SERS Spokane Employees' Retirement System

Comprehensive Annual Report FOR THE YEAR ENDED DECEMBER 31, 2022

Mada and Sal

A shall be and a start of

Photography by James Richman

Retirement Department City Hall, Suite 604 808 W. Spokane Falls Blvd. Spokane, WA 99201-3324 tel 509.625.6330 fax 509.625.6861



Comprehensive Annual Report

FOR THE YEAR ENDED DECEMBER 31, 2022



Retirement Department City Hall, Suite 604 808 W. Spokane Falls Blvd. Spokane, WA 99201-3324 Tel 509.625.6330 • Fax 509.625.6861

Email: sers@spokanecity.org • www.spokanesers.org

This page intentionally left blank

Introductory Section

This page intentionally left blank

Table of Contents

Introductory Section	
Letter of Transmittal	
Board, Staff, and Advisory Personnel	8
Organizational Chart Description of Retirement System and Service Retirement Options	9
Description of Retirement System and Service Retirement Options	. 10
Financial Section	
Independent Auditor's Report	. 15
Management's Discussion and Analysis	. 18
Statements of Fiduciary Net Position	. 25
Statements of Changes in Fiduciary Net Position	. 26
Notes to the Financial Statements	
Required Supplementary Information	
Additional Supplementary Information	. 43
Actuarial Section	
Certification Letter	. 52
Summary of Valuation Results	
Demographics	
Asset Information	. 66
Accrued Liability	
Actuarial (Gain)/Loss	
Amortization Schedule	
Normal Cost	
Net Pension Liability	. 75
Schedule of Employer Contributions	. 76
GASB 68 Summaries	
Deferred Outflows/(Inflows) Amortization Schedule	
Historical Summary of Fund Additions and Deductions	. 80
Membership and Payment Tables	. 01
Description of Actuarial Assumptions and Methods Summary of Benefit and Contribution Provisions	. 00
Appendix and Exhibits	
Statistical Section	
Schedule of Revenues by Source	
Schedule of Expenses by Type	107
Schedule of Benefit Expenses by Type	
Graph of Retirements by Year	108
List of Service Retirements	
List of Retiree Deaths	
List of Active Member Deaths	110
Investment Section	
Graph of Total Retirement Assets	113
Schedule of Investment Results	
Investments Listed by Type	114

This page intentionally left blank



SPOKANE EMPLOYEES' RETIREMENT SYSTEM 808 W. Spokane Falls Blvd. Spokane, Washington 99201-3324 509.625.6330 FAX 509.625.6861 www.spokanesers.org

To the Honorable Mayor and Spokane City Council Spokane, WA 99201

This 81st Annual Report consists of five sections: The Introductory Section contains the letter of transmittal and an explanation of the administrative organization of the System; the Financial Section contains the audited financial statements of the System as well as an opinion letter from the System's independent certified public accountants; the Actuarial Section contains the consulting actuary's report along with related actuarial data and statements; the Statistical Section contains tables of significant data pertaining to the operation of the System; and the last section is the Investment Section, which includes information related to the System's investments.

The Retirement System began its first year of operations in 1942 and is managed in accordance with Chapters 3.05 and 4.14 of the Spokane Municipal Code. The retirement plan is an employer-sponsored defined benefit plan that pays a determinable amount to each member who retires after a minimum number of years of service. Refer to the Summary of Benefit and Contribution Provisions contained in the Actuarial Section of this report for criteria and a more detailed explanation of the benefits.

The compilation of this report reflects the combined efforts of the staff under the leadership of the Retirement Board. The intention of this report is to provide complete and reliable information to assist in management decisions, to present evidence of compliance with legal provisions and to demonstrate responsible stewardship for the assets contributed by the members and their employer. The accuracy and completeness of the data contained in this report are the sole responsibility of the management of the Spokane Employees' Retirement System.

We would like to express our gratitude to the advisors and the many people who have worked so diligently to assure the successful operation of the System. Lastly, the Director would like to acknowledge the hard work and dedication of the Retirement Department staff. Without them, this report would not be possible.

Respectfully submitted,

Board of Administration, Spokane Employees' Retirement System As of December 31, 2022

Phillip Tencick Retirement Director

Administrative Organization

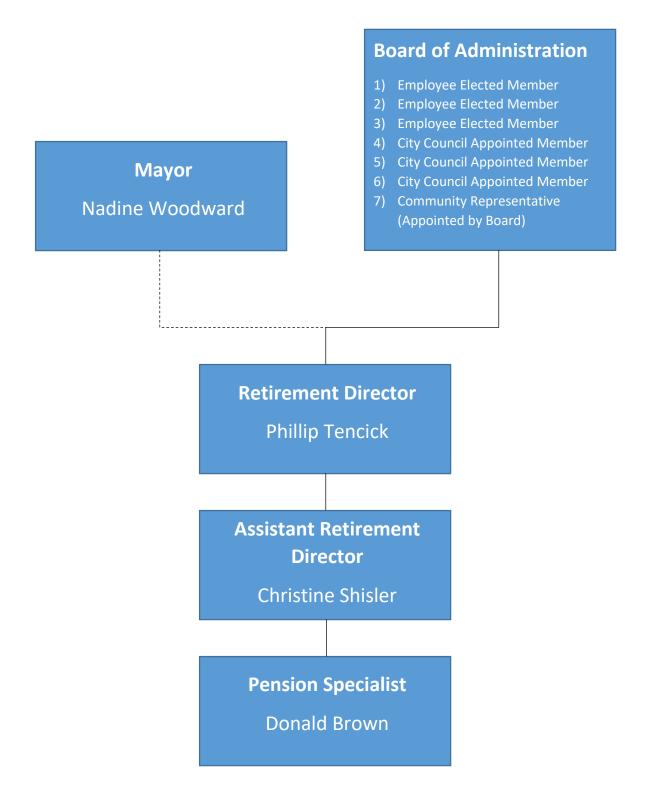
BOARD OF ADMINISTRATION

DUARD OF ADMIIN	ISTRATION	
James Tieken (Chair)	Elected Employee	Refuse District Supervisor, Solid Waste Management
Joseph Cavanaugh	Elected Employee	Water Engineering Tech Foreperson, Water Division
Richard Czernik	Elected Employee	Inventory Control Specialist, Advanced Wastewater Treatment
Jonathan Bingle	Council Appointee	City Council Member, City of Spokane
Brian Brill	Council Appointee	Portfolio Manager, Washington Trust Bank
Brian Myers	Board Appointee	Director of Community Engagement, WSU College of Medicine
Vacant Position	Council Appointee	
INVESTMENT ADV		==
Gene Fitzpatrick	President, Spokane	
Brian Brill	•	Washington Trust Bank
Tonya Wallace	•	cer, City of Spokane
Phillip Tencick		, Spokane Employees' Retirement System
OTAFF		
STAFF Phillip Tencick	Retirement Director	
Christine Shisler	Assistant Retiremer	
Donald G. Brown	Pension Specialist	
Timothy Szambelan	Legal Advisor	
ADVISORY Auditor	Moss Adams	
Actuary	SageView Consultir	ng Group
Investment Consultant	Hyas Group	
Custodian	US Bank	
Legal Counsel	K&L Gates and Ogl	etree, Deakins, Nash, Smoak & Stewart, PC
This Annual Report was	printed and produced	d by Sir Speedy Printing, Spokane, WA

8

Organization Chart

Retirement Department



Description of Retirement System

The Spokane Employees' Retirement System (SERS) is a defined benefit pension plan that was established July 1, 1942. Membership in SERS is required for all permanent non-uniformed employees of the City of Spokane. SERS provides retirement, death, and disability benefits after a member has vested.

SERS is governed by a Board of Administration of seven members. Three members are appointed by the City Council and three employee members are elected by the SERS membership. The seventh member is appointed by the other six members and may not be an elected official or an employee of the City.

Member contributions are currently 10.25% of total salary-based compensation. Member contributions are deducted from the member's salary and paid into the retirement fund, with credit given to the specific member. The City makes an equivalent 10.25% contribution. The City's contributions are used for funding the overall plan.

This following contains a brief summary of the Retirement System; refer to the Summary of Benefit and Contribution Provisions contained in the Actuarial Section of this report for a more detailed explanation of the benefits.

If a member terminates service before vesting, their contributions plus interest are available for withdrawal. If the member is vested and eligible to retire, they can elect to withdraw their contributions or they can elect to receive a monthly pension. If a member is vested and not yet eligible to retire, they can withdraw their contributions or they can vest and receive a pension when they meet the retirement eligibility requirements.

If a member has vested and becomes totally and permanently disabled, the member may be eligible for a disability pension. If the disability is due to an injury incurred on the job, no minimum service is required. The amount of disability pension is calculated based on 1.25% of final average salary and service that would have been creditable had the member worked until normal retirement age.

For employees hired on or before December 31, 2008, their benefits vest with five-years of service. The normal retirement age is 50. The normal retirement benefit is calculated by multiplying 2.15% times the member's years of creditable service times their consecutive two-year monthly salary. Creditable service is capped at 30 years.

For those employees hired between January 1, 2009 and December 31, 2014, their benefits vest with five-years of service. The normal retirement age is 62, with early eligibility when the employee's age plus years of service equals 75. The normal retirement benefit is calculated by multiplying 2.0% times the member's years of creditable service times their consecutive two-year monthly salary. Creditable service is capped at 35 years.

For those employees hired between January 1, 2015 and December 31, 2017, their benefits vest with seven-years of service. The normal retirement age is 65, with early eligibility when the employee's age plus years of service equals 80. The normal retirement benefit is calculated by multiplying 2.0% times the member's years of creditable service times their consecutive three-year monthly salary. Creditable service is capped at 35 years.

For those employees hired on or after January 1, 2018, their benefits vest with seven-years of service. The normal retirement age is 65, with early eligibility when the employee's age plus years of service equals 90 or upon completing 30 years of service and reaching age 50. The normal retirement benefit is calculated by multiplying 2.0% times the member's years of creditable service times their consecutive three-year monthly salary. Creditable service is capped at 40 years. Salary with overtime is capped at 120% for any given year.

There are a number of actuarially equivalent payment options that allow a retiree to provide benefits to his or her beneficiary with a reduction in monthly pension benefits.

SERVICE RETIREMENT OPTIONS

In each option, a pension is paid to the retiree for their lifetime. The options provide different types of a remaining cash balance, paid to a beneficiary, upon death of the retiree. Briefly, the options are as follows:

Normal Benefit The total pension is deducted each month from the retiree's total accumulated contributions, leaving any remaining balance to be paid to a beneficiary in one lump-sum upon the retiree's death.

