

(A Fiduciary Component Unit of the City of St. Louis, Missouri)

ANNUAL FINANCIAL REPORT

Fiscal Years Ended September 30, 2022 and 2021

BOARD OF TRUSTEES

Active Firefighters

Gerald "Jerry" Jacobsen, Chairman - Term Expires August 31, 2023 William Ellner, Vice - Chairman - Term Expires August 31, 2025 Kenny Mitchell - Term Expires August 31, 2024

Retired Firefighter

Bruce Williams - Term Expires August 31, 2023

Ex-Officio

Chief Dennis Jenkerson Darlene Green, Comptroller or Beverly Fitzsimmons, Deputy Comptroller - designee

Mayoral Appointees

Mark Smith - Term Expires August 31, 2023 Vacant - Term Expires August 31, 2023

KEY STAFF MEMBERS

John D. Brewer, Executive Director Sue Degunia, Assistant Executive Director

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS MISSION STATEMENT

The Board of Trustees ("Board") of the Firemen's Retirement System of St. Louis ("System") is designated as the named fiduciary of the System and as such has a fiduciary responsibility to administer the System's retirement plan, manage the System's operations and invest the System's assets. In recognition of this responsibility, the Board hereby adopts the following Mission Statement:

To plan an important role in the future financial security of System participants by providing useful information, quality service and attractive and progressive benefits through professional plan administration and prudent investment management of System assets.

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS FINANCIAL REPORT

	Page
BOARD OF TRUSTEES	i
MISSION STATEMENT	ii
INDEPENDENT AUDITOR'S REPORT	1
MANAGEMENT'S DISCUSSION AND ANALYSIS	4
FINANCIAL STATEMENTS	
Statements of Fiduciary Net Position	9
Statements of Changes in Fiduciary Net Position	10
Notes to Financial Statements	11
REQUIRED SUPPLEMENTAL INFORMATION	
GASB Statement No. 67 Pension Elements - System Related:	
Schedules of Changes in Net Pension Liability (Excess Assets)	43
Schedules of Net Pension Liability (Excess Assets)	44
Schedules of Employer's Contributions	45
Schedules of Annual Money-weighted Rate of Return on Investments	46
Notes to Required Supplemental Information	47
GASB Statement No. 68 Pension Elements - System Staff Pension Related:	
Schedules of the System's Proportionate Share of the Net Pension Liability of the	
Employees Retirement System of the City of St. Louis (ERS), a Cost-Sharing,	
Multi-Employer Defined Benefit Pension Plan	49
Schedules of the System's Contributions to the Employees Retirement System of	
the City of St. Louis (ERS), a Cost-Sharing, Multi-Employer Defined Benefit	
Pension Plan	50
OTHER SUPPLEMENTAL INFORMATION	
Benefits Paid to Retirees and Beneficiaries	52
Administrative Expenses	52
Investment Management and Custodial Fees	53
Historical Trend Information	54
Summary of Insurance Coverage	55
Graphs:	
Investments	56
Additions to Net Position	57
Deductions from Net Position	58
Benefits Paid by Type	59
INTERNAL CONTROL AND COMPLIANCE SECTION	
Independent Auditor's Report on Internal Control Over Financial Reporting	
and on Compliance and Other Matters Based on an Audit of Financial	
Statements Performed in Accordance with Government Auditing Standards	61
-	



12655 Olive Blvd., Suite 200 St. Louis, MO 63141 314.275.7277

SIKICH.COM

INDEPENDENT AUDITOR'S REPORT

The Board of Trustees
FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS

REPORT ON THE FINANCIAL STATEMENTS

Opinion

We have audited the accompanying financial statements of the **FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS** (the System) as of and for the years ended September 30, 2022 and 2021, and the related notes to financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the System as of September 30, 2022 and 2021 and the respective changes in financial position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinions

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under these standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management 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, and for 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.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and Government Auditing Standards, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit 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, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Other Matters

Required Supplementary Information

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

Other Supplemental Information

Management is responsible for the Board of Trustees and Mission Statement and other supplemental information included in the annual report. The Board of Trustees and Mission Statement and other supplemental information, as listed in the table of contents, does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements do not cover the other supplemental information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the Board of Trustees and Mission Statement and other supplemental information and consider whether a material inconsistency exists between the Board of Trustees and Mission Statement and other supplemental information and the basic financial statements, or the Board of Trustees and Mission Statement and other supplemental information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other supplemental information exists, we are required to describe it in our report.

OTHER REPORTING REQUIRED BY GOVERNMENT AUDITING STANDARDS

In accordance with *Government Auditing Standards*, we have also issued our report dated February 8, 2023, on our consideration of the System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control over financial reporting and compliance.

St. Louis, Missouri February 8, 2023

Sikich LLP

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED SEPTEMBER 30, 2022

The following Management's Discussion and Analysis (MD&A) of the Firemen's Retirement System of St. Louis (the System) provides an overview of the System's financial activities for the fiscal year ended September 30, 2022. The MD&A should be read in conjunction with the System's financial statements and supplemental information.

FINANCIAL HIGHLIGHTS

During the System's fiscal year ended September 30, 2022 the U.S. and global economic markets showed substantial signs of strengthening. This followed 2021 when the coronavirus pandemic adversely affected the U.S. and global economic markets. The System is well diversified and the portfolio is continually managed and monitored to an investment policy established to minimize market risks. The System is a long-range proposition and is responsible for administering benefits to firefighters of the City of St. Louis who have dedicated their careers as public servants to the residents and businesses of the St. Louis metropolitan area. The System is frozen as of February 1, 2013. Active Members on February 1, 2013 are classified as "grandfathered" Members and benefits paid to these Members is based on the Member's service and salary earned as of February 1, 2013. The only new benefits to be earned are the "grandfathered" Members who are in DROP status. The System has and will continue to provide benefits in a prudent and professional manner to its active (grandfathered) and retired Members and their beneficiaries.

The System's net position was \$411.7 million at September 30, 2022, which represents a decrease of \$86 million or 17.29% from September 30, 2021.

Additions to net position for fiscal year 2022 were (\$50.6) million as compared to additions of \$92.7 million for fiscal year 2021. The current period net additions are comprised of (\$52.9) million of net investment loss and \$2.3 million of employer contributions. No member contributions were received during the current year due to the System being frozen on February 1, 2013.

Deductions from net position were \$35.5 million for fiscal year 2022 and \$34.5 million for fiscal year 2021.

The overall investment return for the System was (10.69)% for fiscal year 2022 as compared to a return of 22.42% for fiscal year 2021. The Board of Trustees acts to ensure the System retains top performing investment managers while maintaining a balanced investment portfolio.

Changes in Members' benefits resulted from:

	1 01	IIIC	
	Years 1	Ended	
	<u>Septem</u>	ber 30	
	2022	2021	
Service retirements:			
Regular	16	17	
Death	-	1	
Members requesting a refund withdrawal	4	-	
Retiree death benefits	20	32	

FINANCIAL STATEMENTS

The financial statements, notes to financial statements, and required supplemental information (RSI) were prepared in conformity with Governmental Accounting Standards Board Statement No. 67 (GASB 67), *Financial Reporting for Pension Plans*. GASB 67 replaced GASB 25 and GASB 50 as reporting standards for governmental employer pension systems.

For The

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED SEPTEMBER 30, 2022

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

- GASB 67 only affects reporting requirements and does not prescribe funding methods which could be different. The System will continue to use a funding policy that computes contribution amounts over the future working lifetime of current participants (the entry age frozen initial liability actuarial cost method). For financial reporting purposes the System is required to use the entry age actuarial cost valuation method in determining the normal cost of the System's benefits, expressed as a percent of active covered payroll for service retirement benefits, disability benefits, survivor benefits, and administrative expenses (excluding expenses related to the investment of the System's assets, all of which are covered by investment return). The contribution amount required to amortize any unfunded actuarial liability is determined annually and as a percentage of participants covered payroll. The required contribution amounts are to be determined by regular annual actuarial valuations conducted by the System's actuary.
- GASB 67 classifies the System as a single-employer public pension plan for reporting purposes.
- The discount rate used to calculate the present value of future benefit payments for reporting purposes is based upon the projected plan net position (PNP) using actuarial assumptions about contributions, benefit payments, and the long-term rate of return. If the projected PNP is not sufficient to cover projected benefit payments, a blended discount rate is required using both the weighted average of the long-term rate of return and the muni-bond rate for periods after the PNP is exhausted. The System currently uses the long-term discount rate of 6.75% (7.00% less expected administrative expenses of 0.25%). The System's Fiduciary net position is 87.44% of total pension liability at September 30, 2022.
- Footnote requirements include the target asset allocation including long-term expected real rate of return, investments representing 5% or more of the System's fiduciary net position, employer's net pension liability, summary of actuarial assumptions, and sensitivity of net pension liability to changes in the discount rate.
- Required supplemental information includes a schedule of changes in employer's net pension liability (excess assets), schedule of employer's net pension liability (excess assets), schedule of employer's contributions, and schedule of annual money-weighted rate of return on investments. Notes to the RSI include significant methods and assumptions used in calculating the actuarially determined contributions.

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

- The statements of fiduciary net position report the System's assets, deferred outflows, liabilities, deferred inflows, and resulting net position. The net position is restricted for pensions. It is a snapshot of the financial position of the System at that specific point in time.
- The statements of changes in fiduciary net position summarizes the System's financial transactions that have occurred during the current and previous fiscal years.
- The notes to financial statements are an integral part of the above financial statements and include additional information not readily evident in the statements themselves.

Other items in the financial report are the MD&A, the RSI, and other supplemental information which provide other information considered useful in evaluating the condition of the System.

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED SEPTEMBER 30, 2022

FINANCIAL ANALYSIS

Total assets at September 30, 2022 were \$412,409,690 and were mainly comprised of cash and cash equivalents, investments, and receivables. Total assets decreased \$86,240,665 or 17.29% from September 30, 2021 primarily due to a decrease in investments.

Total liabilities at September 30, 2022 were \$760,620 and consisted mainly of the net pension liability - System's staff pension related, and accrued expenses. Total liabilities decreased \$371,465 or 32.81% from September 30, 2021. Accrued benefits payable decreased \$328,607, Employees Retirement System of the City of St. Louis (ERS) pension liability decreased \$134,123, and unsettled investment transactions increased \$75,000.

The System implemented GASB 68, Accounting and Financial Reporting by State and Local Governments, for the fiscal year 2015. The System's staff participate in the ERS, a cost sharing, multi-employer defined benefit plan. The System elected to report pension elements based on ERS' September 30 actuarial valuations at the beginning of the fiscal year as allowed by GASB 68. The pension elements required to be reported in the statements of fiduciary net position include: 1) net pension liability and 2) deferred outflows of resources.

Net position - restricted for pensions was \$411,652,100 at September 30, 2022, a decrease of \$86,023,760 or 17.29% from fiscal year 2021. This decrease mainly resulted from net investment loss during the year.

Following is a condensed version of the statements of fiduciary net position (dollars in thousands):

					Total Change				
	September 30			Amo	unt	Percent	tage		
		2022	2021	2020	2022	2021	2022	2021	
ASSETS							•		
Investments	\$	407,735	494,101	435,479	(86,366)	58,622	(17.5) %	13.5	
Cash and cash equivalents		3,907	3,702	3,931	205	(229)	5.5	(5.8)	
Receivables		537	606	637	(69)	(31)	(11.4)	(4.9)	
Capital assets, net		230	241	294	(11)	(53)	(4.6)	(18.0)	
Total Assets		412,409	498,650	440,341	(86,241)	58,309	(17.3)	13.2	
DEFERRED OUTFLOWS									
System's staff pension related		83	158	99	(75)	59	(47.5)	59.6	
LIABILITIES		760	1,132	942	(372)	190	(32.9)	20.2	
DEFERRED INFLOWS									
System's staff pension related		80		6	80	(6)	100.0	(100.0)	
NET POSITION	\$	411,652	497,676	439,492	(86,024)	58,184	(17.3) %	13.2	

Revenues - Additions to Net Position

• Net investment loss totaled (\$52,866,939) in fiscal year 2022 as compared to net investment income of \$89,290,920 in fiscal year 2021. Investment income (loss) is net of investment expenses (investment management and custodial fees) totaling \$1,308,533 and \$1,586,198 for the years ended September 30, 2022 and 2021, respectively.

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED SEPTEMBER 30, 2022

The reserves needed to finance retirement benefits as well as death and disability benefits are accumulated through the collection of employer contributions and through earnings on investments. Employer contributions were \$2,296,125 for the year ended September 30, 2022 as compared to \$3,403,198 for the prior year.

Expenses - Deductions from Net Position

The primary expenses of the System include the payment of pension benefits to retirees and beneficiaries, administrative expenses, and refunds of Members' contributions to operate the System. Total expenses for fiscal year 2022 were \$35,452,946 an increase of \$942,462 from fiscal year 2021. This increase is mainly due to a trend of retirees.

