.6)%	52,234	6.2 %
Investments	<u>799,745,259</u>	<u>796,763,057</u>	<u>826,748,560</u>	<u>2,982,202</u>	0.4 %	<u>(29,985,503)</u>	(3.6)%
Total Assets	<u>801,492,242</u>	<u>797,721,936</u>	<u>827,981,720</u>	<u>3,770,306</u>	0.5 %	<u>(30,259,784)</u>	(3.7)%
Deferred Outflows of Resources							
Currency exchange	<u>670,573</u>	<u>703,641</u>	<u>232,286</u>	<u>(33,068)</u>	(4.7)%	<u>471,355</u>	202.9 %
Total Assets and Deferred Outflows	<u>802,162,815</u>	<u>798,425,577</u>	<u>828,214,006</u>	<u>3,737,238</u>	0.5 %	<u>(29,788,429)</u>	(3.6)%
Liabilities							
Accounts payable	632,417	647,856	858,873	(15,439)	(2.4)%	(211,017)	(24.6)%
Global collateral	<u>263,920</u>	<u>-</u>	<u>-</u>	<u>263,920</u>	100.0 %	<u>-</u>	- %
Total Liabilities	896,337	647,856	858,873	248,481	38.4 %	(211,017)	(24.6)%
Deferred Inflows of Resources							
Deferred inflows of resources	<u>974,801</u>	<u>-</u>	<u>-</u>	<u>974,801</u>	100.0 %	<u>-</u>	- %
Total Liabilities and Deferred Inflows of Resources	<u>1,871,138</u>	<u>647,856</u>	<u>858,873</u>	<u>1,223,282</u>	188.8 %	<u>(211,017)</u>	(24.6)%
Net Position Held in Trust for Pension Benefits							
	<u>\$ 800,291,677</u>	<u>\$ 797,777,721</u>	<u>\$ 827,355,133</u>	<u>\$ 2,513,956</u>	0.3 %	<u>\$ (29,577,412)</u>	(3.6)%

**Employees Retirement System of the City of St. Louis
Management's Discussion and Analysis - Unaudited
Years Ended September 30, 2020 and 2019**

REVENUES – ADDITIONS TO FIDUCIARY NET POSITION

The assets needed to finance retirement benefits are accumulated through the receipt of employer contributions, member purchases of creditable service and earnings on investments. Net investment income was \$43.3 million and \$9.4 million for FY 2020 and FY 2019, respectively. Investment performance deteriorated in the second quarter of FY 2020 and posted (13.8%) return. The COVID-19 pandemic turned global economic markets into recession and impacted investment performance during that quarter. Investments recovered in the next quarter of FY 2020 with an 11.5% return. Overall, the System's investments ended FY 2020 with a 6.4% return. Fixed Income, domestic and international equities were key drivers in the economic recovery. Investment performance deteriorated in the first quarter of FY 2019 and posted (8.5%) return. Investments recovered in the next three quarters of FY 2019 with an 11.2% return. Overall, the System's investments ended FY 2019 with a 1.7% return. Domestic and international equities were key drivers in both economic scenarios. Net investment income included custodial and investment management fees of \$4.8 million and \$5.0 million during FY 2020 and FY 2019, respectively.

Employer contributions increased by \$952,227 or 3.21% and \$268,466 or 0.9% in FY 2020 and FY 2019, respectively. The primary factor was an increase during FY 2020 in pension wages due to a one-time \$1,000 lump-sum pay increase and a \$15 per hour minimum wage for City Civil Service employees as established by Ordinance #71099 and Executive Order #65. Member contributions were comprised entirely of purchase of creditable service by active members.

EXPENSES – DEDUCTIONS FROM FIDUCIARY NET POSITION

The major expenses of the System include the payment of pension benefits to retirees and beneficiaries and administrative expenses. Other expenses within retirement benefits include refunds of member contributions and pension service transfer payments to other public plans within the State of Missouri which have a portability agreement with the System. Service transfer payments were \$9,526 and \$96,453 during FY 2020 and FY 2019, respectively, and there were no contribution refunds in FY 2020 or FY 2019. Administrative expenses increased \$45,000 in FY 2020 mostly due to one-time expense items, such as the five-year actuarial experience study of \$24,000, and the \$1,000 per employee lump-sum pay increase totaling \$9,000. Administrative expenses decreased \$86,909 in FY 2019 largely due to the one-time charge in FY 2018 relating to the *Tribune* bankruptcy legal settlement.

**Employees Retirement System of the City of St. Louis
Management's Discussion and Analysis - Unaudited
Years Ended September 30, 2020 and 2019**

	Condensed Statements of Changes in Fiduciary Net Position						
	September 30			Total Change FY 2020		Total Change FY 2019	
	2020	2019	2018	Amount	Percentage	Percentage	Percentage
Additions							
Net investment income	\$ 43,257,885	\$ 9,411,622	\$ 48,770,991	\$ 33,846,263	359.6 %	\$ (39,359,369)	(80.7)%
Employer contributions	30,581,795	29,629,568	29,361,102	952,227	3.2 %	268,466	0.9 %
Member contributions	<u>151,774</u>	<u>147,584</u>	<u>58,201</u>	<u>4,190</u>	2.8 %	<u>89,383</u>	153.6 %
Total Additions	<u>73,991,454</u>	<u>39,188,774</u>	<u>78,190,294</u>	<u>34,802,680</u>	88.8 %	<u>(39,001,520)</u>	(49.9)%
Deductions							
Retirement benefits	70,557,232	67,890,918	66,788,634	2,666,314	3.9 %	1,102,284	1.7 %
Administrative expenses	<u>920,268</u>	<u>875,268</u>	<u>962,177</u>	<u>45,000</u>	5.1 %	<u>(86,909)</u>	(9.0)%
Total Deductions	<u>71,477,500</u>	<u>68,766,186</u>	<u>67,750,811</u>	<u>2,711,314</u>	3.9 %	<u>1,015,375</u>	1.5 %
Changes in Fiduciary Net Position	2,513,954	(29,577,412)	10,439,483	32,091,366	(108.5)%	(40,016,895)	(383.3)%
Net position held in trust for pension benefits							
Beginning of year	<u>797,777,721</u>	<u>827,355,133</u>	<u>816,915,647</u>	<u>(29,577,412)</u>	(3.6)%	<u>10,439,486</u>	1.3 %
End of year	<u>\$ 800,291,675</u>	<u>\$ 797,777,721</u>	<u>\$ 827,355,130</u>	<u>\$ 2,513,954</u>	0.3 %	<u>\$ (29,577,409)</u>	(3.6)%

SUMMARY

The System's investments managed to post a positive return for FY 2020 despite a global pandemic resulting in a loss of 13.8% in the second quarter of FY 2020. As economic conditions improved in the next two quarters of FY 2020, the System's investments ended FY 2020 with a return of 6.42%. The System's investments managed to post a small positive return for FY 2019. However, rising interest rates and prospects of a global economic slowdown resulted in a first quarter of FY 2019 loss in excess of 8%. As economic conditions improved in the next three quarters of FY 2019, the System's investments returned over 11% and ended the fiscal year slightly under 2%. The required employer contribution rates recommended by the actuary are currently 13.19% for the City of St. Louis and 13.11% for the other participating employers for the period July 1, 2020 through June 30, 2021. The prior year's contribution rates were 12.26% and 12.18%, respectively. The dual contribution rates are a result of a legal settlement involving the Retirement System, the City of St. Louis and the other participating employers.

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

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

**Employees Retirement System of the City of St. Louis
Management's Discussion and Analysis - Unaudited
Years Ended September 30, 2020 and 2019**

REQUESTS FOR INFORMATION

This financial report is designed to provide the Board of Trustees, our members and other users of our financial report with a general overview of the System's finances and to demonstrate the System's accountability for its funds. If you have any questions about this report or need additional financial information, contact:

The Employees Retirement System of the City of St. Louis
1114 Market Street, Suite 900
St. Louis, MO 63101

Employees Retirement System of the City of St. Louis
Statements of Fiduciary Net Position
September 30, 2020 and 2019

Assets	<u>2020</u>	<u>2019</u>
Cash	\$ 897,869	\$ 59,712
Receivables		
Employer receivable	76,541	67,475
Accrued interest	623,683	654,469
Accrued dividends	<u>148,890</u>	<u>177,223</u>
Total Receivables	<u>849,114</u>	<u>899,167</u>
Investments, at fair value		
Temporary cash investments	20,906,458	9,819,140
Fixed income securities	120,675,671	111,844,773
Common stocks	235,717,423	216,696,469
Managed master limited partnerships	34,452,740	31,296,804
Managed international equity funds	169,278,305	181,604,022
Real estate funds	95,435,939	95,225,746
Domestic bond funds	63,882,498	89,403,040
Managed hedge fund of funds	<u>59,396,225</u>	<u>60,873,063</u>
Total Investments	<u>799,745,259</u>	<u>796,763,057</u>
Total Assets	<u>801,492,242</u>	<u>797,721,936</u>
Deferred Outflows of Resources		
Receivable Under Forward Foreign Currency Exchange Contracts	<u>670,573</u>	<u>703,641</u>
Liabilities		
Accounts payable	632,417	647,856
Other liabilities - securities lending collateral	<u>263,920</u>	<u>-</u>
Total Liabilities	<u>896,337</u>	<u>647,856</u>
Deferred Inflows of Resources		
Advance Contributions Received	<u>974,801</u>	<u>-</u>
Net Position		
Net Position Held in Trust for Pension Benefits	<u>\$800,291,677</u>	<u>\$797,777,721</u>