Option "A" An annuity portion is deducted monthly from the retiree's total accumulations, with a lumpsum cash refund of any remaining balance being paid to a beneficiary upon the retiree's death. (This option is no longer available effective January 1, 2023)

Option "B" The death benefit is the same as in Option A, but it is paid in monthly payments until the balance of the total accumulations is exhausted. (This option is no longer available effective January 1, 2023)

Option "C" In case of death within the guaranteed period, a retiree's beneficiary receives the pension for the remainder of a pre-selected time period of 5, 10, 15, or 20 years.

Option "D" Upon the retiree's death, 50% of the pension is continued to the retiree's spouse for life.

Option "E" Upon the retiree's death, 100% of the pension is continued to retiree's spouse for life.

If a retiree elects options "A" through "E," their monthly pension is actuarially reduced to provide a total benefit equivalent to the Normal Benefit.

At the time of retirement, a retiree also has the option of withdrawing their contributions, with interest, in a lump-sum payment and foregoing all rights to any further benefits from SERS.

Additional information can be obtained at www.spokanesers.org

This page intentionally left blank

Financial Section

Moss-Adams L.L.P. Independent Auditor's Report This page intentionally left blank

) moss<u>a</u>dams

Report of Independent Auditors

The Board of Administration Spokane Employees Retirement System

Report on the Audit of the Financial Statements

Opinion

We have audited the accompanying financial statements of the Spokane Employees' Retirement System (Plan), a component unit of the City of Spokane, Washington, which comprise the statements of fiduciary net position as of December 31, 2022 and 2021, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

In our opinion, the accompanying financial statements referred to above present fairly, in all material respects, the respective fiduciary net position of Spokane Employees' Retirement System as of December 31, 2022 and 2021, and the respective changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits 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* (*Government Auditing Standards*), issued by the Comptroller General of the United States. Our responsibilities under those 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 Plan 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.

Financial Reporting Entity

As discussed in Note 1, the financial statements present only the Plan and do not purport to, and do not, present fairly the financial position of the City of Spokane, Washington, as of December 31, 2022 and 2021, the changes in its financial position, or, where applicable, its cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the 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.

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 opinions. 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 Plan'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.

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.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that management discussion and analysis, schedule of changes in the employer's net pension liability and related ratios, and the schedule of employer's contributions and the schedule of investments returns, as identified in the table on 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.

Supplementary Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Plan's basic financial statements. The schedule of administrative expenses and schedule of investment expenses, as identified in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedule of administrative expenses and schedule of investment expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated May 30, 2023, on our consideration of the Plan'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 solely 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 effectiveness of the Plan's 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 Plan's internal control over financial reporting and compliance.

oss Adams UP

Spokane, Washington May 30, 2023

This section presents management's discussion and analysis of the Spokane Employees' Retirement System's (SERS, System, or Plan) financial performance during the year ended December 31, 2022. Please read it in conjunction with the accompanying financial statements and the related notes.

This report is prepared in accordance with the principles of governmental accounting and reporting promulgated by the Governmental Accounting Standards Board (GASB). Investments are stated at fair market value or net asset value and income includes the recognition of unrealized gains or losses. The accrual basis of accounting is used to record assets, liabilities, revenues, and expenses. Revenue recognition occurs when earned without regard to the date of collection. Expense recognition occurs when the corresponding liabilities are incurred, regardless of payment date. For ease of reading, the dollar amounts that appear in these narratives are typically rounded to the closest one thousand dollars. The basis of contributions to the System is the Entry Age Normal funding method, with current service contributions based on the normal contribution rate determined under the funding method and unfunded prior service amortized as a level percentage of covered payroll over a period of no more than 30 years in accordance with generally accepted accounting principles. SageView Consulting Group, LLC, the System's actuary, evaluates the funding status of the System.

The financial section contains the following information:

- 1. Basic Financial Statements including:
 - a. Statements of fiduciary net position
 - b. Statements of changes in fiduciary net position
 - c. Notes to financial statements
- 2. Required Supplementary Information including:
 - a. Schedule of changes in the employer's net pension liability and related ratios
 - b. Schedule of employer's contributions
 - c. Schedule of investment returns
- 3. Additional Supplementary Information including:
 - a. Schedule of administrative expenses
 - b. Schedule of investment expenses

The basic financial statements are described as follows:

- The statements of fiduciary net position show the account balances at year end and include the net position available for future benefit payments. The Plan's net position is restricted to the payment as shown in the schedule of employers' net pension liability and related ratios.
- The statements of changes in fiduciary net position show the sources and uses of funds during the year corresponding to the change in net position from the previous year.
- The notes to the financial statements are an integral part of the financial statements and include additional detailed information and schedules to provide a better understanding of the financial statements.

The required supplementary information provides historical data and projected obligations that reflect the long-term nature of the Plan and trends over time.

- Schedule of changes in the employer's net pension liability and related ratios contains the items contributing to the changes in the pension liability and Plan's net position. Ratios comparing the unfunded liability to the Plan's net position and covered-payroll are also provided.
- Schedule of employer's contributions contains a history of employee and employer contributions made to the Plan.
- Schedule of investment returns contains a history of the Plan's investment performance on a money-weighted basis.

Financial Highlights

- Net position restricted for pension end of year balance was \$311.1 million for 2022 and \$374.5 million for 2021, a decreased by \$63.4 million (-16.9%) during 2022, and increased by \$34.6 million (10.2%) during 2021. Investments returned -13.5% in 2022, providing \$50.2 million of net investment loss. The net outflows for benefit payments (benefit payments and refunds, less total contributions) were \$13.2 million.
- Total additions and changes in investments were \$-26.4 million in 2022, compared to \$69.2 million in 2021. For 2022, revenue includes member and employer contributions of \$23.8 million and net investment loss of \$50.2 million. Member and employer contributions increased by \$755 thousand (3.3%) in 2022 compared to an increase of \$1.7 million (8.1%) in 2021. Net investment income (or loss), which fluctuates year-to-year depending on market conditions, was \$-50.2 million in 2022, a decrease of \$96.4 million compared to income of \$46.2 million in 2021.
- Total Plan expenses and payments for 2022 were \$36.9 million, a 6.8% increase from 2021. Total expense amounts and fluctuations are primarily driven by pension benefit payments, which make up 98.2% of total expenses. Retiree benefits increased by \$1.8 million (5.4%) during 2022 and by \$1.7 million (5.3%) during 2021. Administrative expenses increased by \$71.5 thousand (11.8%) during 2022 compared to a decrease of \$11 thousand (-1.8%) in 2021.

Financial Statements and Analysis

Changes in Plan Net Position

The table below provides a summary of the changes in Plan net position during the years ended December 31:

	2022	2021	2020
Additions and changes in investments Employer contributions Plan member contributions Net investment income (loss)	\$ 11,863,726 11,931,102 (50,241,335)	\$ 11,519,708 11,519,708 46,166,835	\$ 10,659,281 10,659,281 33,795,088
Total additions and changes in invesments	(26,446,507)	69,206,251	55,113,650
Deductions Benefits Refunds of contributions Net administrative expenses	35,057,797 1,210,280 679,519	33,256,350 741,019 603,645	31,595,115 513,758 619,135
Total deductions	36,947,596	34,601,014	32,728,008
Net increase (decrease) in net position Net position restricted for pensions	(63,394,103)	34,605,237	22,385,642
Beginning of year	374,533,245	339,928,008	317,542,366
End of year	\$ 311,139,142	\$ 374,533,245	\$ 339,928,008

Additions and Changes in Investments to Net Plan Position

Employer contributions increased by 3.0% (\$344 thousand) and Plan participant contributions increased by 3.6% (\$411 thousand) in 2022. In 2021 Employer contributions increased by 8.1% (\$860 thousand) and Plan participant contributions increased by 8.1% (\$860 thousand). Participant contributions may vary from employer contributions if rehired employees exercise their option to buy-back creditable service time from a prior withdrawal upon being rehired. Employer and participant contributions are driven by employees' salaries/wages and the contribution rate. Effective December 26, 2021, the contribution rate changed from 10.0% to 10.25% of salary for both employees and employer. There was no change to the contributions rate in 2022.

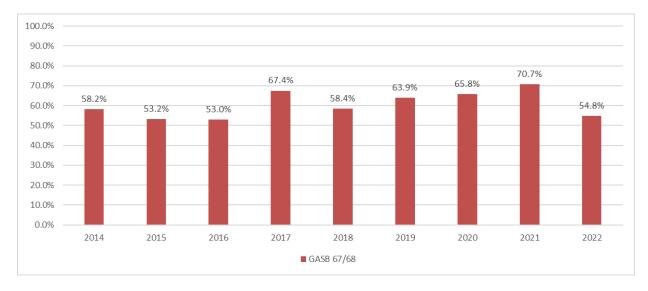
 Net investment loss was \$-50.2 million in 2022 compared to income of \$46.2 million in 2021, a significant decrease from the prior year. In 2022, the portfolio's annual return was -13.5% compared to 13.7% in 2021. In 2021, markets were generally positive. After many quarters of economic headwinds, the market finished 2022 on a broadly positive note, with the S&P 500 and MSCI ACWI ex-USA up +7.56% and +14.28% respectively for the quarter though ending the year at -18.11% and -16.00%. Bond markets also reacted positively on the increasing expectation that inflation is in remission and Fed tightening is approaching a peak. Investment managers in turn conveyed an expectation that although rates are not going back to levels seen a few years back, market activity and issuance can pick back up via rate stabilization. Overall, the market sentiment appeared to show preference to the positive news stemming from the Fed and a strong job market as opposed to the gathering headwinds more apparent in consumer data and corporate margins. In the context of a very challenging year, Capital Preservation was the highest performing asset class, returning -7.41%. Domestic and International Equities were down -18.25% and -17.36% respectively for the year while the remaining asset class returns ranged from -8.09% to -10.62%. On a portfolio-level, Special Opportunities was the strongest contributor, adding +0.07% to benchmark-relative performance while Real Estate was the weakest, detracting -0.54% (this was due to a REIT allocation, which declined in advance of Core Real Estate). Despite 2022's challenging backdrop the portfolio ranked in the top third of comparable peers.

Deductions from Net Plan Assets

- Retiree benefits paid increased by \$1.8 million (5.4%) in 2022 and \$1.6 million (5.3%) in 2021 compared to the prior years. The number of retirees and beneficiaries increased by 48 (3.1%) in 2022 and by 30 (2.0%) in 2021. SERS' active member age is an average of 46.59 years old, which is a slight decrease from 47.27 in 2021. Similarly, average active participant service has remained relatively unchanged, decreasing slightly from 10.90 years in 2021 to 10.20 years in 2022.
- Refunds of contributions increased by \$469 thousand (66.3%) in 2022 compared to an increase of \$227 thousand (44.2%) in 2021. Lump sum withdrawals from the Plan can fluctuate from year to year based on the number of participants that leave the system and the average size of withdrawal.
- Net administrative expenses include salaries and benefits for SERS staff, along with other costs associated with administering the Plan. These expenses are shown on the Schedule of Administrative Expenses. Staff and the SERS Board of Administration (Board) continue to be diligent about Plan operating expenses. The net administrative expenses were \$680 thousand, an increase of 11.8% compared to 2021. The increase to administrative expenses is primarily due to an increase in professional services and education with travel. Administrative expenses represent only 1.8% of total annual expenditures and rose as a proportion of total assets to 0.22%.