Following is a condensed version of the statements of changes in fiduciary net position (dollars in thousands):

	For The Years			Total Change			
	Endo	ed September	30	Amou	ınt	Percenta	age
	2022	2021	2020	2022	2021	2022	2021
ADDITIONS							
Net investment income	\$ (52,867)	89,291	19,336	(142,158)	69,955	(159.2) %	361.8
Employer contributions	2,296	3,403	1,297	(1,107)	2,106	(32.5)	162.4
Total Additions	(50,571)	92,694	20,633	(143,265)	72,061	(154.6)	349.3
DEDUCTIONS							
Benefits paid	33,059	32,011	32,965	1,048	(954)	3.3	(2.9)
Refund of Members'	,	,	,	,	,		\ /
contributions	1,378	1,399	1,399	(21)	-	(1.5)	-
Administrative expenses	1,015	1,100	1,087	(84)	13	(7.6)	1.2
Total Deductions	35,453	34,510	35,451	943	(941)	2.7	(2.7)
CHANGE IN NET POSITION	(86,024)	58,184	(14,818)	(144,208)	73,002	247.8	492.7
NET POSITION, BEGINNING		420 402	454 210	50 104	(14.010)	12.2	(2.2)
OF YEAR	497,676	439,492	454,310	58,184	(14,818)	13.2	(3.3)
NET POSITION, END OF YEAR	\$ 411,652	497,676	439,492	(86,023)	58,184	(17.3) %	13.2
YEAR	\$ 411,652	497,676	439,492	(86,023)	58,184	(17.3) %	

SUMMARY

The System's net position - restricted for pensions on a market value basis was \$408.0 million (excluding the Future Benefit Fund of \$3.7 million) at September 30, 2022. At the same time the present value of pension obligations was \$466.5 million. The System's net pension liability of \$58.63 million or 87.447% funded level provides the System cushion for providing benefits. The Board of Trustees believe, and the actuarial calculations confirm, that the System is in a financial position to meet its current and projected obligations. With a continued focus on a prudent investment program, cost controls, and strategic planning, the System should maintain its current funded position over an extended period of years.

MANAGEMENT'S DISCUSSION AND ANALYSIS FOR THE YEAR ENDED SEPTEMBER 30, 2022

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 the money it receives. If you have any questions about this report or need additional financial information, contact:

John D. Brewer, Executive Director Firemen's Retirement System of St. Louis 1601 South Broadway St. Louis, MO 63104-3845 or e-mail: jdbrewer@frs-stl.org

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS STATEMENTS OF FIDUCIARY NET POSITION

	Septem	ber 30
	2022	2021
ASSETS		
Investments at fair value:		
Equities:		
Corporate stocks	\$ 90,979,634	126,281,773
Collective investment funds	64,627,902	93,235,153
Fixed income:		
Collective investment funds	80,719,753	96,612,618
Corporate bonds	6,915,739	11,604,015
Government-backed bonds	2,720,301	3,575,579
Mortgage-backed bonds	2,835,133	2,524,173
Real estate investment trust	84,736,278	77,547,191
Hedge funds	69,866,590	76,917,811
Money market funds	4,334,049	5,803,067
Total Investments	407,735,379	494,101,380
Cash and cash equivalents	3,907,377	3,702,219
Receivables:		
Foreign withholding tax reclaims	300,111	354,873
Unsettled investment sale transactions	39,310	- · · · · · · · · · · · · · · · · · · ·
Interest and dividends	197,467	250,939
Total Receivables	536,888	605,812
Capital assets, less accumulated depreciation	230,046	240,944
Total Assets	412,409,690	498,650,355
DEFERRED OUTFLOWS OF RESOURCES		
System's staff pension related	83,494	157,590
LIABILITIES		
Net pension liability - System's staff pension related	249,039	383,162
Accrued benefits payable	-	328,607
Accrued investment management fees	218,749	295,440
Accrued administrative expenses	182,529	100,348
Members' contributions refundable	35,303	24,528
Unsettled investment purchase transactions	75,000	-
Total Liabilities	760,620	1,132,085
DEFERRED INFLOWS OF RESOURCES		
System's staff pension related	80,464	
NET POSITION - RESTRICTED FOR PENSIONS	\$ 411,652,100	497,675,860
See notes to financial statements		

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION

For The Years

	Tor the reary	
	Ended Sept	ember 30
	2022	2021
ADDITIONS TO NET POSITION ATTRIBUTED TO		
Investment income:		
Net appreciation (depreciation) in fair value of investments	\$ (55,474,909)	86,122,600
Dividends	1,727,025	2,723,895
Interest	2,087,968	1,948,923
Securities lending income (net of expenses of		
\$19,511 in 2022 and \$16,453 in 2021)	65,153	54,925
Class action lawsuit proceeds	36,357	26,775
Total Investment Income (Loss)	(51,558,406)	90,877,118
Less - Investment management and custodial fees	1,308,533	1,586,198
Net Investment Income (Loss)	(52,866,939)	89,290,920
Employer contributions	2,296,125	3,403,198
Total Additions	(50,570,814)	92,694,118
DEDUCTIONS FROM NET POSITION ATTRIBUTED TO		
Benefits paid to retirees and beneficiaries	33,058,966	32,011,708
Refunds of Members' contributions	1,378,105	1,398,931
Administrative expenses	1,015,875	1,099,845
Total Deductions	35,452,946	34,510,484
CHANGE IN NET POSITION	(86,023,760)	58,183,634
NET POSITION - RESTRICTED FOR PENSIONS,		
BEGINNING OF YEAR	497,675,860	439,492,226
NET POSITION - RESTRICTED FOR PENSIONS,		
END OF YEAR	\$ 411,652,100	497,675,860

NOTE A - DESCRIPTION OF PLAN

The FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS (the System) administers a single employer defined benefit pension plan providing pension benefits to the City of St. Louis firemen (the Members). The System is frozen as of February 1, 2013. Active Members on February 1, 2013 are classified as "grandfathered" Members, and benefits paid to these Members are based on the Member's service and salary earned as of February 1, 2013. Membership in the System consists of:

	September 30		Increase
	2022	2021	(Decrease)
Currently receiving benefits:			
Retirees	577	583	(6)
Beneficiaries	244	259	(15)
Total Currently Receiving Benefits	<u>821</u>	842	(21)
Current Active Members:			
Vested - participating in DROP	102	96	6
Vested - nonDROP	191	198	(7)
Nonvested	142_	161	(19)
Total Current Active Members	435	455	(20)
Total Membership	1,256	1,297	<u>(41)</u>

The System provides retirement benefits as well as death and disability benefits. Members can voluntarily retire after a minimum of 20 years of service (compulsory retirement at age 60 with 30 years of service). The monthly allowance consists of 40% of the final two-year average monthly compensation at 20 years of service, plus 2% of such final average compensation for each of the next five years of service, plus 5% of final average compensation for each additional year of service after 25 years with a maximum pension of 75%. Unused accrued sick pay accumulated before February 1, 2013 may increase the maximum pension beyond this limitation.

Covered Members contributed 8% of their salary through February 1, 2013 (date frozen). Upon leaving employment, the Member's contributions are refunded. In addition, terminated Members receive interest.

During the fiscal year ended August 31, 1994, the System, in accordance with Ordinance 62994 of the City of St. Louis (the City), initiated a Deferred Retirement Option Plan (DROP). The DROP option is available to Members of the System who have at least 20 years of creditable service and have achieved eligibility for retirement. Those Members who elect to participate will continue active employment, will have a service retirement allowance credited monthly in the DROP account of the Member, and the Member's contributions are 1% (previously reduced to 1% from the normal 8% through February 1, 2013). During participation in DROP, the Member will not receive credit for employer contributions or credit for service. A Member may participate in DROP only once for any period up to five years. At retirement, the funds in the Member's DROP account plus: 1) interest and 2) accrued sick leave if elected is available to the Member in a lump sum or installments. The number of Members with DROP account balances and currently participating at September 30, 2022 and 2021 were as follows:

	Active M	<u> Iembers</u>	Retirees		DROP Acco	unt Balances
	Currently Participating	Previously <u>Participated</u>	With DROP Balance	Total DROP <u>Accounts</u>	Active Members	Retired Members
2022	102	61	130	293	\$ 19,358,216	\$ 25,309,646
2021	96	53	120	269	19,146,908	23,995,164

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The significant accounting policies consistently applied by the System in the preparation of the accompanying financial statements are summarized as follows:

1. Reporting Entity

The System is a fiduciary trust fund of the City. As such, the System is included in the City's Annual Comprehensive Financial Report as a fiduciary component unit. The System and its Board of Trustees (Board) are not financially accountable for any other entities or other organizations. Accordingly, the System is the only entity included in this financial report.

2. Board Composition

The Board shall consist of eight (8) Trustees, three (3) of whom are elected by the active Members of the System, one (1) of whom is elected by the retired Members of the System, two (2) of whom are appointed by the Mayor of the City, and two (2) of whom are Trustees by virtue of offices (Fire Chief and the Comptroller of the City or the Comptroller's designee -- Deputy Comptroller or the First Assistant Comptroller).

3. Measurement Focus and Basis of Accounting

The System's financial statements were prepared in accordance with accounting principles generally accepted in the United States of America as applicable to governmental organizations. In doing so, the System adheres to the reporting requirements established by the Governmental Accounting Standards Board (GASB). Employer's contributions are recognized in the period in which the contributions are due. Benefits and refunds are recognized when due and payable in accordance with the System's benefit provisions. Expenses are recorded when the corresponding liabilities are incurred, regardless of when payment is made. Dividend income is recognized based on the ex-dividend date and interest income is recognized on the accrual basis as earned. Fair value changes are recorded as investment income or loss. Investment purchases and sales are recorded on a trade-date basis (the date upon which the transaction is initiated).

4. GASB 67 Financial Reporting Model

The System's financial statements are prepared in conformity with GASB 67's financial reporting requirements for governmental pension systems. GASB 67 includes required presentation of the financial statements, notes to financial statements, and RSI. An actuarial calculation of the total and net pension liability (excess assets) as defined in the accounting standard is included in the notes to the financial statements and RSI. Other comprehensive footnote disclosures include the sensitivity of the net pension liability (excess assets) to the discount rate and investment activity disclosures. The total employer's projected net pension liability (excess assets) is presented in the notes to financial statements and is calculated using a discount rate (long-term or blended) depending on the sufficiency of projected net position to cover projected benefit payments of retirees and beneficiaries.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

5. Investment Valuation

Investments are reported at fair value. Short-term money market investments are reported at cost, which approximates fair value. Securities traded on a national or international exchange are valued at the last reported sales price at current exchange rates. On September 30 or on the last reported bid price if no sale was made on that date, fixed-income securities are valued principally using quoted market prices provided by independent pricing services. For collective investments, fair value is determined and certified by the investment managers as of the reporting date. Hedge funds and real estate investment trusts are measured at net asset value (NAV). Real estate investments are valued at estimated fair value as determined by the general partner, based upon appraisals provided by the investment manager. Hedge funds investments are reported at estimated fair value as determined by the general partner of the investment vehicle.

6. Cash and Cash Equivalents

Cash on deposit with Commerce Bank N.A. is maintained for the System by the Treasurer of the City.

7. Operating Expenses

Benefits paid and administrative expenses are approved by the Board. Payments are processed by the Treasurer of the City.

8. Net Position - Restricted for Pensions

The System's net position - restricted for pensions consist of:

Member's Savings Fund -- Members contributed 8% of their compensation to the System through February 1, 2013 (date frozen). Such contributions are credited to the Member's Savings Fund. Interest, at a rate determined by the Board, is credited annually on the balance in each Member's account during the preceding year. Withdrawal refunds of Member's accumulated contributions are charged to this fund. Upon retirement or death in service of a Member with a surviving beneficiary, the Member's own contributions are refunded. Upon termination of employment or death in service with no survivor, the Member's contributions, including interest, are refunded. The balance at September 30, 2022 and 2021 was \$81,492,199 and \$82,104,653, respectively.

Benefit Reserve Fund -- Upon retirement or death, the Benefit Reserve Fund is payable to the Member or their beneficiaries. This amount is determined by the actuaries, in accordance with Ordinances 49623, 56444, 57603, 58242, 58651, 58652, and 59018. An amount is transferred from the General Reserve Fund which, when added to the amount transferred from Member's Savings Fund, brings the balance of the Benefit Reserve Fund to an amount equal

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

8. Net Position - Restricted for Pensions (Continued)

to the present value of future benefits. The balance at September 30, 2022 and 2021 was \$325,138,765 and \$326,066,590, respectively.

General Reserve Fund -- Contributions made by the City are credited to the General Reserve Fund. The present value of all future estimated benefits payable to active Members on death or retirement not provided by Member's contributions are accumulated in this fund. The balance excluding the System's Employees Benefit Fund at September 30, 2022 and 2021 was \$1,146,483 and \$84,252,642, respectively.

Future Benefit Fund -- The Future Benefit Fund was established June 29, 1990 by City Ordinance as a method to fund increased benefits for retired Members. The funding of the Future Benefit Fund was terminated per the City Ordinance after fiscal year ended August 31, 1993. The balance in the fund will be used for future benefits until it is exhausted. Benefits of \$690,982 and \$145,270 were paid from the Future Benefit Fund during the years ended September 30, 2022 and 2021, respectively. The System entered into a settlement agreement with the City regarding sick leave benefits. The settlement required a one-time payment of \$1,070,749 during the year ended September 30, 2015 and 15 annual transfers between the Future Benefit Fund and the General Reserve Fund of \$166,792 starting with the year ended September 30, 2016 (see Note O). The Future Benefit Fund is excluded from the assets used in determining the employer's contribution requirement. The balance at September 30, 2022 and 2021 was \$3,729,496 and \$5,121,626 respectively.