Employees Retirement System of the City of St. Louis
Statements of Changes in Fiduciary Net Position
Years Ended September 30, 2020 and 2019

	2020	2019
Additions		
Contributions		
Employer contributions	\$ 30,581,795	\$ 29,629,568
Member contributions	151,774	147,584
Total Contributions	30,733,569	29,777,152
Investment income		
Interest and dividends	7,186,209	9,686,379
Net appreciation in fair value of investments	40,884,650	4,714,476
	48,070,859	14,400,855
Less investment expenses	4,812,972	4,989,233
Net investment income	43,257,887	9,411,622
Net Additions	73,991,456	39,188,774
Deductions		
Retirement benefits	70,557,232	67,890,918
Administrative expenses	920,268	875,268
Total Deductions	71,477,500	68,766,186
Net Increase (Decrease) in Net Position	2,513,956	(29,577,412)
Net Position Held in Trust for Pension Benefits, Beginning of Year	797,777,721	827,355,133
Net Position Held in Trust for Pension Benefits, End of Year	\$800,291,677	\$797,777,721

Employees Retirement System of the City of St. Louis
Notes to Financial Statements
September 30, 2020 and 2019

1. Description of System

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

General

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

Membership

Membership consisted of the following at September 30,:

	2020	2019
Retirees and Beneficiaries		
Currently receiving benefits	4,890	4,782
Terminated employees entitled to but not yet receiving benefits	2,561	2,561
Current employees		
Fully vested	3,595	3,587
Non-vested	1,389	1,557
Total membership	12,435	12,487

Benefits

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

Employees Retirement System of the City of St. Louis
Notes to Financial Statements
September 30, 2020 and 2019

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

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

Contributions

Employer contribution rates are established annually by the Board of Trustees based on an actuarial study. The required employer contribution rate recommended by the actuary is currently 13.19 percent for the City of St. Louis and 13.11 percent for the other participating employers for the period July 2020 through June 2021. Previously, the contribution rates were 12.26 percent and 12.18 percent for July 2019 through June 2020 and 12.36 percent and 12.27 percent for July 2018 through June 2019. The dual contribution rates are a result of a legal settlement involving the System, the City of St. Louis and the other participating employers.

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

Funding Policy

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

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.

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Receivables

Receivables consist of pending interest and dividends payable on investments held at the end of the year and employer contributions receivable for contributions related to the years ended September 30, 2020 and 2019.

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 long-term expected rate of return on pension plan investments was determined using the building-block method in which best-estimate ranges of expected future real rates of return (expected return, net of investment expenses and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The target allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table.

Even though history provides a valuable perspective for setting the investment return assumption, the System relies primarily on an approach which builds upon the last capital market assumption. Specifically, the System uses Marquette Associates, Inc. capital market assumptions in analyzing the System's asset allocation. The table below is based on simulated capital market returns (generated in 1,000 Monte Carlo simulations), and presents average annualized 10 year return of all the simulations performed

<u>Asset Class</u>	<u>Allocation Targets</u>	<u>Long-Term Expected Real Rate of Return</u>
Large cap	25.00 %	7.27 %
Mid cap	7.50 %	7.60 %
Small cap	7.50 %	7.90 %
International large cap	12.00 %	7.47 %
Emerging markets	3.00 %	8.10 %
Bank loans	5.00 %	6.10 %
Fixed income	10.00 %	3.30 %
International fixed income	5.00 %	5.80 %
Core real estate	10.00 %	6.60 %
Infrastructure	5.00 %	7.50 %
Private equity	5.00 %	10.80 %
Hedge funds	5.00 %	6.70 %
Total/Average	<u>100.00 %</u>	<u>7.68 %</u>

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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 3 for discussion of fair value measurements. Securities traded on national or international exchanges are valued at the latest reported sales price at current exchange rates.

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.

Derivatives

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

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

Investment Expenses

Investment expenses consist of investment manager, investment advisor, 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 administrative expense.

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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 in the statements of fiduciary net position that relate to receivables under forward foreign currency exchange contracts and deferred inflows that relate to advance contributions received from participating employers.

Subsequent Events

Management has evaluated subsequent events through February 22, 2021, the date the financial statements were available to be issued.

3. 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, and accounts payable 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 September 30, 2020 and 2019.

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

- Level 1 Investments consist of fixed income and equity securities. 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 fixed income securities and foreign exchange contracts. Fixed income 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. Foreign exchange contracts are valued using a market approach that considers foreign exchange rates.

Investments also consist of co-mingled funds and pooled separate accounts. 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 tables present the fair value measurements of instruments recognized in the accompanying statement 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 September 30,:

	2020			
	Total	Fair Value Measurements		Level 3
		Level 1	Level 2	
Fixed income securities				
U.S. Government securities	\$ 30,906,380	\$ -	\$ 30,906,380	\$ -
Corporate bonds	33,500,950	-	33,500,950	-
Temporary cash investments	20,906,458	20,906,458	-	-
International bonds and securities	40,999,010	1,327,754	39,671,256	-
Equity securities				
Common stocks	235,717,423	235,717,423	-	-
Mutual funds	15,269,331	15,269,331	-	-
Total investments in fair value hierarchy	<u>377,299,552</u>	<u>\$ 273,220,966</u>	<u>\$ 104,078,586</u>	<u>\$ -</u>
Investments measured at NAV	<u>422,445,707</u>			
	<u>\$ 799,745,259</u>			
Investment derivative instruments				
Foreign exchange contracts	<u>\$ 670,573</u>	<u>\$ -</u>	<u>\$ 670,573</u>	<u>\$ -</u>

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	2019			
	Total	Fair Value Measurements		
		Level 1	Level 2	Level 3
Fixed income securities				
U.S. Government securities	\$ 38,948,605	\$ -	\$ 38,948,605	\$ -
Corporate bonds	33,710,451	-	33,710,451	-
Temporary cash investments	9,819,140	9,819,140	-	-
International bonds and securities	39,185,717	4,943,774	34,241,943	-
Equity securities				
Common stocks	216,696,469	216,696,469	-	-
Total investments by fair value level	338,360,382	<u>\$ 231,459,383</u>	<u>\$ 106,900,999</u>	<u>\$ -</u>
Investments measured at the net asset value (NAV)	458,402,675			
	<u>\$ 796,763,057</u>			
Investment derivative instruments				
Foreign exchange contracts	\$ 703,641	\$ -	\$ 703,641	\$ -

Investments measured at fair value based on NAV per share practical expedient as of September 30, are as follows:

September 30, 2020	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Loomis High Yield Conservative Trust B	\$ 43,125,841	N/A	Daily	Daily
SSGA Passive Bond Market Index (NL) Fund	20,756,657	N/A	Monthly	15 days
Principal Real Estate Group Annuity Contract	95,435,939	N/A	Daily	7 days
Acadian Emerging Markets Mutual Equity Fund II	41,304,264	N/A	Daily	30 days
Kabouter International Opportunities Fund II	34,452,740	N/A	Daily	15-30 days
Silchester International Value Equity Group Trust	73,448,965	N/A	Monthly	5-10 days
Walter Scott Group Trust International Equity Fund	54,525,076	N/A	Daily	10 days
Entrust Capital Diversified Fund	7,789,237	N/A	Quarterly	90 days
Weatherflow Offshore Fund I	<u>51,606,988</u>	N/A	Quarterly	65 days
Total investments measured at NAV	<u>\$ 422,445,707</u>			
September 30, 2019	Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Loomis High Yield Conservative Trust B	\$ 41,215,442	N/A	Daily	Daily
SSGA Passive Bond Market Index (NL) Fund	48,187,598	N/A	Monthly	15 days
Principal Real Estate Group Annuity Contract	95,225,746	N/A	Daily	7 days
Acadian Emerging Markets Mutual Equity Fund II	51,996,123	N/A	Daily	30 days
Kabouter International Opportunities Fund II	31,296,804	N/A	Daily	15-30 days
Silchester International Value Equity Group Trust	83,247,937	N/A	Monthly	5-10 days
Walter Scott Group Trust International Equity Fund	46,359,962	N/A	Daily	10 days
Entrust Capital Diversified Fund	15,686,644	N/A	Quarterly	90 days
Weatherflow Offshore Fund I	<u>45,186,419</u>	N/A	Quarterly	65 days
Total investments measured at NAV	<u>\$ 458,402,675</u>			

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

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

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

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

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

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

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

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

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

4. 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 September 30, 2020, the System had \$1,477,538 in cash on deposit at US Bank. This balance was insured by the Federal Deposit Insurance Corporation ("FDIC") for \$250,000. The remaining balances are collateralized by securities held by the pledging financial institution's trust department in the System's name.