Funding Status

The Net Pension Liability (NPL) is the actuarial present value of benefits accrued, adjusted to reflect future changes based on the actuarial assumptions. The funded ratio compares the NPL to Plan assets.



This schedule is designed to show information for 10 years. However, until a full 10-year trend is compiled, the Plan will present information for those years for which information is available.

Beginning in 2014, and reported retrospectively, the implementation of the Governmental Accounting Standards Board (GASB) No. 67 resulted in a new method for measuring the future value of Plan liabilities. The discount rate for any funding shortfalls moved from the long-term assumed rate of return to the municipal bond borrowing rate for all points in time after fund assets are projected to be depleted. This change in methodology reduced the discount rate from 7.50% to 5.50%, which increased the value of the reported unfunded liability through 2016. The lower discount rate reduced the funding ratio from 69.3% to 58.2% in 2014 when GASB No. 67 was implemented for the Plan.

In 2017, a new tier was added to the Plan that reduced the normal cost for employees hired on or after January 1, 2018. In addition, the participant and employee contribution rates are now tied to the Actuarially Determined Contribution (ADC) rate as determined by the Plan's actuary in the annual valuation. These changes were sufficient to eliminate the projected depletion of assets and set the discount rate equal to the 7.50% assumed rate of return.

Funds are accumulated from employer and employee contributions and investment earnings and are used to pay present and future benefit obligations and administrative expenses. For most of 2021, active members contributed 10.0% of their salaries to the Plan and the City contributed 10.0%, for a total of 20.00%. Starting December 26, 2021, active members contributed 10.25% of their salaries to the Plan and the City contributes 10.25%, for a total of 20.50%. The current 10.25% employer and employee contribution rate is expected to allow the Plan to gradually improve its funded position.

Investment Activities

One-year returns on asset classes and comparative benchmarks are presented in the table below. The policy indices and benchmarks are in italics.

	Investment Return		
	2022	2021	
Total portfolio	-13.5%	13.7%	
Policy Index	-12.3%	14.1%	
Capital Preservation	-7.4%	2.4%	
Capital Preservation Policy Index	-8.1%	3.1%	
Total Return Bonds	-12.7%	-1.0%	
Bloomberg US Aggregate Bond Index	-13.0%	-1.6%	
High Yield Bonds	-9.7%	6.8%	
Bloomberg US Corporate High Yield Index	-11.2%	5.3%	
Absolute Return	-2.3%	4.1%	
HFRI FOF Conservative Index	0.1%	7.6%	
Domestic Equity	-18.2%	25.7%	
Domestic Equity Policy Index	-18.2%	25.1%	
US Large Cap Equities	-18.1%	29.1%	
S&P 500 Index	-18.1%	28.7%	
US Small/Mid Cap Equities	-18.5%	19.7%	
Russell 2500 Index	-18.4%	18.2%	
International Equity	-17.4%	9.7%	
International Equity Policy Index	-17.2%	7.3%	
International Large Cap Equities	-14.4%	9.9%	
MSCI ACWI Ex-US Index	-16.0%	7.8%	
International Small/Mid Cap Equities	-23.1%	12.4%	
MSCI ACWI Ex-US Small Cap Index	-20.0%	12.9%	
Emerging Market Equities	-23.0%	5.6%	
MSCI EM Free Index	-20.1%	-2.5%	
Long Biased Hedge Funds	-8.4%	4.5%	
HFRI FOF Composite Index	-5.3%	6.1%	
Opportunistic Credit	-8.1%	20.6%	
HFRI Distressed Restructuring Index	-4.3%	15.6%	
Real Estate	-10.6%	27.9%	
NCREIF ODCE Index	6.6%	21.0%	
Special Opportunities	-10.3%	-21.5%	
Russell 3000 Index	-19.2%	25.7%	

The investments of the System are governed by the "prudent investor rule." The prudent investor rule, as set forth by state statute, establishes a standard for all fiduciaries, which includes anyone who has authority with respect to the fund.

The System is a long-term investor with a perpetual investment horizon, anticipating ongoing investment cycles with both good and bad years for financial markets. Investments are diversified to reduce investment risk and mitigate the risk of underperforming the actuarial rate of return. While annual market performance is unlikely to match the actuarial rate of return in any given year, long-term returns are expected to be in line with the assumption based on the diversified nature of the portfolio. Each alternative investment that SERS enters into has been carefully studied by the System's independent investment consultant and has been reviewed by the Retirement Director and the Board. The asset allocation study that was modeled by the independent consultant and completed in 2016 demonstrated that alternative assets have low correlations to traditional asset classes and are expected to add value to the portfolio over time. The Chief Investment Officer (CIO) and Board believe the use of alternative investing only in traditional asset classes.

Contacting the Spokane Employees' Retirement System

If you have questions about this report or need additional information, please contact:

Spokane Employees' Retirement System City Hall – Suite 604 808 W. Spokane Falls Blvd. Spokane, WA 99201 www.spokanesers.org 509.625.6330

Spokane Employees' Retirement System Statements of Fiduciary Net Position December 31, 2022 and 2021

	2022	2021			
Assets					
Cash Short-term investments	\$	\$ 268,476 1,795,164			
Total cash and short-term investments	1,023,993	2,063,640			
Receivables Investment income Other	217,767 3,012	195,806 777			
Total receivables	220,779	196,583			
Investments	309,914,488	372,281,363			
Capitalized software, net	158,841	176,490			
Total assets	\$ 311,318,101	\$ 374,718,076			
Liabilities					
Payables Accounts payable Employee salaries and benefits Employee leave benefits Other liabilities Total liabilities	\$ 85,365 7,271 74,936 11,387 178,959	\$ 104,517 5,667 62,125 12,522 184,831			
Net position restricted for pensions	\$ 311,139,142	\$ 374,533,245			

Spokane Employees' Retirement System Statements of Changes in Fiduciary Net Position Years Ended December 31, 2022 and 2021

	2022	2021
Additions and changes in investments		
Contributions	• • • • • • • • • •	• • • • • • • • • •
Employer	\$ 11,863,726	\$ 11,519,708
Member	11,931,102	11,519,708
Total contributions	23,794,828	23,039,416
Investment income (loss)		
Net appreciation (depreciation) in fair value of		
investments	(54,068,120)	41,998,002
Interest and dividends	4,326,389	4,726,318
Less investment expense	(499,604)	(557,485)
Net investment income (loss)	(50,241,335)	46,166,835
Total additions and changes in investments	(26,446,507)	69,206,251
Deductions		
Benefit payments	35,057,797	33,256,350
Refunds of member contributions	1,210,280	741,019
Administrative expenses, net of administrative income	679,519	603,645
Total deductions	36,947,596	34,601,014
Net increase (decrease) in net position	(63,394,103)	34,605,237
Net position restricted for pensions		
Beginning of year	374,533,245	339,928,008
End of year	\$ 311,139,142	\$ 374,533,245

Note 1 – Plan Description

Plan administration – The Spokane Employees' Retirement System (SERS, System, or Plan) is a multiple employer defined benefit pension plan covering employees of the City of Spokane (City), administered in accordance with Chapters 3.05 and 4.14 of the Spokane Municipal Code (SMC).

SERS is a pension trust fund of the City and is presented as a blended component unit within the fiduciary fund of the City's comprehensive annual financial report. SERS has separate legal standing. The City is financially accountable for SERS because a financial burden is imposed on the City using the criteria of financial accountability. SERS has determined there are no entities that require inclusion within its financial statements.

All permanent employees of the City, including employees of the Plan, are eligible to belong to SERS with the exception of elected officials, who may opt out of the Plan, and police and firefighters, who are members of the State Law Enforcement Officers and Firefighters' Retirement System. Additionally, certain SERS members that moved to the Spokane Regional Emergency Communications (SREC) are eligible to remain in SERS. Such members have the same benefits, eligibility requirements, and contribution rates as current SERS members.

Management of SERS is vested in the SERS Board of Administration (Board), which consists of seven members: three members are elected by active employee Plan members, three members are appointed by the Spokane City Council, and one member (who may not be an elected official or employee of the City) is appointed by the other six Board members.

Reporting entity – The accompanying financial statements present only the Plan, a component unit of the City, and are not intended to present fairly the financial position of the City, the changes in its financial position, or where applicable, its cash flows in accordance with accounting principles generally accepted in the United States of America.

Plan membership – At December 31, 2022 and 2021, pension Plan membership consisted of the following:

	2022	2021
Retirees or beneficiaries currently receiving benefits Inactive plan members entitled to but not yet receiving benefits	1,582 161	1,534 134
Active plan members	1,535	1,494
	3,278	3,162

Benefits provided – SERS provides retirement, death, and disability benefits. All employees hired before January 1, 2009, who participate in SERS, are eligible for service retirement after completing five years of service if they are age 50 or older. Their retirement benefits are calculated by multiplying 2.15% of the member's highest consecutive two-year average salary by the member's years of creditable service, not to exceed 64.5%. Employees hired prior to January 1, 2009, may retire under the terms of a subsequent tier if it provides a greater benefit.

All employees hired between January 1, 2009, and December 31, 2014, who participate in SERS, are eligible for service retirement after completing five years of service and reaching the normal retirement age of 62. This group of employees may retire early with full benefits if they reach age 50 and their age, plus years of service, total to 75. Retirement benefits are calculated by multiplying 2.00% of the member's highest consecutive two-year average salary by the member's years of creditable service, to a maximum of 70.0%. In addition, the employees hired between January 1, 2009, and December 31, 2014, may retire under the terms of a subsequent tier if it provides a greater benefit.

All employees hired between January 1, 2015, and December 21, 2017, who participate in SERS, are eligible for service retirement after completing seven years of service and reaching the normal retirement age of 65. This group of employees may retire early, with full benefits, if they reach age 50 and their age, plus years of service, total to 80. Retirement benefits are calculated by multiplying 2.00% of the member's highest consecutive three-year average salary by the member's years of creditable service, to a maximum of 70.00%. Employees hired between January 1, 2015, and December 31, 2017, may retire under the terms of a subsequent tier if it provides a greater benefit.