System Employees Benefit Fund -- On August 28, 1997, the Board approved a resolution to provide additional benefits for the administrative employees of the System in the form of severance pay and a limited retirement package. The severance pay applies to employees who are dismissed for any reason other than for just cause based on the wrongful conduct of the employee. The dismissed employee would be entitled to one month's pay for each year or part of year that the employee has been employed by the System. The retirement package is for employees who have completed five years of service. Upon completing five years of service, the employee will have five months of salary credited to him or her. Thereafter the employee will be credited with a month of salary upon completion of each additional year of service. Employees accrued additional benefits of \$14,808 and \$13,750 for the years ended September 30, 2022 and 2021, respectively. The employees must make a one-time election as to how their accounts will be credited each anniversary date with interest on the account. There were no benefits paid from the System Employees Benefit Fund during the years ended September 30, 2022 and 2021. The System Employees Benefit Fund is excluded from the assets used in determining the employer's contribution requirement. The balance at September 30, 2022 and 2021 was \$145,157 and \$130,349, respectively.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

8. Net Position - Restricted for Pensions (Continued)

The severance pay benefit program provided to administrative employees of the System was frozen to the current and future System's employees effective September 30, 2014. Future interest accrual or losses on employees' vested accounts is limited to one identified employee of the System.

9. Use of Estimates

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

10. Capital Assets

Expenditures for property and equipment exceeding \$1,000 are capitalized and depreciated over the estimated useful lives of the capital assets on the straight-line method as follows:

Asset	Years
Building	40
Building improvements	10 - 15
Furniture, equipment, and software	5 - 10

Expenditures for repairs and maintenance are expensed as incurred. Gains and losses on disposition of property and equipment are included in changes in fiduciary net position as realized.

Capital assets, net of accumulated depreciation, is summarized by major classification as follows:

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

10. Capital Assets (Continued)

	For The Year Ended September 30, 2022				
		Balance tember 30 2021	Increases	Decreases	Balance September 30 2022
Capital assets not being depreciated:					
Land	\$	83,086			83,086
Capital assets being depreciated:					
Building		205,417	-	-	205,417
Building improvements		232,702	-	-	232,702
Furniture, equipment, and software		501,562			501,562
Total Capital Assets Being Depreciated		939,681			939,681
Less - Accumulated depreciation for:		102.564	5 105		100 (00
Building		103,564	5,135	-	108,699
Building improvements		181,458	3,879	-	185,337
Furniture, equipment, and software		496,801	1,884		498,685
Total Accumulated Depreciation		781,823	10,898		792,721
Total Capital Assets Being Depreciated, Net		157,858	(10,898)		146,960
Total Capital Assets, Net	\$	240,944	(10,898)		230,046
		For The Balance tember 30 2020	he Year Ended Increases	September 30. Decreases	Balance September 30 2021
Capital assets not being depreciated:	Φ.	02.006			02.006
Land	\$	83,086			83,086
Capital assets being depreciated: Building		205,417	_	_	205,417
Building improvements		232,702	_	_	232,702
Furniture, equipment, and software		501,562	_	_	501,562
Total Capital Assets Being		001,002			001,002
Depreciated		939,681	-	_	939,681
Less - Accumulated depreciation for:					
Building		98,428	5,136	-	103,564
Building improvements		177,579	3,879	-	181,458
Furniture, equipment, and software		452,323	44,478	-	496,801
Total Accumulated Depreciation		728,330	53,493		781,823
Total Capital Assets Being Depreciated, Net		211,351	(53,493)		157,858
Total Capital Assets, Net	\$	294,437	(53,493)		240,944

Depreciation expense for the years ended September 30, 2022 and 2021 was \$10,898 and \$53,493 respectively.

NOTE B - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

11. Staff Pension Plan

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pension, and pension expense, information about the fiduciary net position of the Employees Retirement System of the City of St. Louis (ERS), a cost-sharing, multi-employer defined benefit plan and additions to/deductions from ERS' fiduciary net position have been determined on the same basis as they are reported by ERS. For this purpose, contributions from employers and net pension liability are recognized on an accrual basis of accounting.

12. Deferred Outflows/Inflows of Resources

In addition to assets, the statements of fiduciary net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense/expenditure) until then.

In addition to liabilities, the statements of fiduciary net position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time.

The System currently has deferred inflows and outflows from GASB 68 pension elements from the System's staff participation in ERS which is reported on the statement of fiduciary net position.

NOTE C - CASH AND CASH EQUIVALENTS

The System's bank deposits are required by state law to be secured by the deposit of certain securities specified by RSMo 30.270. The collateralized securities are held by a trustee institution. The value of the securities must amount to the total of the System's cash not insured by the Federal Deposit Insurance Corporation (FDIC). The System's bank deposits as of September 30, 2022 and 2021 were \$3,993,404 and \$3,755,752, respectively. Both years' balances were insured by the FDIC or collateralized with securities held by the pledging financial institution's trust department in the System's name. The System's carrying amount of bank deposits was \$3,907,377 and \$3,702,219 as of September 30, 2022 and 2021, respectively.

NOTE D - CONTRIBUTION RECEIVABLE - EMPLOYER

Employer contributions are calculated by the System's actuary (Gabriel, Roeder, Smith & Company). The employer contributions due to the System for the years ended September 30, 2022 and 2021 were \$2,296,125 and \$3,403,198, respectively.

NOTE D - CONTRIBUTION RECEIVABLE - EMPLOYER (Continued)

Contribution receivable - employer consists of the following:

	September 30		
	202	2	2021
Contributions receivable, beginning of year Current year contributions due from the employer as	\$	-	-
calculated by the System's actuary Contributions received from the employer during the year	· · · · · · · · · · · · · · · · · · ·	6,125 6,125)	3,403,198 (3,403,198)
Total Contributions Receivable, End Of Year	\$		-

NOTE E - INVESTMENTS

Section 104.440, RSMo allow the Board of Trustees to invest the System's assets in accordance with the prudent person rule. The Systems' policy with respect to the allocation of invested assets, is established and may be amended by the Board of Trustees' majority vote. The Board's guiding principles with respect to the investment of the System's assets are to maximize total return within prudent risk parameters, and act in the exclusive interest of the members of the System. The Board has developed a risk-weighted policy allocation that is designed to achieve the long-term actuarial return assumption of the System, given certain risk constraints. The current asset allocation reflects a diversified portfolio, which will perform well in a variety of economic conditions and will help reduce the portfolio's overall volatility. The System's investment consultant monitors investment returns by manager and specific benchmarks based on investment standards for the objective of the investment portfolio.

Investments of the System are managed by various investment managers hired by the Board to invest according to investment policy guidelines established by the Board. The fair value of investments managed consisted of the following:

	September 30		
	2022	2021	
ABS Investment Management, LLC (multi-strategy hedge fund): Hedge fund	\$ 21,945,806	28,262,843	
Acadian Asset Management, LLC (international small cap): Collective investment fund - equity	25,092,419	34,406,783	
Argent Capital Management, LLC (U.S. large cap growth index)			
Corporate stocks	21,705,319	26,371,164	
Money market fund	504,979	342,534	
	22,210,298	26,713,698	

NOTE E - INVESTMENTS (Continued)

	Septemb	er 30
	2022	2021
The Commerce Trust Company (core plus domestic fixed income):		_
Corporate bonds - active core, primarily domestic	6,915,739	11,604,015
Government-backed bonds	2,720,301	3,575,579
Mortgage-backed bonds	2,835,133	2,524,173
Money market fund	387,080	287,241
	12,858,253	17,991,008
Eagle Capital Management, LLC (U.S. large cap value):		
Corporate stocks	20,666,854	28,720,952
Money market fund	200,915	285,092
, and the second	20,867,769	29,006,044
EnTrust Capital Diversified Fund, Ltd. (multi-strategy hedge fund):		
Hedge fund	2,510,922	4,651,964
Money market fund	-	3
name in the second	2,510,922	4,651,967
		1,001,007
Fisher Investments, Inc. (international large cap value):		
Corporate stocks	34,494,104	49,719,541
Money market fund	157,169	382,370
	34,651,273	50,101,911
Integrity Asset Management, LLC (U.S. small/mid-cap value):		
Collective investment fund - equity	14,755,648	22,468,537
Money market fund (overdraft)	(875)	(875)
	14,754,773	22,467,662
K2 Muana Kea, LLC (multi-strategy hedge fund):		
Hedge fund	8,123,989	10,287,468
Money market fund	- -	68
	8,123,989	10,287,536
MacKay Shields Collective Investment Trust (fixed income):		
Collective investment fund - domestic aggregate	39,570,128	47,549,439
Money market fund	<u> </u>	7
	39,570,128	47,549,446
Magnitude Institutional, LLC (multi-strategy hedge fund):		
Hedge fund	37,285,873	33,715,536
The Northern Trust Company (S&P 500 index fund):		
Collective investment fund - equity	24,779,835	36,359,833
Money market fund	2,808,230	4,154,382
Corporate stocks	114,352	114,816
1	27,702,417	40,629,031
		, ,

NOTE E - INVESTMENTS (Continued)

	Septemb	oer 30
	2022	2021
Pinnacle Associates, Ltd. (U.S. small/mid cap growth):		
Corporate stocks	13,999,005	21,355,300
Money market fund	276,551	352,154
	14,275,556	21,707,454
Principal Financial Group (core real estate):		
Real estate investment trust	52,684,288	53,866,438
Principal Enhanced Financial Group (core real estate):		
Real estate investment trust	32,051,990	23,680,753
Money market fund	-	21
	32,051,990	23,680,774
Prudential Trust Company (fixed income):		
Collective investment fund - domestic aggregate	41,149,625	49,063,179
Money market	-	70
	41,149,625	49,063,249
Total Investments	\$ 407,735,379	494,101,380

Money Market Funds

Money market funds are invested in Northern Trust's Collective Government Short-term Investment Fund. The Fund invests substantially all of its assets in cash equivalents (certificates of deposit and repurchase agreements) and securities (commercial paper and U.S. Treasury obligations the weighted average maturity was 55 days at September 30, 2022. The fund seeks to preserve value at \$1 per share, but the value is not guaranteed.

The System's investments are continuously exposed to various types of inherent risks. These risks are mitigated by the System's development and continual monitoring of sound investment policies. The maturities, credit rating by investment, and foreign currency exposures by asset class schedules are presented as follows to provide an illustration of the System's current level of exposure to various risks.

Fair Value

The System categorized its fair value measurement within the fair value hierarchy established by accounting principles generally accepted in the United States of America. The System has the following recurring fair value measurements as of September 30, 2022 and 2021:

NOTE E - INVESTMENTS (Continued)

Investments Measured at Fair Value

Debt and equity securities classified in Level 1 of the fair value hierarchy are valued using prices quoted in active markets for those securities. Debt securities classified in Level 2 of fair value hierarchy are valued using a matrix pricing technique. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices. Level 3 are valued using unobservable inputs where pricing requires significant adjustments or estimation.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as an indication of the risk associated with investing in these securities.

The remaining investments not categorized under the fair value hierarchy are shown at net asset value (NAV). NAV is used as a practical expedient to estimate the fair value of the System's interest therein, unless it is probable that all or a portion of the investment will be sold for an amount different from NAV. As of September 30, 2022, the System had no specific plans or intentions to sell investments at amounts different from NAV.

Real Estate Investments - the System invest in real estate investment trusts (REITS) which invest in real estate located in the United States.

Real estate investments are carried at fair value, generally based on the net asset value (or its equivalent) (NAV). Properties are initially recorded at the purchase price plus closing costs. Development costs and major renovations are capitalized as a component of cost, and routine maintenance and repairs are charged to expense as incurred. Real estate costs include the cost of acquired property, including all the tangible and intangible assets. Tangible assets include the value of all land, building and tenant improvements at the time of acquisition. Intangible assets include the value of any above and below market leases, in-place leases, and tenant relationships at the time of acquisition.

In general, fair value estimates are based upon property appraisal reports prepared by independent real estate appraisers (members of the Appraisal Institute or an equivalent organization) within a reasonable amount of time following acquisition of the real estate and no less frequently than annually thereafter. The real estate trust's General Partner is responsible to assure that the valuation process provides independent and reasonable property fair value estimates. Unaffiliated third-party appraisal firms assist the General Partner in maintaining and monitoring the independence and the accuracy of the appraisal process.

Determination of estimated fair value of real estate involves subjective judgement because the actual fair value of real estate can be determined only by negotiation between parties in a sale transaction and amounts ultimately realized may vary from the fair value presented. The General Partner's approval is required to approve the buyer before the sale of real estate investment properties can be completed.

NOTE E - INVESTMENTS (Continued)

The REITS at times invest in real estate joint ventures. The REITS do not consolidate investments in joint ventures in which the REIT has significant influence but not overall control. For the investments in unconsolidated joint ventures, the investments are initially recorded at the original investment amounts, are subsequently adjusted for the REIT's share of undistributed earnings and losses (including unrealized and realized gain (loss)) from the underlying entities form the dates of formation, are increased by additional contributions, and are reduce by distributions received.

Hedge Fund Investments - the System invests in hedge fund which invests in portfolio funds and private companies. Hedge fund investments are valued at fair value in accordance with U.S. GAAP. The fair value of the Fund's assets and liabilities approximates the carrying amounts presented in these statement of assets and liabilities. The administrator, subject to the supervision of the directors and in consultation with the manager, is responsible for determining and calculating the fair value of the fund's assets and liabilities, including all investments. The manager review and approves the administrator's valuations and calculations.

Hedge fund managers investment in portfolio funds which are stated at fair value, generally based on the net asset value (or its equivalent) NAV provided by each portfolio fund's administrator or manager. The fund is typically permitted, but not required, to use the net asset value as a practical expedient for fair value without the evaluation of other factors (subject to certain restrictions). Due to the inherent uncertainty in the valuation of private fund investments, the stated fair values of the portfolio funds held by the fund may differ significantly from the values that would have been used had a ready market for these investments existed, and the differences could be material.