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

Concentration of Credit Risk

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 at September 30,:

Investments	2020	
	Fair Value	Percentage of Total Net Position
Acadian Asset Management - Emerging Markets Mutual Equity Fund II	\$ 41,304,264	5.16 %
Loomis High Yield Conservative Trust B	\$ 43,125,841	5.39 %
Principal Global Investors - Real Estate Group Annuity Contract	\$ 95,435,939	11.93 %
Silchester International Advisors - International Value Equity Group Trust	\$ 73,448,965	9.18 %
Walter Scott & Partners Limited Group Trust -International Equity Fund	\$ 54,525,076	6.81 %
Weatherlow Offshore Fund I	\$ 51,606,988	6.45 %

Investments	2019	
	Fair Value	Percentage of Total Net Position
Acadian Asset Management - Emerging Markets Mutual Equity Fund II	\$ 51,996,123	6.52 %
Loomis High Yield Conservative Trust B	\$ 41,215,442	5.17 %
Principal Global Investors - Real Estate Group Annuity Contract	\$ 95,225,746	11.94 %
Silchester International Advisors - International Value Equity Group Trust	\$ 83,247,937	10.43 %
Walter Scott & Partners Limited Group Trust -International Equity Fund	\$ 46,359,962	5.81 %
Weatherlow Offshore Fund I	\$ 45,186,419	5.66 %
SSGA Passive Bond Market Index NL Fund	\$ 48,187,598	6.04 %

Credit Risk of Debt Securities

The System's debt investments as of September 30, 2020 and 2019 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 portfolio credit rating shall be A or better and the credit rating of fixed income securities shall be Baa or better. Non-rated issues are allowed as long as the quality is sufficient to maintain the overall average rating noted.

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As of September 30, 2020 and 2019, the System held the following fixed income investments with respective Moody's quality ratings or equivalent rating. Foreign investments not considered to have credit risk such as stocks and cash equivalents are not included in the following:

<u>Quality Rating</u>	<u>2020</u>	<u>2019</u>
	<u>Fair Value</u>	<u>Fair Value</u>
Aaa	\$ 33,697,793	\$ 46,367,085
Aa1	1,107,025	1,178,855
Aa2	3,719,476	4,795,020
Aa3	2,894,524	421,631
A1	8,737,084	8,950,832
A2	7,783,527	7,219,267
A3	7,056,112	6,997,311
Baa1	8,013,391	7,489,414
Baa2	7,238,170	6,487,808
Baa3	2,666,937	4,718,449
Ba1	741,431	647,456
Ba2	597,718	712,466
Ba3	955,809	235,844
B1	248,145	220,783
B2	-	373,543
B3	224,100	-
Not rated	19,717,098	14,009,293
Total	<u>\$ 105,398,340</u>	<u>\$ 110,825,057</u>

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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 September 30, 2020 is as follows:

Currency	Cash Equivalents	Equities	Total
Australian Dollar	\$ 10,304	\$ 656,164	\$ 666,468
British Pound Sterling	109,333	1,937,593	2,046,926
Canadian Dollar	4,966	977,835	982,801
Danish Krone	6,566	70,551	77,117
Euro	506,664	7,822,567	8,329,231
Japanese Yen	1,430	5,373,527	5,374,957
Mexican Peso	13,471	399,906	413,377
Moroccan Dirham	-	184,134	184,134
Norwegian Krone	(434)	-	(434)
Polish Zloty	13,554	51,858	65,412
Qatari Riyal	-	233,744	233,744
Swedish Krona	3,854	132,418	136,272
Swiss Franc	865	303,496	304,361
	<u>\$ 670,573</u>	<u>\$ 18,143,793</u>	18,814,366
Foreign investment denominated in U.S. Dollars			<u>19,329,454</u>
			<u>\$ 38,143,820</u>

The System's exposure to foreign currency risk in U.S. Dollars as of September 30, 2019 is as follows:

Currency	Cash Equivalents	Equities	Total
Australian Dollar	\$ 8,948	\$ 535,137	\$ 544,085
Brazilian Real	(5,711)	-	(5,711)
British Pound Sterling	169,645	2,203,291	2,372,936
Canadian Dollar	97,230	988,838	1,086,068
Danish Krone	7,392	67,553	74,945
Euro	339,894	8,517,734	8,857,628
Japanese Yen	35,071	6,115,558	6,150,629
Mexican Peso	27,502	100,998	128,500
Norwegian Krone	(5,295)	-	(5,295)
Polish Zloty	12,880	51,936	64,816
Swedish Krona	9,092	-	9,092
Swiss Franc	6,237	170,887	177,124
Thai Baht	756	-	756
	<u>\$ 703,641</u>	<u>\$ 18,751,932</u>	19,455,573
Foreign investment denominated in U.S. Dollars			<u>20,585,122</u>
			<u>\$ 40,040,695</u>

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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, the effective duration of any fixed income portfolio cannot exceed 120% of the effective duration of the manager's broad market benchmark.

Duration is a measure of a debt instrument's exposure to a change in interest rates and the related sensitivity of market price to parallel shifts in the yield curve. It uses the present value of cash flows, weighted for those cash flows as a percentage of the instruments' full price. The following schedule provides a summary of interest rate risk assumed by the System as of September 30,:

	2020	
Manager	Fair Value	Effective Duration
Payden and Rygel	\$ 42,184,453	8.1 years
Allegiant (PNC)	65,244,714	7.7 years
SSGA	20,756,657	6.6 years
Loomis	43,125,841	5.9 years
Total	\$ 171,311,665	
	2019	
Manager	Fair Value	Effective Duration
Payden and Rygel	\$ 40,506,612	8.3 years
Allegiant (PNC)	73,200,534	7.0 years
SSGA	48,187,598	6.3 years
Loomis	41,215,442	5.1 years
Total	\$ 203,110,186	

COVID-19

During the first quarter of 2020, the World Health Organization declared COVID-19 to be a public health emergency. COVID-19 has led to increased short-term market volatility and may have adverse long-term effects on the United States and international economies and markets in general. COVID-19 may adversely impact the value of the System's investments. Because of the uncertainties on valuation, international economies and business operations, values reflected in these financial statements may materially differ from the value received upon actual sale of those investments. COVID-19 has also caused a downturn in business activity across most sectors and industries in the United States and internationally. The System cannot reasonably estimate the length or severity of this public health emergency and it remains too early to estimate the full impact, if any, on financial results.

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5. Tax Status of Plan

The Internal Revenue Service has determined and informed the System by a letter dated June 12, 2014, that the System 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 tax exempt.

6. Plan Termination

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

7. Deferred Retirement Option Plan

On June 8, 2000, the Mayor of the City of St. Louis approved an ordinance passed by the Board of Alderman, authorizing a Deferred Retirement Option Plan ("DROP"), which became effective January 1, 2001. This plan allows for members to work for an additional 5 years after reaching retirement age and defer receipt of their retirement allowance. The calculation of average salary for retirement benefits will not include the additional years of service after normal retirement age. The amount that would have been received as retirement benefit is put in a special DROP account monthly. Total DROP expense was \$8,662,265 and \$8,578,601 for the years ended September 30, 2020 and 2019, respectively. The DROP account will not be adjusted for cost of living increases.

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

After a member completely terminates employment, the member can withdraw amounts from the DROP account in a lump sum or according to a deferred retirement payment plan. At September 30, 2020 and 2019, 2,009 and 1,946 members have elected DROP participation and have DROP account balances of \$48,674,986 and \$49,129,176, respectively.

8. Annual Money-Weighted Rate of Return

The annual money-weighted rate of return was 5.8030 percent and 1.5121 percent for the years ended September 30, 2020 and 2019, respectively. The annual money-weighted rate of return expresses investment performance, net of investment expense, and adjusted for the changing amounts actually invested.

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9. Funding Status

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

	<u>2020</u>	<u>2019</u>
Actuarial value of assets	\$ 841,450,402	\$ 830,686,015
Actuarial accrual liability (AAL)	\$ 1,084,125,462	\$ 1,015,454,744
Unfunded AAL (UAAL)	\$ 242,675,060	\$ 184,768,729
Funded ratio	77.6 %	81.8 %
Annual covered payroll	\$ 228,162,770	\$ 228,673,586
UAAL as a percentage of payroll	106.4 %	80.8 %

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

	<u>October 1, 2020</u>
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the plan year.
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Fixed 20 year period as of October 1, 2015 as a level percentage of payroll
Inflation rate	2.50%
Asset valuation method	5 year smoothing
Discount rate	7.25%
Mortality and death rates	Active: 135% of the Pub-2010 General Employee below-median income mortality table for males and 155% for females projected with generational mortality improvements from 2010 using Scale MP-2019. Healthy: 125% of the Pub-2010 General Retiree below-median income mortality table for males and 120% for females projected with generational mortality improvements from 2010 using Scale MP-2019. Disabled: 120% of the Pub-2010 Non-Safety Disabled Retiree mortality table for males and 110% for females projected with generational mortality improvements from 2010 using Scale MP-2019.
Rate of salary increases	Varies by service, ranging from 2.50% to 4.55%

Employees Retirement System of the City of St. Louis
Notes to Financial Statements
September 30, 2020 and 2019

	October 1, 2019
Timing	Actuarially determined contribution rates are calculated based on the actuarial valuation at the beginning of the plan year.
Actuarial cost method	Entry Age Normal Cost Method
Amortization method	Fixed 20 year period as of October 1, 2015 as a level percentage of payroll
Inflation rate	2.50%
Asset valuation method	5 year smoothing
Discount rate	7.50%
Mortality and death rates	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA
Rate of salary increases	Varies by service, ranging from 3.00% to 4.25%

10. Employers' Net Pension Liability

The components of the net pension liability (the System's liability determined in accordance with GASB Statement No. 67 less the fiduciary net position) as of September 30, 2020, 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 for the period October 1, 2014 through September 30, 2019, performed in 2020. The net pension liability as of September 30, 2020 and 2019 is \$283,833,785 and \$217,677,023, respectively, based on the actuarial valuation. The 2020 valuation was performed as of October 1, 2019, with a measurement date of September 30, 2020 and the 2019 valuation was performed as of October 1, 2018, with a measurement date of September 30, 2019.