All employees hired on or after January 1, 2018, who participate in SERS, are eligible for service retirement after completing seven years of service and reaching the normal retirement age of 65. Early retirement, with no reduction of benefits, may be elected when an employee's age plus years of service total to 90 or if they are age 50 or older and complete 30 years of service. A reduced early retirement may be elected with benefits reduced by 2.5% per year for each year before the retiree would be eligible for full retirement. Retirement benefits are calculated by multiplying 2.00% of the member's highest consecutive three-year average salary by the member's years of creditable service, with an annual cap on overtime plus base pay equal to 120% of base pay. The maximum retirement factor is 80.0%.

For all employee groups, benefits may be reduced on an actuarially equivalent basis according to the retirement annuity option selected for themselves and their beneficiaries.

The Board considers issuing an ad hoc adjustment for retiree benefits each year. The Board can grant an ad hoc adjustment if the funded ratio is 90% or greater and remains above 90% after the ad hoc adjustment is granted. The funded ratio was less than 90% as of December 31, 2022. The last ad hoc retiree adjustment occurred in 2001. Based on the current funded ratio, the Plan does not anticipate making ad hoc adjustments for the foreseeable future. It will take continued favorable experience in the investment markets or an increase in contribution levels to raise the funded ratio above the ad hoc threshold.

Note 2 – Summary of Significant Accounting Policies

Basis of accounting – The financial statements were prepared using the accrual basis of accounting. Employee and employer contributions are recorded as revenues in the period in which payroll is due and expenses are recorded when the corresponding liabilities are incurred. Interest income is recognized when earned and dividend income is recognized on the ex-dividend date.

Use of estimates – In preparing the Plan's financial statements, management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Methods used to value investments – All fixed income, common stock, and short-term investments are listed at fair market value. Fixed income securities and common stock traded on national exchanges are valued at fair market value based on the closing price of the securities. Investments that do not have an established market are reported at estimated fair value.

Investment fees 20represent cash payments made to money managers and other investment professionals. Certain investments, such as mutual funds and limited partnerships, net their management fees before the fund itself reports net investment income for the period and are not reflected in this schedule. However, these investment expenses are netted against investment income in the statement of changes in fiduciary net position to arrive at a net investment income amount.

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

Note 3 – Deposits and Investments

Deposits – The Federal Deposit Insurance Corporation (FDIC) insures the cash deposits up to \$250,000 per depositor. As provided by State of Washington RCW 43.84, the Washington Public Deposit Protection Commission (PDPC) collateralizes deposits in excess of \$100,000.

Investment policy – The Plan's policy regarding the allocation of invested assets is established, and may be amended, by a majority vote of the Board. It is the policy of the Board to pursue an investment strategy that meets the projected return requirements while minimizing volatility by diversifying the portfolio across a broad selection of distinct asset classes. The Plan's investment policy limits the use of cash equivalents to meeting liquidity requirements and reviews rebalancing needs at least quarterly. The investment policy was not updated during the reporting period.

The following was the Board's target asset allocation as of December 31, 2022 and 2021:

Asset Class	Target A	llocation
	2022	2021
Domestic equities	32%	32%
Capital preservation	23%	23%
International equities	22%	22%
Real estate	9%	9%
Long biased	7%	7%
Opportunistic credit	7%	7%
Special opportunities ¹	0%	0%
Total	100%	100%

¹ By policy, special opportunities may be up to 10%

Rate of return – For the years ended December 31, 2022 and 2021, the annual money-weighted rate of return on pension Plan investments, net of pension Plan investment expense, was -8.5% and 13.7%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Investments – The SERS' investment management policy is set by the Board. The investment policy sets strategic asset allocation targets and ranges for all approved asset classes. SERS investments are governed by an investment standard known as the "prudent person rule." The prudent person rule, as set forth by state statute, establishes a standard for all fiduciaries, which includes anyone who has authority with respect to the Plan.

Investments of the pension trust funds are reported at fair value. The Board maintains a formal Statement of Investment Policy, which addresses governing provisions and additional guidelines for the investment process. In fulfilling its responsibilities, the Board has contracted with investment managers, a custodian, and an independent investment consultant. Investment manager contracts include specific guidelines regarding the investments under management. All investments are held in custody. The independent investment consultant monitors the fund on a regular basis and provides quarterly reports to staff and the Board.

The Board has an asset allocation policy that includes allocations to alternative investments. The term "alternative investments" encompasses a broad category of investments other than traditional asset classes of equites, fixed income, and real estate. Funding of these investments began in 2007 and continues on an ongoing basis.

Credit risk – Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations to the System. Although the SERS Investment Policy does not specifically address credit risk, this risk is mitigated by closely monitoring the credit quality ratings of its fixed income portfolios and by setting criteria for fixed income manager selection. SERS' fixed income assets are comprised of one institutional class mutual fund and one separately managed account targeting different levels of credit risk.

Concentration of credit risk – SERS has no holdings by an issuer that represent five percent or more of SERS' investments at December 31, 2022 and 2021. SERS' holdings in organizations that manage five percent or more of the Plan's fiduciary net position at December 31, 2022 and 2021, were:

	2022	2021
Organization	% of Net Pe	osition
Hotchkis & Wiley	11.6%	9.2%
Sterling Capital Management	10.2%	9.0%
Artisan Partners	9.5%	7.9%
American Funds	7.7%	6.8%
MFS Investment Management	6.5%	5.2%
Evanston Capital Management	6.0%	6.0%
Principal Global Investments	2.2%	5.2%
Fidelity Investments	0.0%	12.8%

Custodial credit risk – Custodial credit risk is the risk that in the event of a financial institution or bank failure, SERS would not be able to recover the value of its deposits and investments that are in the possession of an outside party. SERS does not have exposure to custodial credit risk.

Interest rate risk – Interest rate risk is the greatest risk faced by an investor in the debt securities market. The price of a debt security typically moves in the opposite direction of the change in interest rates. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. Although the SERS Investment Policy does not specifically limit interest rate risk, the System's fixed income portfolio is professionally managed with an expected range of interest rate risk within the portfolio. In addition, the portfolio is closely monitored by the independent consultant and the staff.

The table below shows the System's fixed income assets by investment type, average effective maturity, and market value as of December 31, 2022:

Asset	 Fair Value	 Less than 1 Year	 1-5 Years	6	-10 Years	M	ore than 10 Years
Fixed income mutual funds	\$ 20,230,050	\$ 20,230,050	\$ -	\$	-	\$	-
Corporate notes and bonds	5,615,602	318,320	2,226,415		1,267,470		1,803,398
Asset backed securities	6,037,583	-	1,004,376		1,810,213		3,222,994
Governmental CMOs	4,887,423	-	-		66,609		4,820,814
Municipal bonds	1,196,272	505,716	42,089		370,366		278,101
Mortgage backed governmental passthrough	952,883	-	-		624,352		328,531
U.S. government treasuries	 5,041,688	 799,885	 208,900		1,152,956		2,879,946
	\$ 43,961,501	\$ 21,853,970	\$ 3,481,781	\$	5,291,966	\$	13,333,784

The table below shows the System's fixed income assets by investment type, average effective maturity, and market value as of December 31, 2021:

Asset	 Fair Value	 Less than 1 Year		1-5 Years	 6-10 Years	M	lore than 10 Years
Fixed income mutual funds	\$ 23,218,830	\$ 23,218,830	\$	-	\$ -	\$	-
Corporate notes and bonds	10,930,043	311,612		3,680,158	2,713,369		4,224,904
Asset backed securities	7,233,237	-		1,819,972	1,186,041		4,227,224
Governmental CMOs	3,402,236	-		-	94,633		3,307,603
Municipal bonds	1,709,705	313,249		569,317	443,900		383,239
Mortgage backed governmental passthrough	1,153,470	-		-	692,260		461,210
U.S. government treasuries	 2,692,618	1,627,310	_	112,520	7,351		945,437
	\$ 50,340,139	\$ 25,471,001	\$	6,181,966	\$ 5,137,554	\$	13,549,617

Foreign currency risk – Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. At December 31, 2022 and 2021, 26.8 % and 28.9%, respectively, of the System's portfolio is invested in foreign issued securities, which primarily consist of equities, fixed income, and alternative investments. The SERS Investment Policy does not specifically address foreign currency risk; however, the System considers foreign currency risk during the selection and monitoring process of fund managers. The fair market value of the foreign investments as of December 31, 2022, were:

	Total Investments	U.S. Issues	U.S. Issues Foreign Issues					
Cash	\$ 912,268	3 \$ 912,268	\$ -	0.0%				
Fixed income	43,961,50	43,130,797	830,704	1.9%				
Equities	159,684,61	93,815,044	65,869,573	41.2%				
Real estate	30,758,87	5 30,758,875	-	0.0%				
Alternatives	75,509,494	58,859,761	16,649,732	22.0%				
Total	\$ 310,826,75	<u>\$ 227,476,745</u>	\$ 83,350,009	26.8%				

The fair market value of the foreign investments as of December 31, 2021, were:

	Total Investments	U.S. Issues	Foreign Issues	% Foreign	
Cash	\$ 1,795,164	\$ 1,795,164	\$ -	0.0%	
Fixed income	50,340,139	46,651,986	3,688,153	7.3%	
Equities	204,543,821	118,843,367	85,700,454	41.9%	
Real estate	33,697,767	33,697,767	-	0.0%	
Alternatives	83,699,636	65,122,533	18,577,103	22.2%	
Total	\$ 374,076,527	\$ 266,110,817	\$ 107,965,710	28.9%	

Note 4 – Pension

The components of the employer's net pension liability as of December 31, 2022 and 2021, are:

	2022	2021		
Total pension liability Plan fiduciary net position	\$ 567,457,183 311,139,142	\$ 529,869,491 374,533,245		
Employer's net pension liability	\$ 256,318,041	\$ 155,336,246		
Plan fiduciary net position as a percentage of the total pension liability	54.83%	70.68%		

Actuarial assumptions are adopted by the Board, upon review of recommendations made by the actuary. An experience study was conducted for the five-year period ended December 31, 2021. This study resulted in the Board adopting several changes in assumptions as of December 31, 2022, at the recommendation of the actuary, in order to better anticipate emerging experience under the System. Changes in assumption include the mortality tables changed from RP-2000 Fully Generational in 2021 to PUB-2010 with ages set forward 2 years for males and 1 year for females using Projection Scale MP-2021 in 2022. In addition, the inflation rate increased from 2.25% in 2021 to 2.5% in 2022. Finally, the annual payroll growth rate decreased from 4% in 2021 to 3.5% in 2022.