Under certain circumstances, and adjustment to the valuation of a portfolio fund may be considered. This would generally be determined where the value provided by the portfolio fund's administrator or manager does not represent fair value in the opinion of the hedge fund manager, the value is not provided by the portfolio fund's administrator or manager, or the value is not provided on a timely basis. These investments may be valued using a third-party valuation specialist or other available information form a third-party (e.g., the administrator or manager of a portfolio fund). The manager will generally consult with the directors when considering valuation in these instances

Hedge fund value may include redemptions receivable from investment in portfolio funds which represent the amounts due from portfolio funds for which redemption requests have been submitted. The fund carries its redemptions receivable at fair value which includes an assessment of collectability.

NOTE E - INVESTMENTS (Continued)

The System has the following recurring fair value measurements as follows:

	September 30, 2022			
	Level 1	Level 2	Level 3	Total
Investments, at fair value:				
Corporate stocks:				
Domestic	\$ 54,828,366	-	-	54,828,366
International	36,151,268	-	-	36,151,268
Corporate bonds:				
Domestic	-	6,915,739	-	6,915,739
Government-backed bonds	-	2,720,301	-	2,720,301
Mortgage-backed bonds	-	2,760,133	-	2,760,133
Money market funds	4,334,049	-	-	4,334,049
Total Investments By Fair				
Value Level	\$ 95,313,683	12,396,173		107,709,856
Investments measured at net asset value (NAV): Real estate investment trust Hedge funds Mortgage-backed bonds Collective investment funds - domestic Collective investment funds - internation Collective investment funds - domestic fixed income Total Investments Measured At NAV	onal equity			84,736,278 69,866,590 75,000 39,535,483 25,092,419 80,719,753
				, ,
Total Investments Measured				# 40 = =0= C=0
At Fair Value				\$ 407,735,379

Note: the mortgage-backed bonds totaling \$75,000 are not included in the fair value table with the other mortgage-backed bonds as there was no readily determinable value available to determine fair value at this issuance of this report.

NOTE E - INVESTMENTS (Continued)

For the investments measured at fair value based on NAV as a practical expedient:

	September 30, 2022				
		Fair Value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
Real estate investment trusts: Principal Financial Group Principal Enhanced Financial Group	\$	52,684,288 32,051,990	-	Daily Quarterly	N/A N/A
Hedge funds: Magnitude Institutional, LLC		37,285,873	-	Quarterly	65 days
ABS Investment Management, LLC K2 Mauna Kea, LLC		21,945,806 8,123,989	- -	Monthly Varies by Fund	60 days Varies by Fund
Entrust Capital Diversified Fund, Ltd. Collective investment funds - equity:		2,510,922	-	In Liquidation	N/A
Northern Trust Company Acadian Asset Management, LLC		24,779,835	-	Daily Daily	N/A N/A
Integrity Asset Management, LLC		25,092,419 14,755,648	-	Daily Daily	N/A N/A
Collective Investment Funds - fixed income: Prudential Trust Company		41,149,625	-	Daily	N/A
Mackay Shields Collective Trust		39,570,128		Daily	N/A
Total =	\$	299,950,523			
_			September	30, 2021	
		Level 1	Level 2	Level 3	Total
Investments, at fair value:					
Corporate stocks: Domestic	\$	76,562,232	_	_	76,562,232
International	Ψ	49,719,541	<u>-</u>	-	49,719,541
Corporate bonds:		.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Domestic		-	11,604,015	-	11,604,015
Government-backed bonds		-	3,575,579	-	3,575,579
Mortgage-backed bonds		-	2,524,173	-	2,524,173
Money market funds		5,803,067			5,803,067
Total Investments By Fair Value Level	\$	132,084,840	17,703,767		149,788,607
Investments measured at net asset value (NAV):					
Real estate investment trust					77,547,191
Hedge funds					76,917,811
Collective investment funds - domestic equity					58,828,370
Collective investment funds - international equ Collective investment funds - domestic	iity				34,406,783
fixed income Total Investments Measured					96,612,618
At NAV					344,312,773
Total Investments Measured At Fair Value					\$ 494,101,380
ALI all value					Ψ Τ/Τ,101,300

NOTE E - INVESTMENTS (Continued)

The following schedule provides a summary of the fixed income investment maturities by investment category, which helps demonstrate the current level of interest rate risk assumed by the System:

	Maturities As Of September 30, 2022					
Fixed Income Investment Category		Total	Less Than One Year	1 - 5 Years	6 - 10 Years	More Than 10 Years
Collective investment funds Corporate bonds Government-backed Mortgage-backed	\$	80,719,753 6,915,739 2,720,301 2,835,133	5,402,753 99,151 - -	31,341,228 3,038,649 2,179,498	22,348,315 1,327,509 298,740	21,627,457 2,450,430 242,063 2,835,133
Total	\$	93,190,926	5,501,904	36,559,375	23,974,564	27,155,083
	Maturities As Of September 30, 2021					
Fixed Income Investment Category		Total	Less Than One Year	1 - 5 Years	6 - 10 Years	More Than 10 Years
Collective investment funds Corporate bonds Government-backed Mortgage-backed	\$	96,612,618 11,604,015 3,575,579 2,524,173	7,750,184 899,469 - -	34,545,626 4,981,504 2,768,093	28,566,437 2,040,965 807,486	25,750,371 3,682,077 - 2,524,173
Total	\$	114,316,385	8,649,653	42,295,223	31,414,888	31,956,621

Certain collective investment funds are classified by average maturities of the portfolios.

The System's fixed income investments current level of exposure to credit risk, or the risk that an issuer or other counterparty to an investment will not fulfill its obligations, is demonstrated by the following table:

	Credit Rating As Of September 30, 2022					
Credit Rating Level		Total	Collective Investment Funds	Corporate Bonds	Government- Backed	Mortgage- Backed
AAA	\$	34,237,653	31,572,232	_	1,675,840	989,581.00
AA		5,475,062	2,055,984	704,757	1,044,461	1,669,860
A		12,096,142	7,541,768	4,378,682	-	175,692.00
BBB		22,756,339	20,924,039	1,832,300	-	-
BB		11,221,790	11,221,790	-	-	_
В		3,448,754	3,448,754	_	-	_
Not rated		3,955,186	3,955,186	_		
Total	\$	93,190,926	80,719,753	6,915,739	2,720,301	2,835,133

Credit Rating As Of September 30, 2021

456,053

3,575,579

2,524,173

11,604,015

NOTE E - INVESTMENTS (Continued)

В

Not rated

Total

Collective Credit Rating Investment Corporate Government-Mortgage-Level **Funds Bonds** Backed Backed Total 39,827,202 3,198,643 AAA 36,628,559 AA 5,995,588 2,510,414 584,065 376,936 2,524,173 16,744,486 9,420,488 7,323,998 Α **BBB** 29,240,536 26,000,637 3,239,899 BB13,450,079 13,450,079

3,780,002

4,822,439

96,612,618

Certain collective investment funds are classified by average credit rating levels of the portfolios.

3,780,002

5,278,492

\$ 114,316,385

Foreign Currency Risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The System's policy is to allow the individual investment managers to decide what action to take regarding their respective portfolio's foreign currency exposure. The following table demonstrates the System's current level of foreign currency exposure:

Foreign Currency Exposures Of Equity In U.S. Dollars As Of September 30

Currency	2022	2021
Australian Dollar	\$ 1,709,353	1,957,758
British Pound Sterling	5,758,932	5,879,177
Canadian Dollar	-	159,326
Denmark Krone	1,263,299	1,372,366
Euro	14,629,269	19,540,178
Hong Kong Dollar	-	2,862,441
Japanese Yen	4,672,040	8,004,797
New Zealand Dollar	183,914	258,456
Norwegian Krone	1,036,616	804,593
South Korean Won	557,500	1,021,816
Switzerland Franc	915,898	806,264
Total Foreign Currency	30,726,821	42,667,172
United States Dollar	124,880,715	176,849,754
Total	\$ 155,607,536	219,516,926

Investments Policies

Custodial Credit Risk for investments is the risk that, in the event of the failure of a counterparty, the System will not be able to recover the value of the investments that are in the possession of the counterparty. The System does not have a general policy addressing custodial credit risk, but it is the practice that all investments

NOTE E - INVESTMENTS (Continued)

are held by the System's agent in the System's name, except the hedge fund investment and hedge funds where the assets in the hedge funds are held in the name of the trustee of the trust or general partnership. The System retains investment managers that specialize in the investment of a particular asset class. Investment managers are subject to the guidelines and controls established in the investment policy and contract executed with the Board of Trustee. The System utilized a third party (Northern Trust) as custodian over the System's assets.

Credit Risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The System's minimum credit quality for each fixed income security shall be "BBB" (or its equivalent) at the time of purchase. In the event of a split-rating, the higher rating shall apply. The fixed income portfolio should have an average quality rating of at least "A" (or its equivalent). Commercial paper issues must be rated at least "A1" (or its equivalent) at the time of purchase. In the event of a split-rating, the higher rating shall apply. In the event of a downgrade below investment grade by any rating agency, the investment manager is required to notify the Board and investment consultant as soon as possible and to refrain from any further investment in the downgraded issue.

Interest Rate Risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Investments in fixed income securities are subject to interest rate risk. The risk that changes in interest rates will adversely affect the fair value of these investments. These fixed income investments are managed in accordance with monitoring and control policies established by the Board that are specific as to the degree of interest rate risk that can be taken. The System's policies manage the interest rate risk within the portfolio using various methods including average maturity, credit rating, and broad market indexes. The effective duration of any fixed income portfolio shall not exceed 120% of the effective duration of the investment manager's broad market benchmark.

Concentration of Credit Risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer. The System's policy does not allow the concentration per issuer to exceed 5% of the portfolio's fair value at cost, with the exception of cash, cash equivalents, U.S. Treasury, or U.S. Agency securities. Furthermore, the investment manager may not hold more than 5% of the outstanding shares of any single issuer with the exception of U.S. Treasuries or Agencies. Investment in any single fund of hedge funds shall not exceed 10% of the fund's fair value.

It is the System's current policy to invest in each asset class ranging between a minimum and maximum of total System's investments as shown below:

Asset Class As A Percent Of Total Assets						
Asset Class	<u>Minimum</u>	Target Mix	<u>Maximum</u>			
Domestic equity:						
Large cap	13%	18	23			
Small mid cap	3	8	13			
International equities	17	22	27			
Fixed income	22	27	32			
Real estate trust	10	15	20			
Hedge funds	5	10	15			

NOTE E - INVESTMENTS (Continued)

Long-term Expected Rate of Return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense 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. Best estimates of arithmetic real rates of return for each major asset class included in the System's target asset allocation as of September 30, 2022 are summarized in the following table:

Asset Class	Long-term Expected Real Rate Of Return
Core Bonds	2.58%
Core Plus	2.89
Absolute Return	4.75
US Large Cap Equity	7.17
US Small Cap Equity	8.61
International Developed Equity	8.06
Emerging Market Equity	9.33
Long/Short Equity	5.77
Core Real Estate (REIT)	6.54
Value Add Real Estate	8.04
Money Market	-

The above long-term expected real rates of return represent best estimates of mathematical rates of return for each major asset class included. These rates of return are shown net of inflation (assumed at 2.75%) and net of investment expenses (assumed at 0.5%).

Liquidity Risk is the risk that redemption notice periods are required and longer periods may be imposed before payment of redemption proceeds are settled for the following investments:

ABS Investment Management, LLC (Hedge Fund)

EnTrust Capital Diversified Fund QP, Ltd. (Hedge Fund)

K-2 Muana Kea, LLC (Hedge Fund)

Magnitude Institutional, LLC Class A (Hedge Fund)

The Principal U.S. Property & Enhanced U.S. Property Accounts (REIT)

NOTE F - INVESTMENTS GREATER THAN 5% OF NET POSITION - RESTRICTED FOR PENSIONS

Investments which exceed 5% or more of net position - restricted for pensions are as follows:

	September 30		
	2022	2021	
The Principal U.S. Property Account (REIT)	\$ 52,684,288	53,866,438	
Prudential Core Plus Bond Fund	41,149,625	49,063,179	
Mackay Shields Core Plus Opportunities Portfolio	39,570,128	47,549,439	
Magnitude Institutional, LLC Class A Hedge Fund	37,285,873	33,715,536	
Fisher Investments Inc.	34,651,273	49,719,541	
Principal Enhanced Property Fund	32,051,990	23,680,753	
Acadian International Small Cap Fund	25,092,419	34,406,783	
Northern Trust S&P 500 Index Fund	24,779,835	36,359,833	
ABS Investment Management, LLC	21,945,806	28,262,843	
Argent Capital Management, LLC	21,705,319	26,371,164	
Eagle Capital Management, LLC	20,666,854	28,720,952	

NOTE G - NET APPRECIATION (DEPRECIATION) IN FAIR VALUE OF INVESTMENTS

The net appreciation (depreciation) in fair value of investments consists of:

	For the Years Ended September 30		
		2022	2021
Equities:			
Corporate stocks	\$	(34,724,036)	40,560,452
Collective investment funds		(23,295,665)	33,184,155
Fixed income:			
Collective investment funds		(9,251,131)	(695,887)
Corporate bonds		(1,901,239)	(263,059)
Government-backed bonds		(498,798)	(105,492)
Mortgage-backed bonds		(414,112)	(83,629)
Hedge funds		(5,279,014)	3,635,103
Real estate investment trust		19,889,086	7,003,877
Limited partnership units			2,887,080
Total	\$	(55,474,909)	86,122,600

NOTE H - ACTUARIALLY DETERMINED CONTRIBUTIONS BASED ON STATUTORY REQUIRED CONTRIBUTIONS

The actuarial funding method utilized by the System as required by Missouri State Statutes is the entry age frozen liability method. Under this method, any frozen unfunded actuarial accrued liability is amortized over 30 years from the date the liability is added.