Employees Retirement System of the City of St. Louis
Notes to Financial Statements
September 30, 2020 and 2019

Schedule of Net Pension Liability

The components of the net pension liability of all participating employers at September 30, are as follows:

	<u>2020</u>	<u>2019</u>
Total pension liability	\$ 1,084,125,462	\$ 1,015,454,744
Less: Fiduciary net position	<u>800,291,677</u>	<u>797,777,721</u>
Employers' net pension liability	<u>\$ 283,833,785</u>	<u>\$ 217,677,023</u>
Plan net position as a percentage of total pension liability	73.8 %	78.56 %

Sensitivity of Net Pension Eligibility to Changes in the Discount Rate

The following presents the net pension liability at September 30, 2020 and 2019, calculated using the discount rate of 7.25 percent and 7.50 percent, respectively, 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:

<u>September 30, 2020</u>	<u>1% Decrease (6.25%)</u>	<u>Current Discount Rate (7.25%)</u>	<u>1% Increase (8.25%)</u>
Total pension liability	\$ 1,193,946,112	\$ 1,084,125,462	\$ 990,675,080
Fiduciary net position	<u>800,291,677</u>	<u>800,291,677</u>	<u>800,291,677</u>
Net pension liability	<u>\$ 393,654,435</u>	<u>\$ 283,833,785</u>	<u>\$ 190,383,403</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	67.0 %	73.8 %	80.8 %
<u>September 30, 2019</u>	<u>1% Decrease (6.50%)</u>	<u>Current Discount Rate (7.50%)</u>	<u>1% Increase (8.50%)</u>
Total pension liability	\$ 1,114,244,773	\$ 1,015,454,744	\$ 930,812,452
Fiduciary net position	<u>797,777,721</u>	<u>797,777,721</u>	<u>797,777,721</u>
Net pension liability	<u>\$ 316,467,052</u>	<u>\$ 217,677,023</u>	<u>\$ 133,034,731</u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	71.6 %	78.6 %	85.7 %

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 sufficient to make all projected future benefit payments of current plan members.

Under GASB Statement No. 68, employers participating in the plan would recognize a total pension expense of \$49,947,185 and \$42,591,857 for the fiscal years ended September 30, 2020 and 2019, respectively.

Employees Retirement System of the City of St. Louis
Required Supplementary Information
Schedules of Changes of Employer Net Pension Liability - Unaudited
Years Ended September 30,

	2020	2019	2018	2017	2016	2015	2014
Total pension liability							
Service cost	\$ 13,008,418	\$ 12,881,819	\$ 13,342,936	\$ 13,185,412	\$ 13,703,072	\$ 13,067,553	\$ 10,591,910
Interest	74,536,674	73,206,999	72,329,296	71,206,835	69,893,488	73,825,307	72,012,146
Difference between expected and actual experience	6,326,499	713,562	(12,970,671)	(4,372,137)	(3,601,576)	(2,701,109)	(3,664,735)
Changes of assumptions	45,356,360	-	-	-	-	(5,107,330)	-
Benefit payments	<u>(70,557,233)</u>	<u>(67,890,918)</u>	<u>(66,788,634)</u>	<u>(63,532,834)</u>	<u>(60,972,546)</u>	<u>(59,065,812)</u>	<u>(56,317,073)</u>
Net change in total pension liability	68,670,718	18,911,462	5,912,927	16,487,276	19,022,438	20,018,609	22,622,248
Total pension liability - beginning	<u>1,015,454,744</u>	<u>996,543,282</u>	<u>990,630,355</u>	<u>974,143,079</u>	<u>955,120,641</u>	<u>935,102,032</u>	<u>912,479,784</u>
Total pension liability - ending	<u>\$1,084,125,462</u>	<u>\$1,015,454,744</u>	<u>\$ 996,543,282</u>	<u>\$ 990,630,355</u>	<u>\$ 974,143,079</u>	<u>\$ 955,120,641</u>	<u>\$ 935,102,032</u>
Plan fiduciary net position							
Employer contributions	\$ 30,581,795	\$ 29,629,568	\$ 29,361,102	\$ 29,782,200	\$ 32,127,591	\$ 35,436,141	\$ 36,788,260
Member contributions	151,774	147,584	58,201	134,248	10,093	289,810	129,164
Net investment income	43,257,887	9,411,622	48,770,991	86,394,236	66,460,934	(28,435,882)	70,076,027
Benefit payments including refunds of employee contributions	(70,557,232)	(67,890,918)	(66,788,634)	(63,532,834)	(60,972,546)	(59,065,812)	(56,317,073)
Administrative expense	<u>(920,268)</u>	<u>(875,268)</u>	<u>(962,177)</u>	<u>(763,273)</u>	<u>(722,132)</u>	<u>(722,758)</u>	<u>(670,957)</u>
Net change in plan fiduciary net position	2,513,956	(29,577,412)	10,439,483	52,014,577	36,903,940	(52,498,501)	50,005,421
Plan fiduciary net position - beginning	<u>797,777,721</u>	<u>827,355,133</u>	<u>816,915,650</u>	<u>764,901,073</u>	<u>727,997,133</u>	<u>780,495,634</u>	<u>730,490,213</u>
Plan fiduciary net position - ending	<u>\$ 800,291,677</u>	<u>\$ 797,777,721</u>	<u>\$ 827,355,133</u>	<u>\$ 816,915,650</u>	<u>\$ 764,901,073</u>	<u>\$ 727,997,133</u>	<u>\$ 780,495,634</u>
Net pension liability - ending	<u>\$ 283,833,785</u>	<u>\$ 217,677,023</u>	<u>\$ 169,188,149</u>	<u>\$ 173,714,705</u>	<u>\$ 209,242,006</u>	<u>\$ 227,123,508</u>	<u>\$ 154,606,398</u>
Total pension liability	\$1,084,125,462	\$1,015,454,744	\$ 996,543,282	\$ 990,630,355	\$ 974,143,079	\$ 955,120,641	\$ 935,102,032
Less: Plan fiduciary net position	<u>800,291,677</u>	<u>797,777,721</u>	<u>827,355,133</u>	<u>816,915,650</u>	<u>764,901,073</u>	<u>727,997,133</u>	<u>780,495,634</u>
Net pension liability	<u>\$ 283,833,785</u>	<u>\$ 217,677,023</u>	<u>\$ 169,188,149</u>	<u>\$ 173,714,705</u>	<u>\$ 209,242,006</u>	<u>\$ 227,123,508</u>	<u>\$ 154,606,398</u>
Plan fiduciary net position as a percentage of the total pension liability	73.82 %	78.56 %	83.02 %	82.46 %	78.52 %	76.22 %	83.47 %
Covered employee payroll	\$ 245,561,257	\$ 240,731,698	\$ 239,956,558	\$ 239,583,848	\$ 237,354,364	\$ 238,385,100	\$ 237,794,875
Net pension liability as a percentage of covered employee payroll	115.59 %	90.42 %	70.51 %	72.51 %	88.16 %	95.28 %	65.02 %

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

Employees Retirement System of the City of St. Louis
Required Supplementary Information
Schedules of Annual Money-Weighted Rate of Return on Investments - Unaudited
Years Ended September 30,

The System began tracking the annual money-weighted rate of return during the fiscal year ended September 30, 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.