The long-term expected rate of return – The long-term expected rate of return on pension Plan investments was determined using statistical methods to determine the best-estimate future real rate of return (net of pension Plan investment expense and inflation) based on long-term performance of the major asset classes. These returns are used to determine the estimated portfolio return based on the target asset allocation percentage of each asset class. Best estimates of geometric real rates of return for each major asset class included in the pension Plan's target asset allocation as of December 31, 2022 and 2021, are summarized in the following table:

	2022	1	2021			
Asset Class	Long-Term Expected Real Rate of Return	Nominal Return	Long-Term Expected Real Rate of Return	Nominal Return		
Domestic equities	7.0%	9.54%	6.5%	9.54%		
Capital preservation	2.4%	4.92%	1.9%	4.92%		
International equities	6.4%	8.90%	5.9%	8.90%		
Long biased	3.7%	6.20%	3.2%	6.20%		
Opportunistic credit	7.5%	9.95%	3.0%	5.95%		
Real estate	2.7%	5.15%	2.2%	5.15%		
Inflation		2.50%		3.00%		

Discount rate – The discount rate used to measure the total pension liability was 7.5%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current 10.25% contribution rate, which went into effect December 26, 2021, and that City contributions will be made at the same rate. Generally accepted accounting principles (GAAP) requires the use of a blended discount rate to the extent future contributions are not projected to be sufficient to provide future benefits for the current closed group of Plan participants. If that is the case, the expected long-term rate of return on Plan assets, currently 7.5%, is used for the period where assets are projected to be sufficient and the current yield on the 20-year AA municipal bonds is used thereafter.

Sensitivity of the net pension liability to changes in the discount rate – The following presents the net pension liability of SERS, calculated using the blended discount rate of 7.5%, as well as what SERS's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower (6.5%) or 1 percentage point higher (8.5%) than the current rate:

	Current				
	1% Decrease (6.5%)	Discount Rate (7.5%)	1% Increase (8.5%)		
Employer's net pension liability	\$ 315,900,727	\$ 256,318,041	\$ 205,519,330		

Note 5 – Fair Value Measurement

Investments measured and reported at fair value are classified according to the following hierarchy, in accordance with GASB Statement 72 – *Fair Value Measurement and Application:*

Level 1 – Quoted prices for an identical asset in an active market.

Level 2 – Quoted prices for an identical asset in an inactive market and market values where prices are determined using observable inputs.

Level 3 – Market value where prices are determined using unobservable inputs.

NAV – Net Asset Value (NAV) is used as a practical expedient where the investment does not have a readily determinable fair value.

The categorization of investments within the hierarchy is based upon the pricing transparency of the instrument and should not be perceived as the particular investment's risk.

Equity investments classified as Level 1 in the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Equity investments classified as Level 2 represent proportional ownership in Collective Investment Trusts (CIT). All assets in the CIT have observable prices in active markets, with the fair value of the CIT representing a proportionate share of all underlying assets held in the CIT.

Fixed income investments classified as Level 1 in the fair value hierarchy are valued directly from a predetermined primary external pricing vendor. Fixed income investments classified as Level 2 represent quoted prices for similar assets.

The following table	presents fair value measuremer	nts as of December 31, 2022:

	2022									
	Fair Value		Level 1		Level 2		Level 3		NAV	
Cash equivalents	\$	912,268	\$	912,268	\$	-	\$	-	\$	-
US Government		10,881,994		-		10,881,994		-		-
US corporate fixed income		4,784,899		-		4,784,899		-		-
International fixed income		830,703		-		830,703		-		-
Asset backed securities		6,037,583		-		6,037,583		-		-
Municipal bonds		1,196,272		-		1,196,272		-		-
Fixed income mutual funds		20,230,050		20,230,050				-		-
Total fixed income		43,961,501		20,230,050		23,731,451		-		-
US common stock		21,250,230		12,208,414		-		-		9,041,816
International common stock		12,669,343		307,776		-		-		12,361,567
Equity mutual funds	1	25,765,045	1	25,685,975		79,070	1	-		-
Total equities	1	59,684,618	1	38,202,166		79,070		-		21,403,383
Real estate		30,758,875		11,715,116		-		-		19,043,758
Alternatives		75,509,494						-		75,509,494
Total investments	\$ 3	10,826,756	\$ 1	71,059,600	\$	23,810,521	\$		\$	115,956,635

The following table presents fair value measurements as of December 31, 2021:

	2021						
	Fair Value	Level 1	Level 2	Level 3	NAV		
Cash equivalents	\$ 1,795,164	\$ 1,795,164	\$-	\$-	\$-		
US Government	7,248,325	-	7,248,325	-	-		
US corporate fixed income	9,235,858	-	9,235,858	-	-		
International fixed income	1,694,186	-	1,694,186	-	-		
Asset backed securities	7,233,237	-	7,233,237	-	-		
Municipal bonds	1,709,704	-	1,709,704	-	-		
Fixed income mutual funds	23,218,830	23,218,830					
Total fixed income	50,340,140	23,218,830	27,121,310	-	-		
US common stock	30,739,637	14,776,342	-	-	15,963,295		
International common stock	12,317,404	533,560	-	-	11,783,844		
Equity mutual funds	161,486,780	145,523,485	15,963,295				
Total equities	204,543,820	160,833,386	15,963,295	-	27,747,139		
Real estate	33,697,767	19,398,925	-	-	14,298,842		
Alternatives	83,699,636				83,699,636		
Total investments	\$ 374,076,527	\$ 205,246,305	\$ 43,084,605	\$-	\$ 125,745,617		

Spokane Employees' Retirement System Notes to Financial Statements

The valuation method for investments measured at the NAV per share, or equivalent, at December 31, 2022 and 2021, are presented in the tables below:

				2022	
	Ne	et Asset Value (NAV)	Unfunded ommitments	Redemption Frequency	Redemption Notice
Equity fund	\$	21,403,383	\$ -	Monthly, annually	15-90 days
Long/short hedge fund		20,448,482	-	Quarterly	60-65 days
Real estate fund		19,043,758	10,355,129	N/A, quarterly with queue	90 days
Absolute return hedge fund		26,046,188	-	Monthly, quarterly, semi-annual	30-45 days
Closed-end hedge fund		817,899	272,444	N/A	N/A
Fixed income fund		28,196,926	 -	Quarterly	90 days
Total investments valued at NAV	\$	115,956,636	\$ 10,627,573		
				2021	

	Ne	et Asset Value (NAV)	-	Jnfunded mmitments	Redemption Frequency	Redemption Notice
Equity fund	\$	27,747,139	\$	-	Monthly, annually	15-90 days
Long/short hedge fund		26,033,783		-	Quarterly	60-65 days
Real estate fund		14,298,842		5,267,787	N/A, quarterly with queue	90 days
Absolute return hedge fund		26,338,751		-	Monthly, quarterly, semi-annual	30-45 days
Closed-end hedge fund		1,008,579		2,780,081	N/A	N/A
Fixed income fund		30,318,523		-	Quarterly	90 days
Total investments valued at NAV	\$	125,745,617	\$	8,047,868		

Equity fund – Three funds that invest long-only in less efficient markets seeking to capture illiquidity and information asymmetry premiums. The two domestic equity funds are invested in collective investment vehicles that are valued based on a pro-rata share of the overall fund. The fund is a fund of funds and valued based on the net asset value provided for each of the underlying investments.

Long/short hedge fund – Two funds that invest long and short to generate outsize risk-adjusted returns. One fund is valued at net asset value of units held based on underlying holdings. One fund is a fund of funds and is valued based on the net asset value provided for each of the underlying units.

Real estate fund – Four funds that invest primarily in commercial real estate properties and debt instruments. The fair values of these funds have been determined using net assets valued based on the appraised value of the holdings. Four funds are not eligible for redemption with distributions received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years. One fund allows for quarterly redemptions subject to a queue and provides quarterly distributions based on the net operating profit of the properties owned.

Absolute return hedge fund – Three funds that seek to generate consistent positive returns with low volatility and low net market exposure. Each fund's unit net asset value is based on the value of the underlying holdings.

Spokane Employees' Retirement System Notes to Financial Statements

Closed-end hedge fund – Two funds that invest primarily in medical royalty streams or securities associated with the royalties. The fair value of the fund is determined using discounted cash flow models based on expected future cash flows. The fund is not eligible for redemption. Distributions are received as underlying investments within the fund generates cash flows, which on average can occur over the span of 5 to 10 years.

Fixed income fund – Three funds that invest in less liquid or distressed debt securities. All funds unit net asset value is based on the value of the underlying holdings.

Note 6 – Contributions Required and Contributions Made

Member and employer contribution rates are established by City Code, Chapter 4.14. Effective December 26, 2021, member contributions are 10.25% of eligible compensation and are deducted from the member's salary and paid into the retirement fund; the City contributes 10.25% of eligible compensation for a combined total of 20.50%. Member and employer contribution rates are established by City Code, Chapter 4.14. Effective December 27, 2020, member contributions were 10.0% of eligible compensation and are deducted from the member's salary and paid into the retirement fund; the City contributed 10.0% of eligible compensation for a combined total of 2 compensation and were deducted from the member's salary and paid into the retirement fund; the City contributed 10.0% of eligible compensation for a combined total of 20.0%. Effective December 15, 2019, member contributions were 9.75% of eligible compensation and were deducted from the member's salary and paid into the retirement fund; the City contributed 9.75% of eligible compensation for a combined total of 20.75%.

Contribution rates are reviewed annually to determine if they meet the Actuarially Determined Contribution (ADC). If the contribution rate is less than the ADC, the contribution rate shall be increased by up to 1.0% per year for both the employee and employer. It is contemplated that over the long term, the contribution by the City will, when added to the member's contribution, plus other revenues, be enough to properly fund the retirement benefits set forth.