For The Veers

NOTE H - ACTUARIALLY DETERMINED CONTRIBUTIONS BASED ON STATUTORY REQUIRED CONTRIBUTIONS (Continued)

Actuarially determined contributions in accordance with this method are as shown in the following table:

	For The Years Ended September 30		Covered Payroll Percentage	
	2022	2021	2022	2021
Required contributions - employer: Portion of normal cost attributable to the	•		•	
System's fiscal year	\$ 998,887	2,105,960	4.2 %	8.3
Unfunded actuarial accrued liability amortization payment	1,297,238	1,297,238	5.4	5.1
Total Employer Required Contributions	\$ 2,296,125	3,403,198	9.6 %	13.4
Contributions Made By Employer During System's Fiscal Year	\$ 2,296,125	3,403,198	9.6 %	13.4

Covered payroll is the payroll on which contributions to the System are based. The covered payroll was \$23,865,783 and \$25,470,902 for the years ended September 30, 2022 and 2021, respectively.

The reduction in unfunded actuarial accrued liability (UAAL) for the System due to plan and assumption changes attributable to BB 109 on October 1, 2013, was greater than the remaining frozen initial liability (FIL). Consequently, the FIL for the System was set equal to zero at that date. A new FIL was added at September 30, 2015 resulting from actuarial assumption changes (mortality and discount rate) as a result of an actuarial cost study performed. The FIL was \$15,923,896 and \$16,132,210 at September 30, 2022 and 2021, respectively. The FIL was established October 1, 2019 and the amortization period is 30 years. As of October 1, 2021, the present value of future benefits was less than the actuarial value of assets, therefore, the September 30, 2022 City contribution was set at \$2,296,125.

NOTE I - NET PENSION LIABILITY - ENTRY AGE NORMAL ACTUARIAL COST METHOD

The components of the employer's net pension liability (the System's liability determined in accordance with GASB 67 less the fiduciary net position) as of September 30, 2022 and 2021, are shown in the schedules of employer's 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 (excess assets) are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of changes in employer's net pension liability (excess assets) presents multi-year trend information about whether the System's fiduciary net positions are increasing or decreasing over time relative to the total pension liability. These schedules are presented in the RSI. The total pension liability as of September 30, 2022 and 2021, are based on an actuarial valuation performed as of October 1, 2022 and 2021, and a measurement date of September 30, 2022 and 2021, using generally accepted actuarial procedures.

NOTE I - NET PENSION LIABILITY - ENTRY AGE NORMAL ACTUARIAL COST METHOD (Continued)

Schedules of Net Pension Liability

	September 30	
	2022	2021
Total pension liability System's fiduciary net position	\$ 466,527,241 407,922,604	470,255,361 492,554,234
Net Pension (Excess Assets) Liability	\$ 58,604,637	(22,298,873)
System's Fiduciary Net Position as a Percentage of Total Pension Liability	87.44%	104.74%
Covered Members Payroll (excluding DROP participants)	\$ 23,865,783	25,470,902
Net Pension (Excess Assets) Liability as a Percentage of Covered Members Payroll	245.56%	(87.55)

The System's fiduciary net position shown in the previous schedules of employer's net pension liability excludes the Future Benefit Fund restricted for SHARE program benefits. The Future Benefit Fund was \$3,729,496 and \$5,121,626 at September 30, 2022 and 2021, respectively.

The System is closed to new Members, and benefits have been frozen as of February 1, 2013. The actuarial accrued liability is now equal to the present value of frozen accrued benefits and DROP balances as of the measurement date.

Sensitivity of the net pension liability to changes in the discount rate: the following presents the net pension liability, calculated using the discount rate of 7.0%, as well as what the net pension liability would be if it were calculated using a discount rate that is 1% point lower (6.0%) or 1% point higher (8.0%) than the current rate.

	40/ D	Current Discount	40/ 7
	1% Decrease	Rate Assumption	1% Increase
Total pension liability	\$ 506,975,727	466,527,241	431,985,129
Net pension (excess assets) liability	99,053,123	58,604,637	24,062,525
System's fiduciary net position/			
total pension liability	80.46%	87.44	94.43

Discount Rate Used to Calculate the Present Value of Future Benefit Payments

A single discount rate was used to measure the total pension liability. This single discount rate was based on the expected rate of return on the System's investments of 6.75%. This single discount rate is net of administrative expense assumption of 25 basis points and net of investment expenses (investment management and custodial fees) assumed to be 50 basis points. The projection of cash flows used to determine this single discount rate assumed that the City would make the required contributions as defined by Missouri State Statutes. Based on these assumptions, the System's fiduciary net position was projected to be available to make all projected future benefit payments of current Members and their beneficiaries. Therefore, the long-term expected

NOTE I - NET PENSION LIABILITY - ENTRY AGE NORMAL ACTUARIAL COST METHOD (Continued)

rate of return on the System's investments was applied to all periods of projected benefit payments to determine the total pension liability. The long-term expected rate of return and for GASB 67 and 68 is increased by 25 basis points to 7.00%, which is gross of administrative expenses.

Methods and Assumptions used in Calculations of Actuarially Determined Pension Liability

Method:

Valuation date Actuarial cost method (GASB 67 reporting) Asset valuation method (GASB reporting) October 1, 2022 and 2021 Entry Age Normal Fair value

Actuarial assumptions:

Investment rate of return Long-term municipal bond rate Rate of payroll growth

Consumer price inflation Mortality

6.75%, net of investment and administrative expenses 2.19% for 2022 and 2.41% for 2021 3% to 4% based on service. Benefits have been frozen as of February 1, 2013; therefore, no salary increases have been assumed for purposes of determining benefits 2.5%

Post-retirement ordinary - Pub-2010 Public Safety
Employee Mortality Table, sex distinct
Pre-retirement - Pub-2010 Public Safety Employee
Mortality Tables, sex distinct
Post-disability - Pub-2010 Public Safety Employee
Mortality Tables, sex distinct

Future mortality improvements are reflected by projecting the base mortality tables forward from the year 2010 using MOP-2019 projection scale.

Cost-of-living adjustments (COLA):

Under Age	60
Service Years	COLA
20 - 24	1.50%
25 - 29	2.25%
30 or more	3.00%
Over Age	60

5% with a maximum of 25% in increases after age 60

NOTE J - SECURITIES LENDING

The System participated in The Northern Trust Company's (NTC) securities lending program in order to enhance the investment yield. In a securities lending transaction, the System transfers possession--but not title-of the security to the borrower. Borrowers shall be rated AA, A, or higher by Moodys or Standard and Poors. Collateral consisting of cash, letter of credit, U.S. government or agency securities, or floating rate notes of U.S. issuers is received and held by NTC. The collateral maintained is at least 102% of loan value for domestic securities and 105% of loan value for international securities of the fair value of the securities lent. The System maintains all the rights in the collateral of a secured lender under the Uniform Commercial Code. The System continues to earn income on the loaned security. In addition, the System receives 70% of the net lending fees generated by each loan of securities.

NTC receives the remaining 30% of the net lending fees as compensation for its services provided in the securities lending program. NTC indemnifies operational risk and counter party risk. The System authorizes the lending and loans of the following: domestic securities, U.S. Treasuries, corporate bonds, and equities.

The System does not have the ability to pledge or sell collateral securities without borrower default. Therefore, for accounting purposes, the statements of fiduciary net position and changes in fiduciary net position do not reflect an increase in assets or liabilities associated with securities lent.

At September 30, 2022 and 2021, outstanding loans to borrowers were \$13,413,693 and \$17,192,520, respectively. The System earned income of \$65,153 and \$54,925 for its participation in the securities lending program for the years ended September 30, 2022 and 2021, respectively.

NOTE K - SYSTEM STAFF PENSION PLAN

General Information about the Pension Plan

Plan Description

All full-time staff at the System are provided with pension benefits through the ERS.

Benefits Provided

Upon retirement at age 65, or at any age plus years if credited service equals or exceeds 85 (Rule of 85), employees receive monthly payments for life of yearly benefits equal to years of credited service multiplied by 1.3% of average final compensation plus 2.05% of average final compensation in excess of employee's benefit compensation in excess of the current Social Security wage base. Early retirement can occur at age 60 with at least five years of service. This early service retirement allowance is reduced by 4% for each year prior to age 65 or at the age at which the Rule of 85 would have been satisfied had the employee continued working until that age, if earlier.

NOTE K - SYSTEM STAFF PENSION PLAN (Continued)

Disability retirement is available if an employee has 5 years of creditable service and is totally disabled as determined by the Medical Board. The disability pension is computed in the same manner as normal service retirement.

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

Employees are eligible, after accumulation of 5 years of credited service, for disability benefits prior to eligibility of normal retirement. Survivor benefits are available for beneficiaries of employees who die after at least 5 years of service.

The Deferred Retirement Option Plan (DROP) allows employees who have reached retirement eligibility to begin receiving a pension benefit while continuing to work. The benefit is paid to an employee's DROP account where it earns interest. No creditable service is earned during DROP participation. An employee can participate in DROP for a maximum of 5 years and can immediately retire or continue to work and resume earning creditable service.

Contributions

ERS does not require employee contributions.

The System was contractually required to contribute a percentage of annual payroll as follows:

Service Period	Contribution Rate
July 2022 to present	15.44%
July 2021 to June 2022	15.42
July 2020 to June 2021	13.19

The amount is actuarially determined and is expected to finance the costs of benefits earned by employees during the year along with any additional amount to finance the unfunded accrued liability. Contributions to ERS from the System were \$53,960 and \$54,699 for the years ended September 30, 2022 and 2021, respectively.

Net Pension Expense

Net pension expense is the sum of changes in the net pension liability and deferred inflows and outflows of resources. The System's net pension expense was calculated as follows:

	Ended Sep	tember 30
	2022	2021
System's employer contributions	\$ 53,960	54,699
Increase (decrease) in net pension liability	(134,123)	92,214
Increase (decrease) in deferred inflows of resources	80,464	(5,779)
(Increase) decrease in deferred outflows of resources	<u>74,096</u>	(58,691)
Net Pension Expense	<u>\$ 74,397</u>	82,443

For The Vears

NOTE K - SYSTEM STAFF PENSION PLAN (Continued)

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

The net pension liability was measured as of the beginning of the Systems fiscal years September 30, 2022 and 2021, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The System had a liability of \$249,039 (or 0.14%) and \$383,162 (or 0.13%) for its proportionate share of ERS' net pension liability for the years ended September 30, 2022 and 2021, respectively. The System's proportion of the net pension liability was based on a projection of the System's long-term share of contributions to ERS relative to the projected contributions of all participating employers, actuarially determined.

The actuarially determined deferred outflows of resources and deferred inflows of resources related to ERS were from the following sources:

			Fo	r The Year	Ended Septem	ber 30, 2022
			Oı	utflows	Inflows	Net Outflows
Net difference between expec	ted and actual experi	ence	\$	3,020	(4,282)	(1,262)
Net difference from assumption	on changes			14,285	-	14,285
Net difference between project	ted and actual earning	igs				
on ERS' investments				-	(76,182)	(76,182)
Net impact from changes in pr	oportion allocation					
between the participating en	nployers			12,229	-	12,229
Fiscal year 2022 paid contribu	ations			53,960		53,960
Total			\$	83,494	(80,464)	3,030
		For The	Year	rs Ending Se	eptember 30	
	Total	2023		2024	2025	2026
Deferred outflows (inflows)					· · · · · · · · · · · · · · · · · · ·	·
future recognition	\$ 3,030	67,408		(7,874)	(26,093)	(30,411)

NOTE K - SYSTEM STAFF PENSION PLAN (Continued)

			I	For The Year	Ended Septemb	per 30, 2021
			О	outflows	Inflows	Net Outflows
Net difference between expe	cted and actual ex	\$	6,015	-	6,015	
Net difference from assumpt	ion changes	_		40,819	-	40,819
Net difference between proje on ERS' investments Net impact from changes in		55,562	-	55,562		
between the participating e		ion		3,928	-	3,928
Fiscal year 2021 paid contrib	outions			51,266		51,266
Total			\$	157,590	-	157,590
		For Th	e Yea	rs Ending Se	ptember 30	
	Total	2022		2023	2024	2025
Deferred outflows (inflows) future recognition	\$ 157,590	90,640		44,985	17,895	4,070

Actuarial Methods and Assumptions used in Calculations of Actuarially Determined Pension Liability

Valuation date:

Actuarially determined contributions are calculated as of October 1, 2021 and 2020 (beginning of year) valuation date used to calculate the required contribution for the fiscal years ending September 30, 2022 and 2021.

Actuarial methods:

Actuarial cost method (Funding)
Actuarial cost method (GASB 68)
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 20-year periods.

Asset valuation method Actuarial assumptions:

Mortality rates -

Inflation 2.50%

Salary increases 3.00% plus merit component based on years of service Investment rate of return 7.25%, net of pension plan

investment expenses

Active: 135% of the Pub-2010 General Employee below-median income mortality table for males and 155% for females projected with generational mortality improvements form 2010 using Scale MP-2019. Health: 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.

5-year smoothing

NOTE K - SYSTEM STAFF PENSION PLAN (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.25%. The projection of cash flows used to determine the discount rate assumed that contributions will continue to follow the current funding policy. Based on those assumptions, the ERS' fiduciary net position was projected to be sufficient to make all projected future benefits payments of current plan employees and their beneficiaries.

Sensitivity of the System's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate

The following presents the System's proportionate share of the net pension liability calculated using the long-term expected rate of return of 7.25%, as well as what the System's proportionate share of the net pension liability would be if it were calculated using a discount rate that is 1% point lower (6.25%) or 1% point higher (8.25%) than the current rate:

	1% Decrease	Current Discount Rate Assumption	1% Increase
Discount rate	6.25%	7.25	8.25
Net pension liability	\$ 406,799	249,039	114,751

Detailed information about ERS' fiduciary net position is available in the separately issued ERS' financial report.