<u>Years Ended September 30,</u>	<u>Annual money-weighted rate of return, net of investment expense</u>
2020	5.80 %
2019	1.51 %
2018	6.48 %
2017	11.90 %
2016	9.45 %
2015	(3.79)%
2014	9.71 %

**Employees Retirement System of the City of St. Louis
Required Supplementary Information
Schedules of Employer Contributions - Unaudited
September 30, 2020**

Years Ended September 30,	Actuarially Determined Contribution	Contributions Recognized by the Plan	Contributions Deficiency (Excess)	Covered Payroll	Contributions Recognized by the Plan as a Percentage of Covered Payroll
2014	\$ 34,060,798	\$ 36,788,260	\$ (2,727,462)	\$237,794,875	15.47 %
2015	31,605,493	35,436,141	(3,830,648)	238,385,100	14.87 %
2016	28,534,042	32,127,591	(3,593,549)	237,354,364	13.54 %
2017	27,684,090	29,782,200	(2,098,110)	239,583,848	12.43 %
2018	28,061,249	29,361,102	(1,299,853)	239,956,558	12.24 %
2019	27,958,439	29,629,568	(1,671,129)	240,731,698	12.31 %
2020	30,122,002	30,581,795	(459,793)	245,561,257	12.45 %

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

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

**Employees Retirement System of the City of St. Louis
Required Supplementary Information
Schedules of Employer Contributions - Unaudited
September 30, 2020**

Actuary Methods and Assumptions

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

	<u>September 30, 2020</u>
Actuarial cost method	Entry age normal cost method
Asset valuation method	5 year smoothing
Amortization method	Fixed 20-year period as of October 1, 2015 as a level percentage of payroll. Future gains and losses and changes in actuarial assumptions will be amortized in layers over separate 20 year periods.
Discount rate	7.25%
Inflation	2.50%
Salary increases	3.00% plus merit component based on years of service
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA
	<u>September 30, 2019</u>
Actuarial cost method	Entry age normal cost method
Asset valuation method	5 year smoothing
Amortization method	Fixed 20-year period as of October 1, 2015 as a level percentage of payroll. Future gains and losses and changes in actuarial assumptions will be amortized in layers over separate 20 year periods.
Discount rate	7.50%
Inflation	2.50%
Salary increases	3.00% plus merit component based on years of service
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA
	<u>September 30, 2018</u>
Actuarial cost method	Entry age normal cost method
Asset valuation method	5 year smoothing
Amortization method	Layered 20-year amortization of unfunded liability
Discount rate	7.50%
Inflation	2.50%
Salary increases	3.00% plus merit component based on years of service
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA

**Employees Retirement System of the City of St. Louis
Required Supplementary Information
Schedules of Employer Contributions - Unaudited
September 30, 2020**

September 30, 2017

Actuarial cost method	Entry age normal cost method
Asset valuation method	5 year smoothing
Amortization method	Layered 20-year amortization of unfunded liability
Discount rate	7.50%
Inflation	2.50%
Salary increases	3.00% plus merit component based on years of service
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA

September 30, 2016

Actuarial cost method	Entry age normal cost method
Asset valuation method	5 year smoothing
Amortization method	Layered 20-year amortization of unfunded liability
Discount rate	7.50%
Inflation	2.50%
Salary increases	3.00% plus merit component based on years of service
Mortality	Healthy: RP-2000 Healthy Mortality 3-year set-forward with generational projections using Scale AA Disabled: RP-2000 Disabled Mortality 3-year set-forward with generational projections using Scale AA

September 30, 2015

Actuarial cost method	Projected unit credit method
Asset valuation method	5 year smoothing
Amortization method	Rolling 30-year level dollar amortization of unfunded liability
Discount rate	8.00%
Inflation	3.125%
Salary increases	3.50% plus merit component based on years of service
Mortality	Healthy: 1994 Group Annuity Mortality Table Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table

September 30, 2014

Actuarial cost method	Projected unit credit method
Asset valuation method	5 year smoothing
Amortization method	Rolling 30-year level dollar amortization of unfunded liability
Discount rate	8.00%
Inflation	3.125%
Salary increases	Varies by age from 3.50% to 7.017%
Mortality	Healthy: 1994 Group Annuity Mortality Table Disabled: 1983 Railroad Retirement Board Disabled Life Mortality Table

**Employees Retirement System of the City of St. Louis
Other Supplementary Information
Analysis of Financial Experience
Years Ended September 30,**

Gain and Loss in Unfunded Actuarial Liability During the Years Ended September 30 Resulting from Differences Between Assumed Experience and Actual Experience

	<u>2020</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>
Investment Experience	\$ (9,292,857)	\$ (22,219,993)	\$ (9,504,274)	\$ (3,004,069)	\$ 533,258	\$ (2,743,842)	\$ 17,899,526	\$ (87,586)
Liability Experience	<u>(6,489,657)</u>	<u>(872,215)</u>	<u>13,001,556</u>	<u>4,322,571</u>	<u>3,695,678</u>	<u>6,114,189</u>	<u>7,265,891</u>	<u>8,391,763</u>
Gain (or Loss) During Year from Combined Experience	(15,782,514)	(23,092,208)	3,497,282	1,318,502	4,228,936	3,370,347	25,165,417	8,304,177
Non-Recurring Gain (or Loss) Items	<u>(45,365,360)</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>20,389,054</u>	<u>-</u>	<u>-</u>
Composite Gain (or Loss) During Year	<u>\$ (61,147,874)</u>	<u>\$ (23,092,208)</u>	<u>\$ 3,497,282</u>	<u>\$ 1,318,502</u>	<u>\$ 4,228,936</u>	<u>\$ 23,759,401</u>	<u>\$ 25,165,417</u>	<u>\$ 8,304,177</u>

Employees Retirement System of the City of St. Louis
Other Supplementary Information
Solvency Test - Aggregate Actuarial Liabilities
September 30, 2020

Valuation date October 1,	Active member contributions	Retirees & beneficiaries	Active member employer financed contributions	Actuarial value of reported assets	Portion of actuarial liabilities covered by reported assets		
	(1)	(2)	(3)		(1)	(2)	(3)
2020	\$ -	\$ 648,506,475	\$ 435,618,987	\$ 841,450,402	100%	100%	44%
2019	-	589,148,288	426,306,456	830,686,015	100%	100%	57%
2018	-	563,779,679	432,763,603	831,005,302	100%	100%	62%
2017	-	540,747,179	449,883,176	818,839,562	100%	100%	62%
2016	-	517,161,890	456,981,189	797,664,391	100%	100%	61%
2015	-	501,123,197	453,997,444	770,006,025	100%	100%	59%
2014	-	494,664,459	417,314,687	737,967,928	100%	100%	58%
2013	-	475,937,321	413,511,258	685,397,323	100%	100%	51%
2012	-	460,581,077	406,310,985	653,001,852	100%	100%	47%
2011	-	411,520,555	400,242,766	661,932,240	100%	100%	55%
2010	-	419,717,802	400,951,838	671,608,995	100%	100%	63%

Employees Retirement System of the City of St. Louis
Other Supplementary Information
Schedules of Funding Progress
September 30, 2020

Actuarial Valuation Date October 1,	Actuarial Value of Assets	Actuarial Liability	Unfunded Actuarial Liability	Funded Ratio	Covered Pension Payroll	Percentage of Covered Payroll
2020	\$ 841,450,402	\$ 1,084,125,462	\$ 242,675,060	77.62 %	\$ 228,162,770	106.36 %
2019	830,686,015	1,015,454,744	184,768,729	81.80 %	228,673,586	80.80 %
2018	831,005,302	996,543,282	165,537,980	83.39 %	228,447,481	72.46 %
2017	818,839,562	990,630,355	171,790,793	82.66 %	227,253,901	75.59 %
2016	797,664,391	974,143,079	176,478,688	81.88 %	226,907,701	77.78 %
2015	770,006,025	955,120,641	185,114,616	80.62 %	228,422,585	81.04 %
2014	737,967,928	911,979,146	174,011,218	80.92 %	227,039,143	76.64 %
2013	685,397,323	889,448,579	204,051,256	77.06 %	224,623,445	90.84 %
2012	653,001,852	866,890,445	213,888,593	75.33 %	224,822,252	95.14 %
2011	661,932,240	841,763,321	179,831,081	78.64 %	223,060,719	80.62 %
2010	671,608,995	820,669,641	149,060,646	81.84 %	232,451,661	64.13 %

Employees Retirement System of the City of St. Louis
Other Supplementary Information
Schedule of Actuarial Present Values of Projected Benefit Payments
September 30, 2020