Required Supplementary Information

		2022		2021		2020		2019		2018	2(2017		2016
Total pension liability Service cost Interest	\$	10,676,035 38,404,746	ŝ	10,379,208 37,498,043	÷	10,326,519 36,091,730	θ	9,814,459 34,666,267	θ	9,397,166 33,296,148	\$ 53	13,133,393 29,336,782	θ	12,896,547 27,443,176
Changes of benefit terms Differences between expected and actual experience Changes of assumptions		- 13,014,651 11,760,337		- (675,673) -		- 5,368,635 -		- 5,866,404 -		- 5,291,272 -	(3 (76	165,092 (3,830,239) (76,976,691)	Ċ	- 12,381,445 (14,542,266)
Benefit payments, including refunds of member contributions		(36,268,077)	\sim	(33,997,369)		(32,108,873)		(30,600,302)		(28,863,766)	(27	(27,443,693)		(26,467,256)
Net change in total pension liability Total pension liability—beginning		37,587,692 529,869,491		13,204,209 516,665,282		19,678,011 496,987,271		19,746,828 477,240,443		19,120,820 458,119,623	(65 52:	(65,615,356) 523,734,979	CD.	11,711,646 512,023,333
Total pension liability—ending (a)	ф	567,457,183	\$	529,869,491	φ	516,665,282	ф	496,987,271	φ	477,240,443	\$ 458	458,119,623	сл сл	523,734,979
Plan fiduciary net position Contributions—employer Contributions—member Net investment income (loss)	6)	11,863,726 11,931,102 (50,241,335)	÷	11,519,708 11,519,708 46,166,835	\$	10,659,281 10,659,281 33,795,088	\$	9,824,717 9,827,760 50,166,728	\$	9,187,420 9,188,781 (18,715,945)	8 8 8 4	8,113,319 8,113,319 43,085,572	ŝ	7,586,365 7,586,362 16,802,274
Benefit payments, including refunds of member contributions Administrative expense		(36,268,077) (679,519)	<u> </u>	(33,997,369) (603,645)		(32,108,873) (619,135)		(30,600,302) (555,763)		(28,863,766) (554,484)	(27	(27,443,693) (563,078)		(26,467,256) (477,252)
Net change in plan fiduciary net position Plan fiduciary net position—beginning		(63,394,103) 374,533,245		34,605,237 339,928,008		22,385,642 317,542,366		38,663,140 278,879,226		(29,757,994) 308,637,220	3. 27	31,305,439 277,331,781		5,030,493 272,301,291
Plan fiduciary net position—ending (b)	⇔	311,139,142	су	374,533,245	φ	339,928,008	φ	317,542,366	φ	278,879,226	\$ 308	308,637,220	ŝ	277,331,784
Employer's net pension liability—ending (a) – (b)	ф	256,318,041	, Ф	155,336,246	ф	176,737,274	ф	179,444,905	φ	198,361,217	\$ 149	149,482,403	ŝ	246,403,195
Plan fiduciary net position as a percentage of the total pension liability covered-payroll, as of December 31	÷	54.8% 126,830,000	ώ	70.7% 116,866,751	\$	65.8% 112,984,469	\$	63.9% 111,746,539	θ	58.4% 107,017,146	67 \$ 102	67.4% 102,844,614	ے بر م	53.0% 102,378,550
Employer's net pension liability as a percentage of covered payroll		202.1%		132.9%		156.4%		160.6%		185.4%	14{	145.3%	N	240.7%
Covereu payroli 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 100.0% 140.0% 140.0%	- Meve	zoz. 1 % er until a full 10.	-vear	trand is compi	+ -	1.00.4 % and line and and and	sent	information for	asodt	103.470 Vears for whic	h inform.	0.0.0 Prinnis	lick	

Contribution (ADC) rate as determined by the Plan's actuary in the annual valuation.

Changes of Assumptions: The mortality tables changed from RP-2000 Fully Generational in 2021 to PUB-2010 with ages set forward 2 years for males and 1 year for females using Projection Scale MP-2021 in 2022. In addition the inflation rate increased from 4% in 2021 to 3.5% in 2022.

Financial Section

		2022		2021		2020		2019		2018		2017		2016		2015	2014		2013
Actuarially determined contribution	Ф	11,700,545 \$ 12,457,475	Ф	12,457,475	Ф	11,527,854	÷	11,078,489	Ф	10,044,342	⇔	9,765,949	Ф	9,853,762	Ф	9,069,276	\$ 8,292,066	6 \$	8,237,317
Joint ibutions in Leadon to the actualianty determined contribution		11,863,726		11,519,708		10,659,281		9,824,717		9,187,420		8,113,319		7,586,362		7,398,945	6,822,279	<u>б</u>	6,715,376
Contribution deficiency (excess)	φ	(163,181) \$ 937,767	ф	937,767	ф	868,573	φ	1,253,772	φ	856,922	φ	1,652,630	φ	2,267,400	ф	1,670,331	\$ 1,469,787	7 \$	1,521,941
Covered-payroll	Ф	\$ 115,743,668 \$ 115,197,080	ŝ	115,197,080	Ф	109,325,959	Ф	106,213,157	Ф	102,082,444	θ	98,343,261	ŝ	91,955,903	ŝ	89,684,182	\$ 86,139,886	\$	86,650,013
Contributions as a percentage of covered payroll		10.25%		10.00%		9.75%		9.25%		9.00%		8.25%		8.25%		8.25%	7.92%	%	7.75%

Spokane Employees' Retirement System Schedule of Employer's Contributions

40

Spokane Employees' Retirement System Schedule of Employer's Contributions

Valuation date:

December 31, 2022

Actuarially determined contribution rates are calculated as of December 31, of the end of the fiscal year in which

Methods and assumptions used to determine contribution rates:

Actuarial cost method		Entry and normal
Amortization method		Entry age normal Level percentage of payroll, closed
Remaining amortization period		22 years
Asset valuation method		5-year smoothed market
Inflation		2.50%
Salary increases		In accordance with the following table based on service:
	Years of	Annual
	Service	Increase
	<1	10.0%
	1	9.0%
	2	8.0%
	3	7.0%
	4	6.0%
	5	5.0%
	6	4.0%
	7-11	3.5%
	12-18	3.0%
	19+	2.5%
Investment rate of return		7.5%, net of pension plan investment expense
Retirement age		In accordance with the following table based on age:
		Retirement
	Age	Probability
	<50	0.0%
	<50 50	10.0%
	50 51-53	4.0%
	51-53 54-59	5.0%
	60	10.0%
	61	15.0%
	62	20.0%
	63	15.0%
	64	20.0%
	65-66	25.0%
	67	40.0%
	68	25.0%
	69	33.0%
	70	45.0%
	71	25.0%
	72	45.0%
	73	30.0%
	74	15.0%
	75+	100.0%

Mortality

Pub-2010 Table for General Employees/Retirees with ages set forward 2 years for males and 1 year for females using Projection Scale MP-2021

See report of independent auditors.

Spokane Employees' Retirement System Schedule of Investment Returns	<u>2022 2021 2020 2019 2018 2017 2016 2015 2014 2013</u>	-13.50% 13.67% 11.47% 18.35% -6.27% 15.40% 6.70% -0.94% 5.34%
okane Em Schedi	121	13.67%
Sp	2022	-13.50%
		Annual money-weighted rate of return, net of investment expense

Additional Supplementary Information

Spokane Employees' Retirement System Schedule of Administrative Expenses Years Ended December 31, 2022 and 2021

	20	22 Budget	20	22 Actual	20)21 Actual
Personnel services						
Salaries and wages	\$	329,825	\$	329,354	\$	311,201
Personnel benefits		96,560		97,465		88,085
Administrative income		(10,000)		(15,226)		(15,226)
Total personnel services		416,385		411,593		384,060
Supplies						
Office supplies		1,000		342		127
Publications		250		-		-
Postage		2,000		1,234		2,143
Software (non-capitalized)		200		314		106
Minor equipment		500		285		638
Other		1,000		158		119
Total supplies		4,950		2,333	1	3,133
Other services and charges						
State audit charges		15,000		14,099		12,433
Professional services		175,000		153,667		131,621
Travel		15,000		2,256		-
Registration and schooling		14,500		575		500
Other dues, subscriptions and memberships		2,500		1,611		1,899
Printing		2,500		1,734		2,546
Depreciation/amortization		-		17,649		17,649
Other miscellaneous charges		2,200		2,111		667
Total other services and charges		226,700		193,702		167,315
Interfund (IF) payments for services						
IF centralized purchasing		9,733		7,027		313
IF centralized accounting		2,136		2,737		1,764
IF My Spokane		1,125		966		885
IF risk management		571		571		607
IF workers' compensation		123		123		134
IF reprographics		5,262		11,050		3,899
IFIT		46,237		46,112		38,532
IF IT replacement		3,305		3,305		3,003
Total interfund services		68,492		71,891		49,137
TOTAL ADMINISTRATIVE EXPENSES,			,			
NET OF ADMINISTRATIVE INCOME	\$	716,527	\$	679,519	\$	603,645

See report of independent auditors.

Spokane Employees' Retirement System Schedule of Investment Expenses Year Ended December 31, 2022

Investment services Bridge City Capital LLC Champlain Small Cap Fund LLC Principal Real Estate Investors LLC Sterling Capital Management LLC	\$ 21,361 81,619 108,644 108,567
	320,191
Investment consulting Hyas Group, LLC	125,596
Custodial services	/ _
U.S. Bank	 53,817
TOTAL INVESTMENT EXPENSES	\$ 499,604

Mutual fund and limited partnership fees are not reflected in this schedule; instead, these investment expenses are netted against investment income in the statement of changes of plan net assets to arrive at a net investment income amount.

See report of independent auditors.



Report of Independent Auditors 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 Administration Spokane Employees' Retirement System

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 financial statements of the Spokane Employees Retirement System (the Plan) as of and for the year ended December 31, 2022, and the related notes to the financial statements, which collectively comprise the Plan's financial statements, and have issued our report thereon dated May 30, 2023.

Report on Internal Control Over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Plan'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 opinions on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control. Accordingly, we do not express an opinion on the effectiveness of the Plan'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 a combination of deficiencies, in internal control such that there is a reasonable possibility that a material misstatement of the entity'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 such that there is a reasonable possibility that a material misstatement of the entity'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 or significant deficiencies may exist that were not identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Plan'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 entity'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 entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

loss Adams UP

Spokane, Washington May 30, 2023

This page intentionally left blank

Actuarial Section

SageView Consulting Group, L.L.C. Actuarial Valuation This page intentionally left blank

SPOKANE EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF DECEMBER 31, 2022



Sageview Consulting Group 4501 Highwoods Parkway, Suite 250, Glen Allen, VA 23060 www.sageviewadvisory.com May 3, 2023

Spokane Employees' Retirement System 808 West Spokane Falls Boulevard Spokane, Washington 99201-3324

Ladies and Gentlemen:

Effective December 31, 2008, actuarial valuations of the Spokane Employees' Retirement System are performed annually. The results of the latest actuarial valuation of the System, which was prepared as of December 31, 2022, are summarized in this letter.

The valuation reflects the benefits in effect on the valuation date, and was prepared on the basis of the data submitted by the System using generally accepted actuarial principles and methods.

Financing Objective and Contribution Rate

The financing objective of the System is to:

- (a) fully fund all current costs based on the normal contribution rate payable by the System determined under the funding method; and
- (b) liquidate the unfunded accrued liability based on accrued liability contributions payable by the System over an amortization period of no more than 30 years; and
- (c) accomplish the above through a combination of Employee Contributions (currently 10.25% of pay) and Employer Contributions (currently 10.25% of pay).

The December 31, 2022 valuation develops an Actuarially Determined Employer Contribution Rate (ADC), exclusive of employee contributions, of 11.33% of total payroll. The ADC rate compares with an actual Employer Contribution rate of 10.25% of total payroll. The Employer Contribution for the 2022 fiscal year of \$11,863,726 was greater than the ADC of \$11,700,545 by \$163,181.