NOTE L - SYSTEM EMPLOYEES HEALTH CARE BENEFITS

The System will pay health insurance for the employees regardless of whether or not it is the health insurance that the City offers to its employees so long as the cost is less that the City's health insurance plan. Current System employees are reimbursed up to \$500 per calendar year for vision care. Reimbursed health care benefits totaled \$2,000 and \$1,000 for the years ended September 30, 2022 and 2021, respectively.

NOTE M - RELATED PARTY TRANSACTIONS

The System reimburses the City 100% of the total salaries, payroll taxes, and employee fringe benefits for the System's employees. The System's expense for the years ended September 30, 2022 and 2021, was \$527,833 and \$502,331, respectively. The System also reimburses the City for cost allocated from the Treasurer's Department. The System's expenses for the years ended September 30, 2022 and 2021, was \$2,412 and \$3,804, respectively.

NOTE N - RISK MANAGEMENT

The System is exposed to various risks of loss related to breach of fiduciary duties, errors and omissions, and loss of assets, torts, etc. The System has chosen to cover such losses through the purchase of commercial insurance. There have been no material insurance claims filed or paid during the past three fiscal years.

NOTE O - COMMITMENTS AND CONTINGENCIES

Unsettled Investment Transactions

The System was committed to the future settlement of investments (sold and purchased). These amounts are reflected in the statements of fiduciary net position as a receivable and liability for unsettled investment transactions, respectively. The pending sales at September 30, 2022 and 2021 were \$39,310 and \$0, respectively.

Lawsuits

The System entered into a settlement agreement with the Firefighters' Retirement Plan (FRP) in July 2015 whereby firefighters employed by the City prior to February 1, 2013 are entitled to use unused medical leave that accrued from September 2, 2010 and February 1, 2013 for pension purposes. The cost of the additional sick leave benefits was funded in part with a one-time transfer of \$1,070,749 from the System's Future Benefit Fund to FRP paid on October 2, 2015.

The remaining actuarial present value of the cost of the additional sick leave benefits applicable to the System of \$1,515,608 shall be paid in full from the System's Future Benefit Fund to the General Reserve Fund of the System on a 15-year amortized basis, with annual payments of \$166,792 beginning October 2015. The actuarially determined net present value of the remaining balance to transfer totals was \$1,008,674 and \$1,097,986 as of September 30, 2022 and 2021, respectively.

NOTE P - RISKS AND UNCERTAINTIES

Investment Risks

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.

Experience Risks

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

NOTE Q - TAX STATUS

The System meets the requirements of a governmental plan under Section 414(d) of the Internal Revenue Code (IRC). The System obtained its latest determination letter on December 20, 2016 in which the Internal Revenue Service (IRS) stated that the System, as designed, was in compliance with the applicable requirements of the IRC. The Trustees believe that the System is currently designed and being operated in compliance with the applicable requirements of the IRC. Therefore, they believe that the System was qualified and the related trust was tax exempt as of the financial date.

Accounting principles generally accepted in the United States of America require the System's Trustees to evaluate tax positions taken by the System and recognize a tax liability if an uncertain position that more likely than not would not be sustained upon examination by the IRS or U.S. DOL. The System's Trustees have analyzed the tax positions taken by the System and has concluded that as of September 30, 2022 and 2021, no uncertain positions are taken or are expected to be taken that would require recognition of a liability or disclosure in the financial statements. The System is subject to routine audits by the taxing jurisdictions; however, there are currently no audits for any tax periods in progress and the System has not been assessed any interest or penalties by the IRS or U.S. DOL.

NOTE R - RATE OF RETURN

For the years ended September 30, 2022 and 2021, the annual money-weighted rate of return on the System's investments, net of investment expenses, was (10.69)% and 22.42%, respectively. The money-weighted rate of return expresses investment performance, net of investment expenses, adjusted for the changing amounts actually invested.

NOTE S - SUBSEQUENT EVENTS

The System has performed an evaluation of subsequent events through February 8, 2023, the date the fin	ancial
statements were available to be issued. No material events were identified by the System.	

NOTE T - SYSTEM RESERVES

Changes in the System's reserves for the years ended September 30, 2022 and 2021 are as follows:

	Total	Member's Savings Fund	Benefit Reserve Fund	General Reserve Fund	Future Benefit Fund	System Employees Benefit Fund
Balance, September 30, 2020	\$ 439,492,226	82,279,829	329,268,201	23,316,123	4,511,474	116,599
Contributions	3,403,198	-	-	3,403,198	-	-
Net investment income less administrative expenses	88,191,075	16,949,002	65,097,977	5,208,132	922,214	13,750
Transfer due to (surplus) deficit	-	(15,725,247)	(36,433,150)	52,158,397	-	-
Transfer in accordance with Sick Leave Settlement	-	-	-	166,792	(166,792)	-
Benefits paid to retirees and beneficiaries	(32,011,708)	-	(31,866,438)	-	(145,270)	-
Refunds of Members' contributions	(1,398,931)	(1,398,931)				
Change in reserves for the year ended Septem-						
ber 30, 2021	58,183,634	(175,176)	(3,201,611)	60,936,519	610,152	13,750
Balance, September 30, 2021	497,675,860	82,104,653	326,066,590	84,252,642	5,121,626	130,349
Contributions	2,296,125	_	-	2,296,125	_	_
Net investment income less administrative expenses	(53,882,814)	(9,108,890)	(34,670,196)	(9,584,180)	(534,356)	14,808
Transfer due to (surplus) deficit	-	9,874,541	66,110,355	(75,984,896)	-	-
Transfer in accordance with Sick Leave Settlement	-	-	- -	166,792	(166,792)	-
Benefits paid to retirees and beneficiaries	(33,058,966)	-	(32,367,984)	-	(690,982)	-
Refunds of Members' contributions	(1,378,105)	(1,378,105)				
Change in reserves for the year ended Septem-						
ber 30, 2022	(86,023,760)	(612,454)	(927,825)	(83,106,159)	(1,392,130)	14,808
Balance, September 30, 2022	\$ 411,652,100	81,492,199	325,138,765	1,146,483	3,729,496	145,157



SCHEDULES OF CHANGES IN NET PENSION LIABILITY (EXCESS ASSETS)

					For The Years En	ded September 30			
	2022	2021	2020	2019	2018	2017	2016	2015	2014 (A)
Discount Rate Assumption (gross of administrative expenses)	7.000 %	7.000 %	7.000 %	7.000 %	7.300 %	7.300 %	7.300 %	7.300 %	7.925 %
Total Pension Liability (B)									
Service cost	\$ -	-	-	-	-	-	-	-	-
Interest on total pension liability	31,736,762	31,900,271	32,070,852	32,252,813	32,729,886	34,536,458	34,916,115	34,403,495	34,449,637
Benefit changes	-	-	-	-	-	-	-	-	-
Differences between expected and actual experience	(1,718,793)	(730,385)	(721,053)	(1,287,244)	(5,442,030)	(26,462,974)	(6,984,303)	15,441	-
Assumption changes	-	-	-	19,942,113 (E)	-	-	-	43,915,338 (E)	-
Benefit payments	(32,367,984)	(31,866,438)	(32,908,833)	(32,808,908)	(32,161,027)	(32,015,540)	(32,154,888)	(33,561,947)	(34,001,921)
Refunds of Members' contributions	(1,378,105)	(1,398,931)	(1,399,122)	(2,027,172)	(649,093)	(816,435)	(1,278,330)	(1,294,477)	(1,205,393)
Net Change In Total Pension Liability	(3,728,120)	(2,095,483)	(2,958,156)	16,071,602	(5,522,264)	(24,758,491)	(5,501,406)	43,477,850	(757,677)
Total Pension Liability Beginning	470,255,361	472,350,844	475,309,000	459,237,398	464,759,662	489,518,153	495,019,559	451,541,709	452,299,386
Total Pension Liability Ending (a)	\$ 466,527,241	470,255,361	472,350,844	475,309,000	459,237,398	464,759,662	489,518,153	495,019,559	451,541,709
System Fiduciary Net Position									
Contributions - Employer	\$ 2,296,125	3,403,198	1,297,238	-	2,715,141	3,313,603	2,715,140	-	1,007,760
Net investment income (loss)	(52,332,583)	88,368,706	19,147,399	8,307,594	24,519,983	60,390,472	38,228,538	(10,931,763)	48,269,780
Benefit payments	(32,367,984)	(31,866,438)	(32,908,833)	(32,808,908)	(32,161,027)	(32,015,540)	(32,154,888)	(33,561,947)	(34,001,921)
Refunds of Members' contributions	(1,378,105)	(1,398,931)	(1,399,122)	(2,027,172)	(649,093)	(816,435)	(1,278,330)	(1,294,477)	(1,205,393)
Administrative expenses	(1,015,875)	(1,099,845)	(1,086,499)	(1,027,225)	(1,050,387)	(1,067,626)	(1,095,335)	(1,593,979)	(1,424,217)
Transfer from Future Benefit Fund	166,792	166,792	166,792	166,792	166,792	166,792	166,792		<u>-</u>
Net Change In System Fiduciary Net Position	(84,631,630)	57,573,482	(14,783,025)	(27,388,919)	(6,458,591)	29,971,266	6,581,917	(47,382,166)	12,646,009
Transfer out	-	-	-	-	-	-	-	-	(10,278,591)
System Fiduciary Net Position Beginning	492,554,234	434,980,752	449,763,777	477,152,696	483,611,287	453,640,021	447,058,104	494,440,270 (C)	492,221,578
System Fiduciary Net Position Ending (b)	\$ 407,922,604 (D)	492,554,234 (D)	434,980,752 (D)	449,763,777 (D)	477,152,696 (D)	483,611,287 (D)	453,640,021 (D)	447,058,104 (D)	494,588,996 (D)
Net Pension Liability (Excess Assets) Ending (a)-(b)	\$ 58,604,637	(22,298,873)	37,370,092	25,545,223	(17,915,298)	(18,851,625)	35,878,132	47,961,455	(43,047,287)
Assets Excluded From System Fiduciary Net Position Future Benefit Fund (D)	\$ 3,729,496	5,121,626	4,511,474	4,546,004	4,825,954	5,236,926	5,051,183	4,804,701	6,326,389

Notes:

- (A) The September 30, 2014 total pension liability was restated due to an actuarial revision to develop the System's liabilities assuming benefits are fully earned because the System is closed to new Members, and benefits have been frozen as of February 1, 2013. The actuarial accrued liability, at that time, is now equal to the present value of frozen accrued benefits and DROP balances as of the measurement date.
- (B) The total pension liability as of the end of each measurement year is measured as of the measurement date (October 1) at the beginning of each year and projected to the end of each year.
- (C) The September 30, 2014 System fiduciary net position was restated (decreased) by \$148,726 from recording the beginning net pension liability, resulting from implementing GASB 68 for the System's staff participation in ERS during the year ended September 30, 2015.
- (D) The System's fiduciary net position shown in the above schedules of changes in net pension liability (excess assets) excludes the Future Benefit Fund, including its earnings allocated, transfer out, and SHARE program benefits.
- (E) The actuarial assumptions were updated based on the experience review for the period October 1, 2014 through September 30, 2018, and are first effective with the actuarial valuation as of October 1, 2019. The actuarial assumptions were updated based on the experience review for the period October 1, 2009 through September 30, 2014, and are first effective with the actuarial valuation as of October 1, 2015.

SCHEDULES OF NET PENSION LIABILITY (EXCESS ASSETS)

	For The Years Ended September 30								
	2022	2021	2020	2019	2018	2017	2016	2015	2014
Total pension liability System fiduciary net position	\$ 466,527,241 407,922,604	470,255,361 492,554,234	472,350,844 434,980,752	475,309,000 449,763,777	459,237,398 477,152,696	464,759,662 483,611,287	489,518,153 453,640,021	495,019,559 447,058,104	451,541,709 494,588,996
Net Pension Liability (Excess Assets)	\$ 58,604,637	(22,298,873)	37,370,092	25,545,223	(17,915,298)	(18,851,625)	35,878,132	47,961,455	(43,047,287)
System Fiduciary Net Position as a Percentage of the Total Pension Liability	87.44 %	6 104.74	92.09	94.63	103.90	104.06	92.67	90.31	109.53
Covered Payroll (excluding DROP participants)	\$ 23,865,783	25,470,902	28,364,942	28,991,522	29,796,947	31,079,373	30,219,253	30,288,086	29,767,542
Net Pension Liability (Excess Assets) as a Percentage of Covered Payroll	245.56 %	6 87.55	131.75	88.11	(60.12)	(60.66)	118.73	158.35	(144.61)

REQUIRED SUPPLEMENTAL INFORMATION - GASB STATEMENT NO. 67 PENSION ELEMENTS - SYSTEM RELATED

SCHEDULES OF EMPLOYER'S CONTRIBUTIONS

	For The Years Ended September 30									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Employer actuarially determined contributions Contributions in relation to the actuari-	\$ 2,296,125	3,403,198	1,297,238	-	2,715,141	3,313,603	2,715,140	-	1,007,760	9,803,957
ally determined contributions	2,296,125	3,403,198	1,297,238	-	2,715,141	3,313,603	2,715,140	-	1,007,760	10,137,271
Contributions Excess	<u>\$</u> -						<u>-</u>			333,314
Covered Payroll (excluding DROP participants)	\$ 23,865,783	25,470,902	28,364,942	28,991,522	29,796,947	31,079,373	30,219,253	30,288,086	29,767,542	30,021,550
Contributions as a Percentage of Covered Payroll	9.62 %	13.36	4.57	-	9.11	10.66	8.98	<u>-</u>	3.39	33.77

REQUIRED SUPPLEMENTAL INFORMATION -

GASB STATEMENT NO. 67 PENSION ELEMENTS - SYSTEM RELATED

SCHEDULES OF ANNUAL MONEY-WEIGHTED RATE OF RETURN ON INVESTMENTS

	For The Years Ended September 30									
	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Annual money-weighted rate of return,										
net of investment expenses	(10.69) %	22.42	4.69	1.80	5.82	14.69	9.20	(2.42)	10.32	14.41

REQUIRED SUPPLEMENTAL INFORMATION -

GASB STATEMENT NO. 67 PENSION ELEMENTS - SYSTEM RELATED

NOTES TO REQUIRED SUPPLEMENTAL INFORMATION FOR THE YEAR ENDED SEPTEMBER 30, 2022

1. **Changes in Benefit Terms**

Changes in benefit terms must be enacted by the General Assembly of the State of Missouri. There were no changes in benefits during the year ended September 30, 2022.