Fiscal Years Ending 9/30	Benefit Payments				Present Value of Benefit Payments		
	Beginning Fiduciary Net Position	Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 7.25%	Unfunded Portion at 2.21%	Using a Single Discount Rate of 7.25%
2020	\$ 800,291,677	\$ 80,283,911	\$ 80,283,911	\$ -	\$ 77,522,875	\$ -	\$ 77,522,875
2021	\$ 810,609,147	\$ 78,835,330	\$ 78,835,330	\$ -	\$ 70,978,193	\$ -	\$ 70,978,193
2022	\$ 822,990,678	\$ 81,874,629	\$ 81,874,629	\$ -	\$ 68,731,543	\$ -	\$ 68,731,543
2023	\$ 833,832,695	\$ 83,903,836	\$ 83,903,836	\$ -	\$ 65,673,666	\$ -	\$ 65,673,666
2024	\$ 844,014,016	\$ 85,588,515	\$ 85,588,515	\$ -	\$ 62,463,690	\$ -	\$ 62,463,690
2025	\$ 853,157,202	\$ 89,903,447	\$ 89,903,447	\$ -	\$ 61,177,424	\$ -	\$ 61,177,424
2026	\$ 858,341,606	\$ 92,229,453	\$ 92,229,453	\$ -	\$ 58,517,691	\$ -	\$ 58,517,691
2027	\$ 861,463,776	\$ 92,138,004	\$ 92,138,004	\$ -	\$ 54,507,849	\$ -	\$ 54,507,849
2028	\$ 864,994,083	\$ 96,842,678	\$ 96,842,678	\$ -	\$ 53,418,260	\$ -	\$ 53,418,260
2029	\$ 864,118,672	\$ 97,836,548	\$ 97,836,548	\$ -	\$ 50,318,393	\$ -	\$ 50,318,393
2030	\$ 862,436,091	\$ 97,214,518	\$ 97,214,518	\$ -	\$ 46,618,626	\$ -	\$ 46,618,626
2031	\$ 861,656,151	\$ 96,962,571	\$ 96,962,571	\$ -	\$ 43,354,598	\$ -	\$ 43,354,598
2032	\$ 861,533,879	\$ 95,524,918	\$ 95,524,918	\$ -	\$ 39,824,507	\$ -	\$ 39,824,507
2033	\$ 863,406,595	\$ 94,418,834	\$ 94,418,834	\$ -	\$ 36,702,451	\$ -	\$ 36,702,451
2034	\$ 867,120,632	\$ 93,970,833	\$ 93,970,833	\$ -	\$ 34,059,025	\$ -	\$ 34,059,025
2035	\$ 872,182,652	\$ 92,122,217	\$ 92,122,217	\$ -	\$ 31,131,942	\$ -	\$ 31,131,942
2036	\$ 855,463,033	\$ 90,286,869	\$ 90,286,869	\$ -	\$ 28,449,139	\$ -	\$ 28,449,139
2037	\$ 840,577,490	\$ 88,836,609	\$ 88,836,609	\$ -	\$ 26,099,922	\$ -	\$ 26,099,922
2038	\$ 826,727,343	\$ 87,170,531	\$ 87,170,531	\$ -	\$ 23,879,192	\$ -	\$ 23,879,192
2039	\$ 814,385,189	\$ 85,206,156	\$ 85,206,156	\$ -	\$ 21,763,243	\$ -	\$ 21,763,243
2040	\$ 800,566,780	\$ 83,689,139	\$ 83,689,139	\$ -	\$ 19,930,786	\$ -	\$ 19,930,786
2041	\$ 779,523,858	\$ 81,456,866	\$ 81,456,866	\$ -	\$ 18,087,799	\$ -	\$ 18,087,799
2042	\$ 757,615,552	\$ 79,207,106	\$ 79,207,106	\$ -	\$ 16,399,284	\$ -	\$ 16,399,284
2043	\$ 734,042,860	\$ 77,644,686	\$ 77,644,686	\$ -	\$ 14,989,087	\$ -	\$ 14,989,087
2044	\$ 708,373,714	\$ 74,772,150	\$ 74,772,150	\$ -	\$ 13,458,789	\$ -	\$ 13,458,789
2045	\$ 683,256,108	\$ 72,216,091	\$ 72,216,091	\$ -	\$ 12,120,005	\$ -	\$ 12,120,005
2046	\$ 658,823,006	\$ 70,819,513	\$ 70,819,513	\$ -	\$ 11,082,161	\$ -	\$ 11,082,161
2047	\$ 633,941,237	\$ 67,940,494	\$ 67,940,494	\$ -	\$ 9,912,950	\$ -	\$ 9,912,950
2048	\$ 610,115,408	\$ 65,212,914	\$ 65,212,914	\$ -	\$ 8,871,775	\$ -	\$ 8,871,775
2049	\$ 587,273,446	\$ 63,591,458	\$ 63,591,458	\$ -	\$ 8,066,375	\$ -	\$ 8,066,375
2050	\$ 564,352,676	\$ 61,067,023	\$ 61,067,023	\$ -	\$ 7,222,525	\$ -	\$ 7,222,525
2051	\$ 542,286,053	\$ 58,633,751	\$ 58,633,751	\$ -	\$ 6,465,955	\$ -	\$ 6,465,955
2052	\$ 521,057,995	\$ 56,649,204	\$ 56,649,204	\$ -	\$ 5,824,807	\$ -	\$ 5,824,807
2053	\$ 500,304,293	\$ 54,112,722	\$ 54,112,722	\$ -	\$ 5,187,879	\$ -	\$ 5,187,879
2054	\$ 480,641,046	\$ 52,304,610	\$ 52,304,610	\$ -	\$ 4,675,554	\$ -	\$ 4,675,554
2055	\$ 461,401,810	\$ 50,043,343	\$ 50,043,343	\$ -	\$ 4,171,019	\$ -	\$ 4,171,019
2056	\$ 443,091,188	\$ 47,112,925	\$ 47,112,925	\$ -	\$ 3,661,328	\$ -	\$ 3,661,328
2057	\$ 426,472,721	\$ 45,025,707	\$ 45,025,707	\$ -	\$ 3,262,584	\$ -	\$ 3,262,584
2058	\$ 410,799,175	\$ 42,574,090	\$ 42,574,090	\$ -	\$ 2,876,400	\$ -	\$ 2,876,400
2059	\$ 396,519,001	\$ 39,497,273	\$ 39,497,273	\$ -	\$ 2,488,134	\$ -	\$ 2,488,134
2060	\$ 384,382,175	\$ 37,194,103	\$ 37,194,103	\$ -	\$ 2,184,658	\$ -	\$ 2,184,658
2061	\$ 373,745,070	\$ 34,948,974	\$ 34,948,974	\$ -	\$ 1,914,020	\$ -	\$ 1,914,020
2062	\$ 364,657,270	\$ 32,860,568	\$ 32,860,568	\$ -	\$ 1,677,992	\$ -	\$ 1,677,992
2063	\$ 357,070,381	\$ 30,850,143	\$ 30,850,143	\$ -	\$ 1,468,840	\$ -	\$ 1,468,840
2064	\$ 351,013,167	\$ 28,919,389	\$ 28,919,389	\$ -	\$ 1,283,835	\$ -	\$ 1,283,835
2065	\$ 346,514,773	\$ 27,055,522	\$ 27,055,522	\$ -	\$ 1,119,899	\$ -	\$ 1,119,899
2066	\$ 343,619,359	\$ 25,257,373	\$ 25,257,373	\$ -	\$ 974,796	\$ -	\$ 974,796
2067	\$ 342,375,557	\$ 23,519,524	\$ 23,519,524	\$ -	\$ 846,363	\$ -	\$ 846,363
2068	\$ 342,840,889	\$ 21,843,813	\$ 21,843,813	\$ -	\$ 732,925	\$ -	\$ 732,925
2069	\$ 345,075,196	\$ 20,230,969	\$ 20,230,969	\$ -	\$ 632,922	\$ -	\$ 632,922

Employees Retirement System of the City of St. Louis
Other Supplementary Information
Schedule of Actuarial Present Values of Projected Benefit Payments (continued)
September 30, 2020