Net Pension Liability

Under GASB 67, the Net Pension Liability is the excess, if any, of the Total Pension Liability over the Fiduciary Net Position. The Total Pension Liability is determined under the Entry Age actuarial cost method. The Net Pension Liability as of December 31, 2022 and December 31, 2021 is as follows:

	December 31	December 31
	2022	2021
Total Pension Liability:	\$567,457,183	\$529,869,491
Fiduciary Net Position:	\$311,139,142	\$374,533,245
Net Pension Liability:	\$256,318,041	\$155,336,246
Fiduciary Net Position as a Percentage of Total Pension Liability:	54.8%	70.7%
GASB 67 Discount Rate:	7.50%	7.50%

Spokane Employees' Retirement System May 3, 2023 Page two

System's Assets and Member Data

The individual data for members of the System as of the valuation date were reported to the actuary by the System. While we did not verify the data at its source, we did perform tests for internal consistency and reasonability in relation to the data submitted for the previous valuation. It is our understanding that the outside auditor of the System has also made an examination of the data.

The amount of assets in the trust fund taken into account in the valuation was based on statements prepared for us by the System's Staff and audited by the independent auditor of the System.

Actuarial Assumptions and Methods

Actuarial assumptions are adopted by the Board, upon review of recommendations made by the actuary. An experience study was conducted for the five-year period ended December 31, 2021. This study resulted in the Board adopting several changes in assumptions as of December 31, 2022, at the recommendation of the actuary, in order to better anticipate emerging experience under the System. See a copy of the experience study for more information about assumptions.

In order to smooth out market value fluctuations for purposes of developing the ADC, the difference between actual investment earnings over expected investment earnings will be recognized in equal amounts over a five-year period with the restriction that the smoothed value of assets may not be less than 90% nor greater than 110% of market value.

The valuation software used to develop liabilities for this report was ProVal, developed by Winklevoss Technologies, LLC. SageView Consulting Group coded ProVal for the data, assumptions and provisions for this plan and believe ProVal is appropriate for performing this valuation.

Samples of the actuarial assumptions, and descriptions of the actuarial cost method and asset valuation method are set forth in the outline of actuarial assumptions and methods included in the report.

Legislative and Administrative Changes

There were no legislative or administrative changes since the last valuation that had a financial impact on the System.

Spokane Employees' Retirement System May 3, 2023 Page three

Financial Results and Membership Data

Detailed summaries of financial results of the valuation and membership data used in preparing the valuation are shown in the valuation report and the related membership data schedules. We were responsible for providing information for all schedules included in the Actuarial Section of the annual financial report for the fiscal year ended December 31, 2022.

To the best of our knowledge, this report is complete and accurate. All costs and liabilities have been determined in conformance with generally accepted actuarial principles and on the basis of actuarial assumptions and methods which are individually reasonable (taking into account past experience and reasonable expectations of future experience) and which in combination represent the best estimate of anticipated experience under the System. In addition, the assumptions and methods used for funding purposes meet the parameters set by relevant Actuarial Standards of Practice.

Future liability and asset values may differ from the results shown in this report for many reasons including, but not limited to, actual experience differing from assumed experience, changes in actuarial assumptions or methods, plan amendments, regulatory changes or changes in contribution strategy. An impact analysis of such potential changes is not included in this report. Potential plan risks are discussed in Appendix I in compliance with ASOP 51.

The undersigned are available to provide additional information or answer any questions with respect to this report.

Respectfully Submitted By:

Sageview Consulting Group

William J. Real

William J. Reid, FCA, EA Principal

Dai L. Hom

Daniel L. Homan, EA, MAAA Principal

Summary of Valuation Results

Presented in this report are the results of the actuarial valuation as of December 31, 2022 for the Spokane Employees' Retirement System.

The principal results include:

• The Actuarially Determined Employer Contribution Rate (ADC) is 11.33% of total payroll. This compares to an actual Employer Contribution rate of 10.25% of total payroll.

The valuation was completed based on membership and financial data submitted by the System.

Net Pension Liability

Under GASB 67, the Net Pension Liability is the excess, if any, of the Total Pension Liability over the Fiduciary Net Position. The Total Pension Liability is determined under the Entry Age actuarial cost method. The Net Pension Liability as of December 31, 2022 and December 31, 2021 is as follows:

	December 31	December 31
	2022	2021
Total Pension Liability:	\$567,457,183	\$529,869,491
Fiduciary Net Position:	\$311,139,142	\$374,533,245
Net Pension Liability:	\$256,318,041	\$155,336,246
Fiduciary Net Position as a Percentage of Total Pension Liability:	54.8%	70.7%
GASB 67 Discount Rate:	7.50%	7.50%

The following changes have been made since the last actuarial valuation:

• Actuarial Assumptions and Methods

Actuarial assumptions are adopted by the Board, upon review of recommendations made by the actuary. An experience study was conducted for the five-year period ended December 31, 2021. This study resulted in the Board adopting several changes in assumptions as of December 31, 2022, at the recommendation of the actuary, in order to better anticipate emerging experience under the System. See a copy of the experience study for more information about assumptions.

GASB 67 requires the use of a blended discount rate to the extent future contributions are not projected to be sufficient to provide future benefits for the current closed group of plan participants. This was the case for years prior to 2017. For years ended 2017 and later, it was not necessary to apply a blended discount rate because of the negotiated terms that allow for both employer and employee contributions to increase or decrease up to 1% each year based on changes in the ADC.

• Legislative and Administrative Changes

There were no legislative or administrative changes since the last valuation that had a financial impact on the System.

Demographics		 2022	 2021
Active			
Number		1,535	1,494
Average Pay for Coming Year		\$ 82,625	\$ 78,224
Retired and Beneficiaries			
Number		1,582	1,534
Average Annual Allowance		22,554	21,983
Terminated Vested and Portables			
Number		161	134
Total Membership		3,278	3,162
Net Pension Liability			
Total Pension Liability		\$ 567,457,183	\$ 529,869,491
Fiduciary Net Position		\$ 311,139,142	\$ 374,533,245
Net Pension Liability		\$ 256,318,041	\$ 155,336,246
Fiduciary Net Position as a Percentage of the Total Pension Liability		54.8%	70.7%
Contribution Rates			
Actuarially Determined Employer Contribution Rate (ADC)*		11.33%	9.75%
Actual Employer Contribution Rate		10.25%	10.25%
Effective 12/26/2021 12/27/2020 - 12/25/2021 12/15/2019 - 12/26/2020 12/16/2018 - 12/14/2019 12/17/2017 - 12/15/2018 09/01/2014 - 12/16/2017 Prior to 9/1/2014	10.25% 10.00% 9.75% 9.25% 9.00% 8.25% 7.75%		

* Exclusive of Employee Contributions

Contribution Rates (ADC)

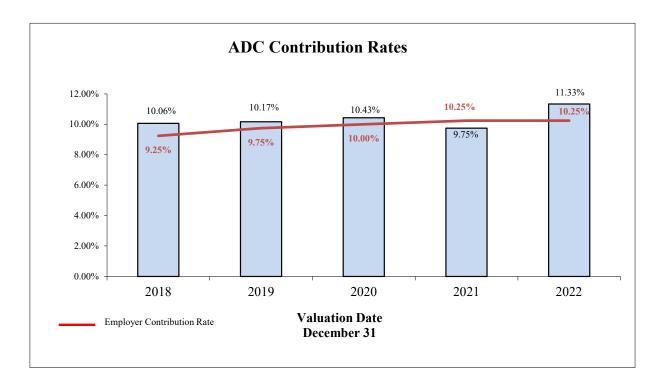
The results of the valuation as of December 31, 2022 determine the ADC rate for the System. The actual Employer Contribution rate is compared to the contribution rate developed in the valuation in order to determine the appropriateness of the actual Employer Contribution rate. As of December 31, 2022 the actual Employer Contribution rate of 10.25% is less than the ADC rate of 11.33%.

Reasons for Change in the ADC

The recommended employer contribution rate as determined by the ADC increased from 9.75% as of December 31, 2021 to 11.33% as of December 31, 2022. The increase of 1.58% is due to the following reasons:

• Increase due to return on actuarial assets	0.86%
• Decrease due to change in normal cost rate	(0.12%)
• Increase due to change in benefit provisions	0.00%
• Increase due to legislative changes	0.00%
• Increase due to change in assumptions	2.46%
• Decrease due to change in funding method	(1.73%)
• Decrease due to higher than expected payroll growth	(0.50%)
• Increase due to other factors	0.61%
• Total	1.58%

Valuation Date	ADC	Employer Rate
2018	10.06%	9.25%
2019	10.17%	9.75%
2020	10.43%	10.00%
2021	9.75%	10.25%
2022	11.33%	10.25%



Five-Year History of Contribution Rates (As a % of payroll)

Unfunded Accrued Liability

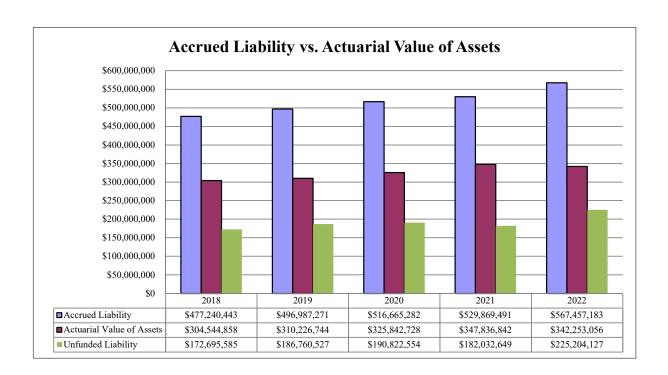
The financing objective of the System is to:

- fully fund all current costs based on the normal contribution rate payable by the System determined under the funding method; and
- liquidate the unfunded accrued liability based on accrued liability contributions payable by the System over an amortization period of no more than 30 years; and
- accomplish the above through a combination of Employee Contributions (currently 10.25% of pay) and Employer Contributions (currently 10.25% of pay).

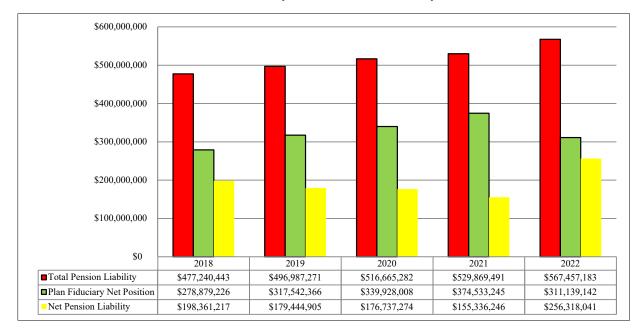
For purposes of determining contribution rates, the System's unfunded actuarial liability is measured by comparing the actuarial value of assets with the actuarial liability. The actuarial liability is determined under the entry age normal cost method. On this basis, the System's unfunded actuarial liability is \$225,204,127 as of December 31, 2022. The unfunded actuarial liability is based on an actuarial value of assets of \$342,253,056 and an actuarial liability of \$567,457,183.