2. **Changes in Actuarial Assumptions**

None

3. **Changes in Actuarial Method**

None

4. Method and Assumptions used in Calculations of Actuarially Determined Pension Liability

The actuarially determined employer's contributions were calculated as of the September 30 preceding the fiscal year in which contributions are made. That is, the contributions calculated as of the September 30, 2021 actuarial valuation was made during the fiscal year ended September 30, 2022. The following actuarial methods and assumptions were used to determine pension liability reported in the schedules of changes in employer's net pension liability (schedule):

Method:

Valuation date Actuarial cost method (funding by state statutes) - 2014 through 2022 Actuarial cost method (GASB 67 reporting) - 2014 through 2018 Actuarial cost method (GASB 67 reporting) - 2019 and 2021 Amortization method/period - 2014 through 2022 Remaining amortization period - 2016 through 2022 Remaining amortization period - 2014 and 2015 Asset valuation method - 2014 through 2022 (funding) Asset valuation method - 2014 through 2021 (GASB 67) Actuarial assumptions:

October 1, 2014 through 2022 Entry Age - Frozen Initial Liability Entry Age Normal Entry Age - Actuarial Cost Method 30-year closed period from establishment Various None - No unfunded actuarial liability 3-year smoothed market Fair value

Investment rate of return - 2019 through 2022 Investment rate of return - 2015 through 2018 Investment rate of return - 2014 Long-term municipal bond rate

2014 - 4.11%; 2015 - 3.71%; 2016 - 3.06%; 2017 - 3.5%; 2018 - 3.83%; 2019 - 2.75%; 2020 - 2.41%; and 2022 - 2.19%

6.75%, net of administrative expenses of 25 basis points

7.625%, net of administrative expenses of 30 basis points

7.0%, net of administrative expenses of 30 basis points

Rate of payroll growth - 2015 through 2018

Rate of payroll growth - 2019 through 2022

2.75 to 3.75% based on service. Benefits have been frozen as of February 1, 2013; therefore, no salary increases have been assumed. 3% to 4% based on service. Benefits have been frozen as of February 1, 2013; therefore, no salary increases have been assumed. 3.35% to 5.5% based on service. Benefits have been frozen as of

Consumer price inflation - 2019 through 2022 Consumer price inflation - 2015 through 2018 February 1, 2013; therefore, no salary increases have been assumed. 2.50%

Consumer price inflation - 2014 Mortality - 2019 through 2022

Rate of payroll growth - 2014

3.00% Post-retirement ordinary - Pub-2010 Public Safety Healthy Annuitant, sex distinct Pre-retirement - Pub-2010 Public Safety Employee Mortality Tables, sex distinct Post-disability - Pub-2010 Public Safety Disable Retiree Mortality Tables, sex distinct

Note:

Future mortality improvements are reflected by projecting the base mortality tables forward from 2010 using MP-2019 projection scale Post-retirement ordinary - RP-2014 Healthy Annuitant Mortality Tables, sex distinct Mortality - 2015 through 2018 Pre-retirement - RP-2014 Employee Mortality Tables, sex distinct Post-disability - assumed to be 20% higher than post-retirement mortality rates Mortality - 2014 RP-2000 mortality table, sex district, with rates projected to 2015

2.75%

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS REQUIRED SUPPLEMENTAL INFORMATION -

GASB STATEMENT NO. 67 PENSION ELEMENTS - SYSTEM RELATED

NOTES TO REQUIRED SUPPLEMENTAL INFORMATION FOR THE YEAR ENDED SEPTEMBER 30, 2022 (Continued)

5. GASB 67 Ten-year Required Supplemental Schedules

Required supplemental schedules are required to present 10 years of information. However, the information in the schedules are not required to be presented retroactively. Years will be added to these schedules in future fiscal years until 10 years of information is presented.

6. Money-weighted Rate of Return

The annual money-weighted rate of return is computed assuming investment yield is received at the end of each month and on the actual or approximate date of contributions, benefit payments, and expenses.

7. Discount Rate used to Calculate the Present Value of Future Benefits

Projected benefit payments are required to be discounted to their actuarial present values using a single discount rate that reflects: 1) a long-term expected rate of return on the System's investments (to the extent that the System's fiduciary net position is projected to be sufficient to pay benefits) and 2) tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

The long-term expected rate of return of the System's funding is assumed to be 6.75%. Per Missouri State Statutes, this rate is net of both investment and administrative expenses. GASB 67 requires the long-term expected rate of return to be determined net of pension plan investment expense but without reduction for the System's administrative expenses. Investment expenses (investment management and custodial fees) are assumed to be approximately 50 basis points. Administrative expenses are assumed to be approximately 30 basis points; consequently, the long-term expected rate of return used for purposes of GASB 67 is increased by 25 basis points to 7%. This rate is gross of administrative expenses.

For the purpose of this valuation, the expected rate of return on the System's investments is 7%; the municipal bond rate is 4.4% (based on the most recent daily rate available on or before the measurement date of the Fidelity "20-Year Municipal GO AA Index") and the resulting single discount rate is 7%.

The single discount rate is the same as the expected rate of return on pension plan assets because FRS is closed to new members, benefits are frozen as of February 1, 2013, and FRS is projected to be fully funded by 2024. Our projection assumes the City will make contributions as required by statute.

The System currently expects assets will be sufficient to cover projected vested benefits of all current Members and their beneficiaries using actuarial assumptions until 2112. Furthermore, in the event that the assets fall below the present value of benefits and a contribution is required, a sound funding policy based on the frozen initial liability actuarial cost method is used, as defined by Missouri's state statutes.

8. Total Payroll and Covered Payroll

The covered payroll for active Members is the payroll on which contributions to the System are based. Member payroll were as follows:

	For The Years Ended September 30					
		2022	2021			
	Number	Compensation	Number	Compensation		
Active Members non-DROP "covered payroll"	333	\$ 23,865,783	359	\$ 25,470,902		
Active Members participating in DROP	102	7,718,110	96	7,268,746		
Total Payroll	435	\$ 31,583,893	455	\$ 32,739,648		

For The Veers Ended Sentember 20

REQUIRED SUPPLEMENTAL INFORMATION - GASB STATEMENT NO. 68 PENSION ELEMENTS - SYSTEM STAFF PENSION RELATED

SCHEDULES OF THE SYSTEM'S PROPORTIONATE SHARE OF THE NET PENSION LIABILITY OF THE EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS (ERS), A COST-SHARING, MULTI-EMPLOYER DEFINED BENEFIT PENSION PLAN

	September 30							
	2022	2021	2020	2019	2018	2017	2016	2015
Proportionate Share of the Employer's Contributions	0.14 %	0.13	0.13	0.13	0.13	0.13	0.11	0.10
Proportionate Share of the Collective Net Pension Liability	\$ 249,039	383,162	290,948	219,637	222,861	264,825	254,939	161,678
Covered Payroll	\$ 342,625	330,881	321,019	311,088	307,054	300,217	828,263	260,505
Proportionate Share of the Collective Net Pension Liability as a Percentage of its Covered Payroll	72.69 %	115.80	90.63	70.60	72.58	88.21	30.78	62.06
ERS' Fiduciary Net Position as a Percentage of the Total Pension Liability	84.11 %	73.82	78.56	83.02	82.46	78.52	76.22	83.47

Notes:

⁽A) The System elected to report pension elements using the beginning of the year actuarial valuation as allowed by GASB 68. Therefore, the amounts presented were determined as of ERS' fiscal years ended September 30, 2022, 2021, 2020, 2019, 2018, 2017, 2016, 2015, and 2014 actuarial valuations and projected to the end of the years.

⁽B) The System implemented GASB 68 for the fiscal year ended September 30, 2015. Years will be added to this schedule in future fiscal years until 10 years of information is provide

REQUIRED SUPPLEMENTAL INFORMATION -GASB STATEMENT NO. 68 PENSION ELEMENTS -SYSTEM STAFF PENSION RELATED

SCHEDULES OF THE SYSTEM'S CONTRIBUTIONS TO THE EMPLOYEES RETIREMENT SYSTEM OF THE CITY OF ST. LOUIS (ERS), A COST-SHARING, MULTI-EMPLOYER DEFINED BENEFIT PENSION PLAN

	For The Years Ended September 30							
	2022	2021	2020	2019	2018	2017	2016	2015
Contractually required contribution Contributions in relation to the contractually	\$ 46,979	41,284	39,603	38,116	38,208	40,662	39,776	38,471
required contribution	(46,979)	(41,284)	(39,603)	(38,116)	(38,208)	(40,662)	(39,776)	(38,471)
Contribution Excess	<u>\$ -</u>	<u> </u>	<u> </u>	<u>-</u> <u>-</u>	<u> </u>	<u> </u>	<u> </u>	<u>-</u>
Covered Payroll	\$ 342,625	330,881	321,019	311,088	307,054	300,217	828,263	260,505
Contributions as a Percentage of Covered Payroll	13.71 %	12.48	12.34	12.25	12.44	13.54	4.80	14.77

Note to schedule:

(A) Actuarial Methods and Assumptions used in Calculations of Actuarially Determined Pension Liability

Valuation date:

Actuarially determined contributions are calculated as of October 1, 2014 through 2021 (beginning of year) valuation date used to calculate the required contribution for the fiscal years ending September 30, 2015 through 2022.

Actuarial methods:

Actuarial cost method (GASB 68)

Entry Age Normal

Amortization method - 2017 through 2020

Amortization method - 2016 and 2015

Entry Age Normal

Fixed 20 year period as of October 1, 2015 as a level percentage of payroll.

Rolling 30-year level dollar amortization of unfunded liability

Asset valuation method Actuarial assumptions:

Inflation

2021, 2020, 2019, 2018, 2017, and 2016 - 2.5%; 2015 - 3.125%
Salary increases - 2017 through 2020

3% plus merit component based on employee's years of service
Salary increases - 2016 and 2015

3.5% plus merit component based on employee's years of service
Investment rate of return

2021, 2020, 2019, 2018, 2017, and 2016 - 7.5%, and 2015 - 8%,
net of pension plan investment expenses

Mortality rates - ordinary - 2016 through 2020 RP-2000 healthy mortality 3 year set-forward with generational

ortainty rates - ordinary - 2016 through 2020 RP-2000 healthy mortainty 3 year set-forward with generational projections using scale A

Mortality rates - ordinary - 2015 1994 Group Annuity Mortality Table

Mortality rates - disability - 2016 through 2020 RP-2000 disabled mortality 3 year set-forward with generational

projections using scale AA

5-year smoothing

Mortality rates - disability - 2015 1953 Railroad Retirement Board disabled life mortality table

(B) The System elected to report pension elements using the beginning of the year actuarial valuation as allowed by GASB 68. Therefore, the amounts presented were determined as of ERS' fiscal years ended September 30, 2014 through 2021 actuarial valuations and projected to the end of the years.

(C) The System implemented GASB 68 for the fiscal year ended September 30, 2015. Years will be added to this schedule in future fiscal years until 10 years of information is provided.