Fiscal Years Ending 9/30	Beginning Fiduciary Net Position	Benefit Payments			Present Value of Benefit Payments		
		Benefit Payments	Funded Portion	Unfunded Portion	Funded Portion at 7.25%	Unfunded Portion at 2.21%	Using a Single Discount Rate of 7.25%
2070	\$ 349,151,692	\$ 18,680,438	\$ 18,680,438	\$ -	\$ 544,908	\$ -	\$ 544,908
2071	\$ 355,108,727	\$ 17,195,959	\$ 17,195,959	\$ -	\$ 467,698	\$ -	\$ 467,698
2072	\$ 363,045,709	\$ 15,777,647	\$ 15,777,647	\$ -	\$ 400,114	\$ -	\$ 400,114
2073	\$ 373,026,937	\$ 14,425,732	\$ 14,425,732	\$ -	\$ 341,100	\$ -	\$ 341,100
2074	\$ 385,131,874	\$ 13,139,980	\$ 13,139,980	\$ -	\$ 289,696	\$ -	\$ 289,696
2075	\$ 399,445,965	\$ 11,920,721	\$ 11,920,721	\$ -	\$ 245,049	\$ -	\$ 245,049
2076	\$ 416,060,511	\$ 10,767,917	\$ 10,767,917	\$ -	\$ 206,388	\$ -	\$ 206,388
2077	\$ 435,075,473	\$ 9,681,776	\$ 9,681,776	\$ -	\$ 173,026	\$ -	\$ 173,026
2078	\$ 456,589,700	\$ 8,662,544	\$ 8,662,544	\$ -	\$ 144,346	\$ -	\$ 144,346
2079	\$ 480,721,387	\$ 7,710,200	\$ 7,710,200	\$ -	\$ 119,792	\$ -	\$ 119,792
2080	\$ 507,588,883	\$ 6,824,416	\$ 6,824,416	\$ -	\$ 98,862	\$ -	\$ 98,862
2081	\$ 537,321,604	\$ 6,004,539	\$ 6,004,539	\$ -	\$ 81,105	\$ -	\$ 81,105
2082	\$ 570,059,026	\$ 5,249,539	\$ 5,249,539	\$ -	\$ 66,113	\$ -	\$ 66,113
2083	\$ 605,951,800	\$ 4,558,291	\$ 4,558,291	\$ -	\$ 53,527	\$ -	\$ 53,527
2084	\$ 645,162,667	\$ 3,929,279	\$ 3,929,279	\$ -	\$ 43,022	\$ -	\$ 43,022
2085	\$ 687,867,738	\$ 3,360,804	\$ 3,360,804	\$ -	\$ 34,310	\$ -	\$ 34,310
2086	\$ 734,257,647	\$ 2,850,758	\$ 2,850,758	\$ -	\$ 27,136	\$ -	\$ 27,136
2087	\$ 284,539,037	\$ 2,396,705	\$ 2,396,705	\$ -	\$ 21,271	\$ -	\$ 21,271
2088	\$ 838,936,052	\$ 1,995,936	\$ 1,995,936	\$ -	\$ 16,517	\$ -	\$ 16,517
2089	\$ 897,691,893	\$ 1,645,310	\$ 1,645,310	\$ -	\$ 12,695	\$ -	\$ 12,695
2090	\$ 961,070,646	\$ 1,341,376	\$ 1,341,376	\$ -	\$ 9,650	\$ -	\$ 9,650
2091	\$ 1,029,359,118	\$ 1,080,475	\$ 1,080,475	\$ -	\$ 7,248	\$ -	\$ 7,248
2092	\$ 1,102,868,697	\$ 858,887	\$ 858,887	\$ -	\$ 5,372	\$ -	\$ 5,372
2093	\$ 1,181,937,201	\$ 672,924	\$ 672,924	\$ -	\$ 3,924	\$ -	\$ 3,924
2094	\$ 1,266,930,758	\$ 518,975	\$ 518,975	\$ -	\$ 2,822	\$ -	\$ 2,822
2095	\$ 1,358,245,779	\$ 393,436	\$ 393,436	\$ -	\$ 1,995	\$ -	\$ 1,995
2096	\$ 1,456,311,149	\$ 292,774	\$ 292,774	\$ -	\$ 1,384	\$ -	\$ 1,384
2097	\$ 1,561,590,506	\$ 213,538	\$ 213,538	\$ -	\$ 941	\$ -	\$ 941
2098	\$ 1,674,584,674	\$ 152,436	\$ 152,436	\$ -	\$ 626	\$ -	\$ 626
2099	\$ 1,795,834,198	\$ 106,351	\$ 106,351	\$ -	\$ 408	\$ -	\$ 408
2100	\$ 1,925,922,039	\$ 72,417	\$ 72,417	\$ -	\$ 259	\$ -	\$ 259
2101	\$ 2,065,476,390	\$ 48,058	\$ 48,058	\$ -	\$ 160	\$ -	\$ 160
2102	\$ 2,215,173,659	\$ 31,044	\$ 31,044	\$ -	\$ 96	\$ -	\$ 96
2103	\$ 2,375,741,600	\$ 19,494	\$ 19,494	\$ -	\$ 56	\$ -	\$ 56
2104	\$ 2,547,962,677	\$ 11,891	\$ 11,891	\$ -	\$ 32	\$ -	\$ 32
2105	\$ 2,732,677,657	\$ 7,037	\$ 7,037	\$ -	\$ 18	\$ -	\$ 18
2106	\$ 3,930,789,500	\$ 4,039	\$ 4,039	\$ -	\$ 9	\$ -	\$ 9
2107	\$ 3,143,267,556	\$ 2,246	\$ 2,246	\$ -	\$ 5	\$ -	\$ 5
2108	\$ 3,371,152,128	\$ 1,213	\$ 1,213	\$ -	\$ 2	\$ -	\$ 2
2109	\$ 3,615,559,401	\$ 634	\$ 634	\$ -	\$ 1	\$ -	\$ 1
2110	\$ 3,877,686,802	\$ 321	\$ 321	\$ -	\$ 1	\$ -	\$ 1
2111	\$ 4,158,818,763	\$ 157	\$ 157	\$ -	\$ -	\$ -	\$ -
2112	\$ 4,460,332,961	\$ 75	\$ 75	\$ -	\$ -	\$ -	\$ -
2113	\$ 4,783,707,023	\$ 34	\$ 34	\$ -	\$ -	\$ -	\$ -
2114	\$ 5,130,525,746	\$ 15	\$ 15	\$ -	\$ -	\$ -	\$ -
2115	\$ 5,502,488,847	\$ 6	\$ 6	\$ -	\$ -	\$ -	\$ -
2116	\$ 5,901,419,282	\$ 2	\$ 2	\$ -	\$ -	\$ -	\$ -
2117	\$ 6,329,272,178	\$ 1	\$ 1	\$ -	\$ -	\$ -	\$ -
2118	\$ 6,788,144,410	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -

Employees Retirement System of the City of St. Louis
Other Supplementary Information
Schedule of Projection of Fiduciary Net Position
September 30, 2020

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2020	\$ 800,291,677	\$ 35,133,459	\$ 80,283,911	\$ 912,651	\$ 56,380,574	\$ 810,609,148
2021	\$ 810,609,148	\$ 34,835,934	\$ 78,835,330	\$ 792,923	\$ 57,173,851	\$ 822,990,679
2022	\$ 822,990,679	\$ 35,431,614	\$ 81,874,629	\$ 702,663	\$ 57,987,695	\$ 833,832,696
2023	\$ 833,832,696	\$ 35,984,698	\$ 83,903,836	\$ 623,529	\$ 58,723,987	\$ 844,014,017
2024	\$ 844,014,017	\$ 35,886,399	\$ 85,588,515	\$ 555,742	\$ 59,401,044	\$ 853,157,203
2025	\$ 853,157,203	\$ 35,678,662	\$ 89,903,447	\$ 495,792	\$ 59,904,982	\$ 858,341,607
2026	\$ 858,341,607	\$ 35,597,790	\$ 92,229,453	\$ 443,170	\$ 60,197,003	\$ 861,463,777
2027	\$ 861,463,777	\$ 35,636,025	\$ 92,138,004	\$ 397,326	\$ 60,429,612	\$ 864,994,084
2028	\$ 864,994,084	\$ 35,800,754	\$ 96,842,678	\$ 358,727	\$ 60,525,240	\$ 864,118,673
2029	\$ 864,118,673	\$ 36,041,756	\$ 97,836,548	\$ 323,986	\$ 60,436,196	\$ 862,436,092
2030	\$ 862,436,092	\$ 36,379,574	\$ 97,214,518	\$ 294,443	\$ 60,349,447	\$ 861,656,152
2031	\$ 861,656,152	\$ 36,791,378	\$ 96,962,571	\$ 268,543	\$ 60,317,464	\$ 861,533,880
2032	\$ 861,533,880	\$ 37,265,598	\$ 95,524,918	\$ 245,478	\$ 60,377,513	\$ 863,406,596
2033	\$ 863,406,596	\$ 37,784,993	\$ 94,418,834	\$ 224,063	\$ 60,571,941	\$ 867,120,633
2034	\$ 867,120,633	\$ 38,359,474	\$ 93,970,833	\$ 204,927	\$ 60,878,306	\$ 872,182,653
2035	\$ 872,182,653	\$ 15,106,573	\$ 92,122,217	\$ 187,566	\$ 60,483,591	\$ 855,463,034
2036	\$ 855,463,034	\$ 16,196,041	\$ 90,286,869	\$ 170,897	\$ 59,376,182	\$ 840,577,491
2037	\$ 840,577,491	\$ 16,772,376	\$ 88,836,609	\$ 155,617	\$ 58,369,703	\$ 826,727,344
2038	\$ 826,727,344	\$ 17,517,722	\$ 87,170,531	\$ 141,307	\$ 57,451,962	\$ 814,385,190
2039	\$ 814,385,190	\$ 14,977,341	\$ 85,206,156	\$ 126,753	\$ 56,537,159	\$ 800,566,781
2040	\$ 800,566,781	\$ 7,438,728	\$ 83,689,139	\$ 113,832	\$ 55,321,321	\$ 779,523,859
2041	\$ 779,523,859	\$ 5,831,800	\$ 81,456,866	\$ 101,656	\$ 53,818,415	\$ 757,615,553
2042	\$ 757,615,553	\$ 3,495,523	\$ 79,207,106	\$ 88,557	\$ 52,227,448	\$ 734,042,861
2043	\$ 734,042,861	\$ 1,547,173	\$ 77,644,686	\$ 76,736	\$ 50,505,104	\$ 708,373,715
2044	\$ 708,373,715	\$ 993,909	\$ 74,772,150	\$ 66,426	\$ 48,727,060	\$ 683,256,109
2045	\$ 683,256,109	\$ 847,422	\$ 72,216,091	\$ 56,636	\$ 46,992,201	\$ 658,823,007
2046	\$ 658,823,007	\$ 719,541	\$ 70,819,513	\$ 48,089	\$ 45,266,292	\$ 633,941,238
2047	\$ 633,941,238	\$ 593,622	\$ 67,940,494	\$ 39,674	\$ 43,560,717	\$ 610,115,409
2048	\$ 610,115,409	\$ 476,192	\$ 65,212,914	\$ 31,825	\$ 41,926,586	\$ 587,273,447
2049	\$ 587,273,447	\$ 370,674	\$ 63,591,458	\$ 24,773	\$ 40,324,786	\$ 564,352,677
2050	\$ 564,352,677	\$ 268,811	\$ 61,067,023	\$ 17,965	\$ 38,749,555	\$ 542,286,054
2051	\$ 542,286,054	\$ 184,436	\$ 58,633,751	\$ 12,326	\$ 37,233,583	\$ 521,057,996
2052	\$ 521,057,996	\$ 141,144	\$ 56,649,204	\$ 9,433	\$ 35,763,791	\$ 500,304,294
2053	\$ 500,304,294	\$ 108,320	\$ 54,112,722	\$ 7,239	\$ 34,348,396	\$ 480,641,047
2054	\$ 480,641,047	\$ 84,608	\$ 52,304,610	\$ 5,655	\$ 32,986,419	\$ 461,401,811
2055	\$ 461,401,811	\$ 65,627	\$ 50,043,343	\$ 4,386	\$ 31,671,481	\$ 443,091,189
2056	\$ 443,091,189	\$ 49,988	\$ 47,112,925	\$ 3,341	\$ 30,447,810	\$ 426,472,722
2057	\$ 426,472,722	\$ 37,784	\$ 45,025,707	\$ 2,525	\$ 29,316,903	\$ 410,799,176
2058	\$ 410,799,176	\$ 28,233	\$ 42,574,090	\$ 1,887	\$ 28,267,570	\$ 396,519,002
2059	\$ 396,519,002	\$ 20,225	\$ 39,497,273	\$ 1,352	\$ 27,341,574	\$ 384,382,176
2060	\$ 384,382,176	\$ 14,473	\$ 37,194,103	\$ 967	\$ 26,543,492	\$ 373,745,071
2061	\$ 373,745,071	\$ 9,717	\$ 34,948,974	\$ 649	\$ 25,852,106	\$ 364,657,271
2062	\$ 364,657,271	\$ 6,603	\$ 32,860,568	\$ 441	\$ 25,267,517	\$ 357,070,382
2063	\$ 357,070,382	\$ 4,221	\$ 30,850,143	\$ 282	\$ 24,788,992	\$ 351,013,168
2064	\$ 351,013,168	\$ 2,614	\$ 28,919,389	\$ 175	\$ 24,418,556	\$ 346,514,774
2065	\$ 346,514,774	\$ 1,439	\$ 27,055,522	\$ 96	\$ 24,158,766	\$ 343,619,360
2066	\$ 343,619,360	\$ 753	\$ 25,257,373	\$ 50	\$ 24,012,868	\$ 342,375,558
2067	\$ 342,375,558	\$ 304	\$ 23,519,524	\$ 20	\$ 23,984,572	\$ 342,840,890
2068	\$ 342,840,890	\$ 144	\$ 21,843,813	\$ 10	\$ 24,077,985	\$ 345,075,197
2069	\$ 345,075,197	\$ 56	\$ 20,230,969	\$ 4	\$ 24,297,412	\$ 349,141,693