FIREMEN'S RETIREMENT SYSTEM OF ST. LOU_ OTHER SUPPLEMENTAL INFORMATION	
OTHER SUPPLEMENTAL INFORMATION SECTION	

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS OTHER SUPPLEMENTAL INFORMATION

	For The Years Ended September 30	
	2022	2021
BENEFITS PAID TO RETIREES AND BENEFICIARIES		
Monthly annuity:		
Service retirees	\$ 14,791,260	14,088,229
Accidental disability	11,551,887	11,500,379
Beneficiaries	4,091,954	3,924,300
Ordinary disability	434,465	456,455
Medical, surgical, and hospital	5,439	6,265
Total Monthly Annuity	30,875,005	29,975,628
Lump sum:		
DROP	2,115,932	1,972,080
Death	40,000	64,000
Term	28,029	
Total Lump Sum	2,183,961	2,036,080
Total Benefits Paid To Retirees And Beneficiaries	\$ 33,058,966	32,011,708
ADMINISTRATIVE EXPENSES		
Personnel costs:	6 405 500	262.600
Salaries	\$ 405,599	362,698
Payroll taxes	22,507	27,074
Employee fringe benefits:	20.562	21.116
Group benefits	30,763	31,116
Net pension expense	70,964	82,443
Total Personnel Costs	529,833	503,331
Bank charges	4,877	6,566
Building operations	18,603	15,316
Computer and website	71,976	118,098
Costs allocated from City	2,412	3,804
Depreciation	10,898	53,493
Equipment rental and maintenance	12,846	12,351
Insurance	31,632	31,683
Office supplies and expenses	14,114	13,234
Postage and delivery	8,100	6,088
Professional fees:		
Accounting and auditing	48,670	60,044
Actuary	56,996	49,250
Investment consultant	160,000	160,000
Legal and legislative	21,173	54,226
Property assessment	-	682
Telephone	6,324	6,483
Travel and seminars	17,421	5,196
Total Administrative Expenses	\$ 1,015,875	1,099,845

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS OTHER SUPPLEMENTAL INFORMATION

INVESTMENT MANAGEMENT AND CUSTODIAL FEES

	For The Years		
	Ended September 30		
	2022	2021	
Investment management fees:			
Acadian Asset Management, LLC	\$ 236,792	239,643	
Argent Capital Management, LLC	88,845	129,584	
The Commerce Trust Company	37,749	44,734	
Eagle Capital Management, LLC	200,497	251,797	
Fisher Investments, Inc.	300,185	410,397	
Pinnacle Associates, Ltd.	162,839	203,134	
Prudential Trust Company	123,420	120,805	
Tortoise Capital Advisors, LLC	-	2,975	
Total Investment Management Fees	1,150,327	1,403,069	
Custodial fees:			
The Northern Trust Company	158,206	183,129	
Total Investment Management And			
Custodial Fees	\$ 1,308,533	1,586,198	

The System incurs its share of fund operating expenses (including the investment management fees) which are deducted directly from each individual fund's assets for the following investment funds:

ABS Emerging Markets Strategic Portfolio, LP (Hedge Fund)

AJO Emerging Markets All - Cap Offshore Fund, Ltd. (Emerging Markets Fund)

EnTrust Capital Diversified Fund, Ltd. (Hedge Fund)

Integrity Asset Management, LLC (Small Cap Equity)

MacKay Shields Collective Investment Trust (Fixed Income)

Magnitude Institutional, LLC (Hedge Fund)

Mauna KEA, LLC (Hedge Fund)

Principal Enhanced Property Fund, LP (Real Estate Separate Account)

Principal U.S. Property Account (Real Estate Separate Account)

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS OTHER SUPPLEMENTAL INFORMATION

HISTORICAL TREND INFORMATION

Additions to Net Position

For The Years Ended	Contribu	ıtions	Net Investment Income	
September 30	Employer			Total
2022	\$ 2,296,125	-	(52,866,939)	(50,570,814)
2021	3,403,198	-	89,290,920	92,694,118
2020	1,297,238	-	19,335,731	20,632,969
2019	-	-	8,382,530	8,382,530
2018	2,715,141	-	24,769,748	27,484,889
2017	3,313,603	-	61,052,343	64,365,946
2016	2,715,140	-	38,641,812	41,356,952
2015	-	-	(11,079,856)	(11,079,856)
2014	1,007,760	-	48,876,120	49,883,880
2013 (A)	20,998,953	944,098	65,779,337	87,722,388

Deductions from Net Position

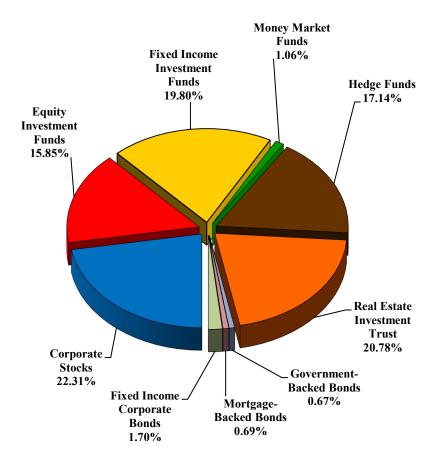
For The Years Ended September 30	 Benefits Paid	Refunds Of Members Contributions	Admini- strative Expenses	Total
2022	\$ 33,058,966	1,378,105	1,015,875	35,452,946
2021	32,011,708	1,398,931	1,099,845	34,510,484
2020	32,964,903	1,399,122	1,086,499	35,450,524
2019	32,997,002	2,027,172	1,027,225	36,051,399
2018	32,654,972	649,093	1,050,387	34,354,452
2017	32,324,876	816,435	1,067,626	34,208,937
2016	32,154,888	1,278,330	1,095,335	34,528,553
2015	33,864,793	1,294,477	1,593,979	36,753,249
2014	34,416,962	1,205,393	1,424,217	37,046,572
2013	34,535,838	3,260,793	1,730,087	39,526,718

⁽A) The City's contribution for the year ended September 30, 2013 was recalculated to be \$9,803,957 for BB 109 and \$10,278,591 was transferred out during the year ended September 30, 2014.

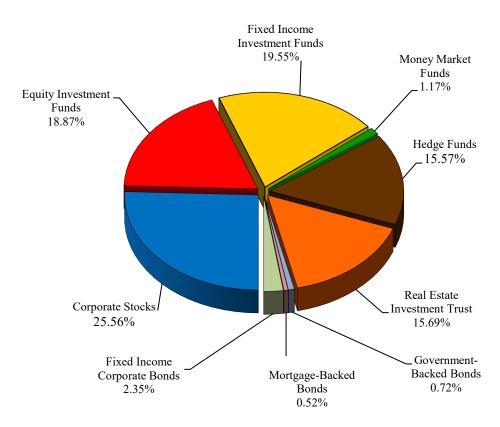
FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS OTHER SUPPLEMENTAL INFORMATION

SUMMARY OF INSURANCE COVERAGE

Type		Coverage
Fiduciary Liability, includes claims expenses	\$	5,000,000
Property:		
Building	\$	623,980
Contents	\$	595,764
General Liability:		
Per occurrence	\$	1,000,000
Aggregate	\$	3,000,000
Workers' Compensation and Employers Liability		Statutory
	\$	1,000,000
Umbrella Liability:		
Per occurrence	\$	1,000,000
Aggregate	\$	3,000,000
Non-owned Automobile	\$	1,000,000
Cyber and Privacy Liability, includes claims expenses	\$	2,000,000
Commercial Crime - Employee Theft	\$	300,000



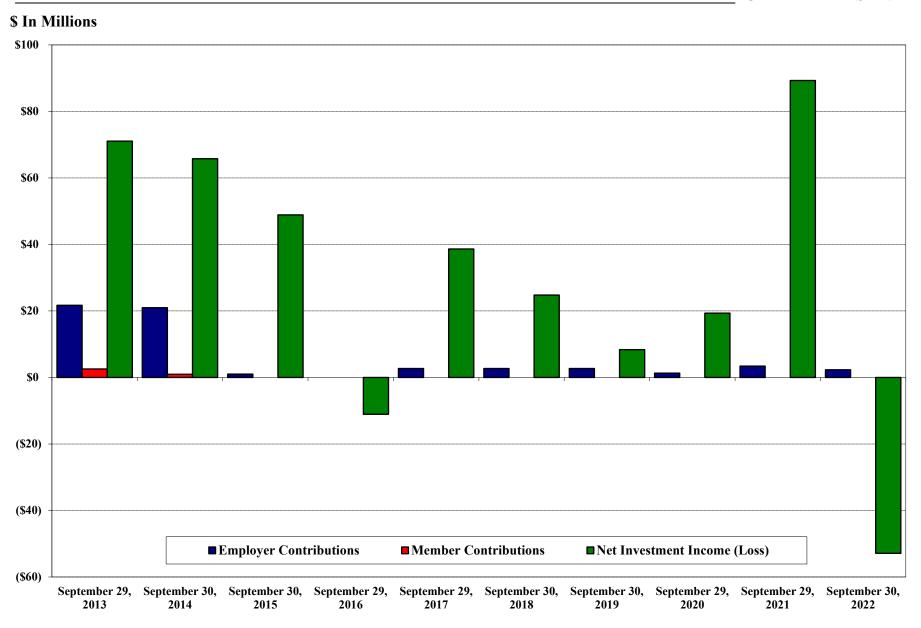
September 30, 2022



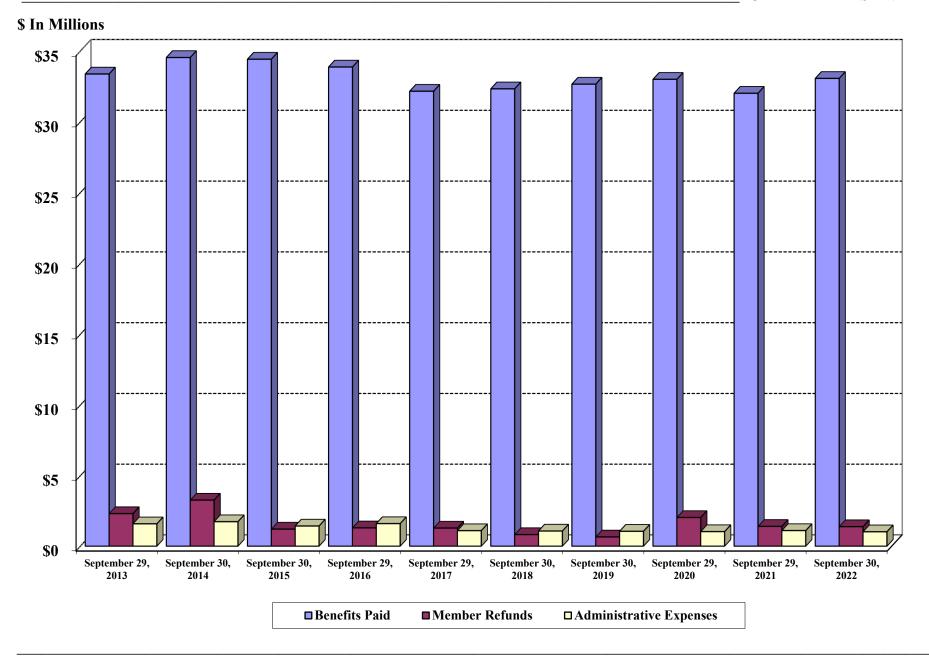
September 30, 2021

FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS ADDITIONS TO NET POSITION

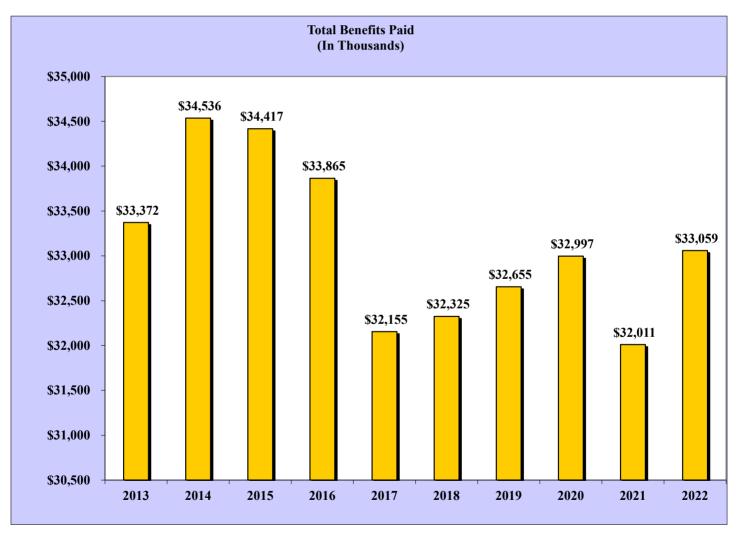
FOR THE YEARS ENDED



DEDUCTIONS FROM NET POSITION FOR THE YEARS ENDED



For The Fiscal Years	Service Betimes*	Accidental	Dans & alania	Ordinary	Doodh	Medical, Surgical, And	Takal
Ended	Retirees*	Disability	Beneficiaries	Disability	Death	Hospital	Total
2013	\$ 16,110,010	13,184,657	3,543,043	464,060	56,000	14,215	33,371,985
2014	16,948,351	13,228,482	3,788,048	495,398	64,000	11,559	34,535,838
2015	16,606,662	13,155,325	3,999,493	587,993	58,000	9,489	34,416,962
2016	16,353,491	12,930,902	3,935,283	584,622	52,000	8,495	33,864,793
2017	15,120,366	12,583,999	3,898,375	493,231	50,000	8,917	32,154,888
2018	14,668,199	13,067,252	4,056,421	474,736	48,000	10,268	32,324,876
2019	15,466,367	12,563,840	4,097,804	476,057	44,000	6,904	32,654,972
2020	16,204,404	12,311,401	3,953,464	472,296	48,000	7,437	32,997,002
2021	16,059,999	11,500,379	3,924,300	456,455	64,000	6,265	32,011,398
2022	16,935,221	11,551,887	4,091,954	434,465	40,000	5,439	33,058,966



^{*}Includes DROP benefit payments.

	FIRE	MEN'S RET		SYSTEM OF CONTROL AND	
Tì	NTERNAL CON	ITROL AND	COMPLIA	NCE SECTI	ON
		VIROL MIVD	COMILIN	TIVEL SECTI	OIV





12655 Olive Blvd., Suite 200 St. Louis, MO 63141 314.275.7277

SIKICH.COM

INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH GOVERNMENT AUDITING STANDARDS

The Board of Trustees FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, the statements of fiduciary net position and the related statements of changes in fiduciary net position of the **FIREMEN'S RETIREMENT SYSTEM OF ST. LOUIS** (the System), a Pension Trust Fund of the City of St. Louis, Missouri, as of and for the year ended September 30, 2022, and the related notes to the financial statements, which collectively comprise the System's basic financial statements and have issued our report thereon dated February 8, 2023.

REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

In planning and performing our audit of the financial statements, we considered the System's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, we do not express an opinion on the effectiveness of the System's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the System's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

REPORT ON COMPLIANCE AND OTHER MATTERS

As part of obtaining reasonable assurance about whether the System's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

PURPOSE OF THIS REPORT

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the System's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the System's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Sikich LLP St. Louis, Missouri

St. Louis, Missouri February 8, 2023