Employees Retirement System of the City of St. Louis
Other Supplementary Information
Schedule of Projection of Fiduciary Net Position (continued)
September 30, 2020

Year	Projected Beginning Fiduciary Net Position	Projected Total Contributions	Projected Benefit Payments	Projected Administrative Expenses	Projected Investment Earnings	Projected Ending Fiduciary Net Position
2070	\$ 349,141,693	\$ 20	\$ 18,680,438	\$ 1	\$ 24,647,455	\$ 355,108,728
2071	\$ 355,108,728	\$ 5	\$ 17,195,959	\$ -	\$ 25,132,936	\$ 363,045,710
2072	\$ 363,045,710	\$ 4	\$ 15,777,657	\$ -	\$ 25,758,881	\$ 373,026,938
2073	\$ 373,026,938	\$ -	\$ 14,425,732	\$ -	\$ 26,530,670	\$ 385,131,875
2074	\$ 385,131,875	\$ -	\$ 13,139,980	\$ -	\$ 27,454,071	\$ 399,445,966
2075	\$ 399,445,966	\$ -	\$ 11,920,721	\$ -	\$ 28,535,267	\$ 416,060,512
2076	\$ 416,060,512	\$ -	\$ 10,767,917	\$ -	\$ 29,780,879	\$ 435,073,474
2077	\$ 435,073,474	\$ -	\$ 9,681,776	\$ -	\$ 31,198,003	\$ 456,589,701
2078	\$ 456,589,701	\$ -	\$ 8,662,544	\$ -	\$ 32,794,230	\$ 480,721,388
2079	\$ 480,721,388	\$ -	\$ 7,710,200	\$ -	\$ 34,577,696	\$ 507,588,884
2080	\$ 507,588,884	\$ -	\$ 6,824,416	\$ -	\$ 36,557,137	\$ 537,321,605
2081	\$ 537,321,605	\$ -	\$ 6,004,539	\$ -	\$ 38,741,960	\$ 570,059,027
2082	\$ 570,059,027	\$ -	\$ 5,249,539	\$ -	\$ 41,142,313	\$ 605,951,801
2083	\$ 605,951,801	\$ -	\$ 4,558,291	\$ -	\$ 43,769,159	\$ 645,162,668
2084	\$ 645,162,668	\$ -	\$ 3,929,279	\$ -	\$ 46,634,349	\$ 687,867,739
2085	\$ 687,867,739	\$ -	\$ 3,360,804	\$ -	\$ 49,750,713	\$ 734,257,648
2086	\$ 734,257,648	\$ -	\$ 2,850,758	\$ -	\$ 53,132,148	\$ 784,539,038
2087	\$ 784,539,038	\$ -	\$ 2,396,705	\$ -	\$ 56,793,720	\$ 838,936,053
2088	\$ 838,936,053	\$ -	\$ 1,995,936	\$ -	\$ 60,751,777	\$ 897,691,894
2089	\$ 897,691,894	\$ -	\$ 1,645,310	\$ -	\$ 65,024,063	\$ 961,070,647
2090	\$ 961,070,647	\$ -	\$ 1,341,376	\$ -	\$ 69,629,848	\$ 1,029,359,119
2091	\$ 1,029,359,119	\$ -	\$ 1,080,475	\$ -	\$ 74,590,054	\$ 1,102,868,698
2092	\$ 1,102,868,698	\$ -	\$ 858,887	\$ -	\$ 79,927,391	\$ 1,181,937,202
2093	\$ 1,181,937,202	\$ -	\$ 672,924	\$ -	\$ 85,666,480	\$ 1,266,930,759
2094	\$ 1,266,930,759	\$ -	\$ 518,975	\$ -	\$ 91,833,996	\$ 1,358,245,780
2095	\$ 1,358,245,780	\$ -	\$ 393,436	\$ -	\$ 98,458,806	\$ 1,456,311,150
2096	\$ 1,456,311,150	\$ -	\$ 292,774	\$ -	\$ 105,572,131	\$ 1,561,590,507
2097	\$ 1,561,590,507	\$ -	\$ 213,538	\$ -	\$ 113,207,706	\$ 1,674,584,675
2098	\$ 1,674,584,675	\$ -	\$ 152,436	\$ -	\$ 121,401,960	\$ 1,795,834,199
2099	\$ 1,795,834,199	\$ -	\$ 106,351	\$ -	\$ 130,194,192	\$ 1,925,922,040
2100	\$ 1,925,922,040	\$ -	\$ 72,417	\$ -	\$ 139,626,769	\$ 2,065,476,391
2101	\$ 2,065,476,391	\$ -	\$ 48,058	\$ -	\$ 149,745,327	\$ 2,215,173,660
2102	\$ 2,215,173,660	\$ -	\$ 31,044	\$ -	\$ 160,598,985	\$ 2,375,741,601
2103	\$ 2,375,741,601	\$ -	\$ 19,494	\$ -	\$ 172,240,572	\$ 2,547,962,678
2104	\$ 2,547,962,678	\$ -	\$ 11,891	\$ -	\$ 184,726,871	\$ 2,732,677,658
2105	\$ 2,732,677,658	\$ -	\$ 7,037	\$ -	\$ 198,118,880	\$ 2,930,789,501
2106	\$ 2,930,789,501	\$ -	\$ 4,039	\$ -	\$ 212,482,095	\$ 3,143,267,557
2107	\$ 3,143,267,557	\$ -	\$ 2,246	\$ -	\$ 227,886,818	\$ 3,371,152,129
2108	\$ 3,371,152,129	\$ -	\$ 1,213	\$ -	\$ 244,408,486	\$ 3,615,559,402
2109	\$ 3,615,559,402	\$ -	\$ 634	\$ -	\$ 262,128,034	\$ 3,877,686,803
2110	\$ 3,877,686,803	\$ -	\$ 321	\$ -	\$ 281,132,282	\$ 4,158,818,764
2111	\$ 4,158,818,764	\$ -	\$ 157	\$ -	\$ 301,514,355	\$ 4,460,332,962
2112	\$ 4,460,332,962	\$ -	\$ 75	\$ -	\$ 323,374,137	\$ 4,783,707,024
2113	\$ 4,783,707,024	\$ -	\$ 34	\$ -	\$ 346,818,758	\$ 5,130,525,747
2114	\$ 5,130,525,747	\$ -	\$ 15	\$ -	\$ 371,963,116	\$ 5,502,488,848
2115	\$ 5,502,488,848	\$ -	\$ 6	\$ -	\$ 398,930,441	\$ 5,901,419,283
2116	\$ 5,901,419,283	\$ -	\$ 2	\$ -	\$ 427,852,898	\$ 6,329,272,179
2117	\$ 6,329,272,179	\$ -	\$ 1	\$ -	\$ 458,872,233	\$ 6,788,144,411
2118	\$ 6,788,144,411	\$ -	\$ -	\$ -	\$ 492,140,470	\$ 7,280,284,881