For purposes of financial reporting, the Fund's unfunded liability (net pension liability) is measured by comparing the market value of assets (fiduciary net position) with the actuarial liability (total pension liability). The total pension liability is determined under the entry age cost method. On this basis, the Fund's net pension liability is \$256,318,041 as of December 31, 2022. The net pension liability is based on a fiduciary net position of \$311,139,142 and a total pension liability of \$567,457,183.

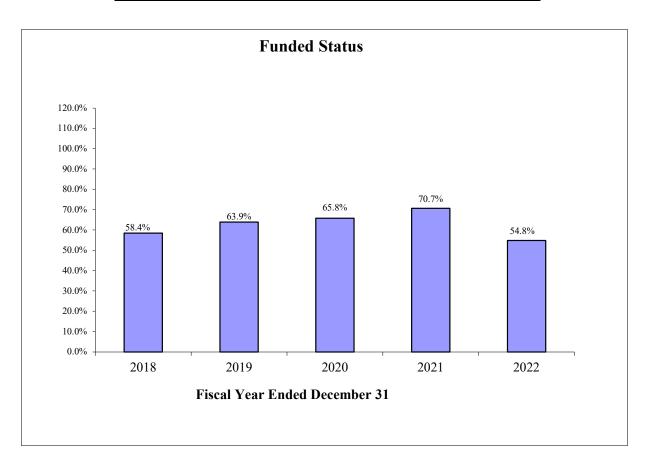
History of Accrued Liability and Actuarial Value of Assets



History of Net Pension Liability



Fiscal	
Year Ending	Funded Status
2018	58.4%
2019	63.9%
2020	65.8%
2021	70.7%
2022	54.8%



Five-Year History of Funded Status

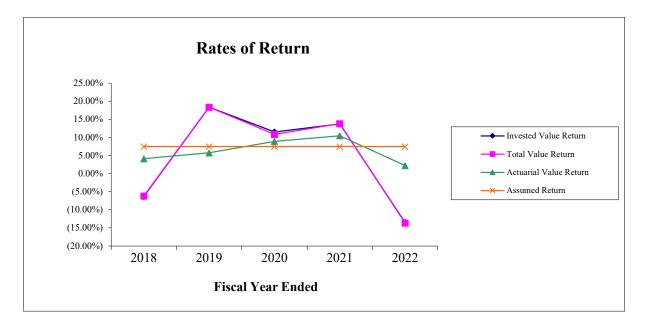
Rate of Return

The investment return of the trust fund (i.e. total return including both realized and unrealized gains and losses) based on the market value of invested assets for the fiscal year ended December 31, 2022 was -13.50%. However, since some contributions go directly to paying benefits and are never invested in the trust, the net investment return on total assets of the System was -13.65%. The investment return on the smoothed fair value of assets was 2.22%. The expected rate of return was 7.50%.

The smoothed fair value of assets is determined using a method that is designed to smooth the impact of market fluctuations. Unlike the market value, which immediately reflects all investment gains and losses during the year, the smoothed fair value recognizes annual appreciation and depreciation over a five-year period.

Fiscal Year	Rate of Return on Assets			
Ending	Invested	Total	Actuarial	Assumed
2018	(6.30%)	(6.17%)	4.12%	7.50%
2019	18.40%	18.37%	5.75%	7.50%
2020	11.50%	10.84%	8.87%	7.50%
2021	13.70%	13.82%	10.48%	7.50%
2022	(13.50%)	(13.65%)	2.22%	7.50%

Five-Year History of Rates of Return



Supporting Information

The remainder of the report is comprised of the following sections or schedules:

Table 1	Demographics			
Funding Schedules				
Table 2	Market Value Reconciliation			
Table 3	Smoothed Fair Value of Net Assets Determination			
Table 4	Accrued Liability			
Table 5	Actuarial (Gain)/Loss			
Table 6	Amortization Schedule			
Table 7	Normal Cost			
Table 8	Contribution Summary			
GASB 67 Schedules				
Table 9	Statement of Fiduciary Net Position			
Table 10	Statement of Changes in Fiduciary Net Position			
Table 11	Net Pension Liability			
Table 12	Schedule of Employer Contributions			
Table 13	GASB 68 Summary for 2022			
Table 14	GASB 68 Summary for 2023			
Table 15	Deferred Outflows/(Inflows) Amortization Schedule			
Financial Schedules				
Table 16	Historical Summary of Fund Additions and Deductions			
Membership Schedules				
Table 17	Schedule of Membership			
Table 18	Schedule of Active Members Valuation Data			
Table 19	Schedule of Retirees Added to and Removed from Rolls			
Table 20	Schedule of Retired Members by Type of Benefit; Schedule of Benefit Payments by Type			
Table 21	Schedule of Average Annual Benefit Payments			
Assumptions, Methods and Provisions Schedules				
Table 22	Description of Actuarial Assumptions and Methods			
Table 23	Summary of Benefit and Contribution Provisions			
Appendices				
Appendix I	Plan Risks (ASOP 51 Compliance)			
Appendix II	Data Tables			

DEMOGRAPHICS

	2022	<u>2021</u>	Increase/ (Decrease)
 Number of Members: a. Retirees 	1,401	1,361	40
b. Beneficiaries	173	165	8
c. Disabled	8	8	0
d. Terminated Vested	87	73	14
e. Portables	74	61	13
f. Active	1,535	1,494	41
g. Total Members	3,278	3,162	116
2. Projected Compensation for Coming Year	126,830,000	116,866,751	9,963,249
3. Average Compensation for Coming Year	82,625	78,224	4,401
4. Average Age (Active Members)	46.59	47.27	(0.68)
5. Average Service (Active Members)	10.20	10.90	(0.70)
6. Annual Retirement Allowance	35,680,825	33,722,469	1,958,356
7. Average Annual Retirement Allowance	22,554	21,983	571
8. Average Monthly Retirement Allowance	1,880	1,832	48

ASSET INFORMATION

Market Value Reconciliation

1. Total Market Value of Net Assets, 12/31/2021		374,533,245
2. Audit Adjustment		0
3. Contributionsa. Employerb. Employeec. Total Contributions	11,863,726 11,931,102	23,794,828
4. Miscellaneous Revenue		0
 5. Investment Earnings a. Interest & Dividends & Other Income b. Realized & Unrealized Gain/(Loss) c. Investment Expenses d. Total Investment Earnings 	4,326,389 (54,068,120) (499,604)	(50,241,335)
6. Benefit Paymentsa. Benefitsb. Refund of Contributionsc. Total Benefit Payments	(35,057,797) (1,210,280)	(36,268,077)
7. Administrative Expenses		(679,519)
8. Total Market Value of Net Assets, 12/31/2022		311,139,142
9. Approximate Rate of Return on Total Assets		-13.65%
10. Approximate Rate of Return on Invested Assets		-13.50%

ASSET INFORMATION

Smoothed Fair Value of Net Assets Determination

1. Total Market Value of Net Assets, 12/31/2021	374,533,245
2. Expected Return for Plan Year	27,605,681
3. Actual Return for Plan Year	(50,241,335)
4. Total Market Value of Net Assets, 12/31/2022	311,139,142

5. Determination of Deferred Gain (Loss)

Fiscal <u>Year</u>	Actual vs. Expected Return	Amount Recognized This Year	Portion Deferred	Deferred Amount
2022	(77,847,016)	(15,569,403)	4/5	(62,277,613)
2021	21,097,956	4,219,591	3/5	12,658,774
2020	10,399,530	2,079,906	2/5	4,159,812
2019	29,674,372	5,934,876	1/5	5,934,876
2018	(41,457,145)	(8,291,429)	0/5	0
Total	(58,132,303)	(11,626,459)		(39,524,151)
6. Preliminary Smoothed Fair Value of	350,663,293			
7. Ratio of Preliminary Smoothed Fai	112.70%			
 Smoothed Fair Value of Net Assets (6., but not less than 90% nor more 	342,253,056			
9. Ratio of Smoothed Fair Value to Market Value				110.00%
10. Approximate Rate of Return on Smoothed Fair Value of Net Assets				2.22%

ACCRUED LIABILITY

1. Accrued Liability prior to Changes in Benefit Provisions and Assumptions

a. Active	198,120,260	
b. Terminated Vested & Portables	18,987,431	
c. Retirees	316,999,259	
d. Beneficiaries	20,497,220	
e. Disableds	1,092,676	
f. Total Accrued Liability prior to Changes		555,696,846
2. Actuarial Value of Assets		342,253,056
3. Unfunded Accrued Liability prior to Changes (1.f 2.)		213,443,790
4. Change in Unfunded Accrued Liability		
a. Due to Changes in Plan Provisions	0	
b. Due to Changes in Assumptions	11,760,337	
c. Due to Change in Funding Method	0	
d. Due to Change in Asset Method	0	
e. Total Change in Unfunded Accrued Liability		11,760,337
5. Actual Unfunded Accrued Liability		225,204,127

(3. + 4.e.)

ACTUARIAL (GAIN)/LOSS

1. Increase (decrease) in Unfunded Accrued Liability

a. Unfunded Accrued Liability, prior year	182,032,649
b. Entry Age Normal Cost (excluding expenses)	9,931,195
c. Contributions	23,794,828
d. Interest	13,521,114
e. Expected Unfunded Accrued Liability, current year (a. + b c. + d.)	181,690,130
f. Actual Unfunded Accrued Liability, current year before benefit, assumption, and method changes	213,443,790
g. (Gain)/Loss	31,753,660
(fe.)	
2. Reasons for (Gain)/Loss	
a. Investment Return on Smoothed Fair Value of Assets	18,739,009
b. Other	13,014,651
c. Total	31,753,660

AMORTIZATION SCHEDULE*

Date <u>Established</u>	Source	Initial <u>Amount</u>	Remaining <u>Balance</u>	Years to <u>Amortize</u>	Required <u>Payment</u>
12/31/2022	Amortization of UAL	225,204,127	225,204,127	25	13,681,654
Total		225,204,127	225,204,127		13,681,654

* Effective December 31, 2022, prior bases established between December 31, 2017 and December 31, 2021 were combined into one base with a weighted average remaining amortization period of 25 years.

NORMAL COST

1. Normal Cost for All Benefits	12,981,782
2. Offset for Employee Contributions	(13,000,075)
3. Estimated Expenses	700,000
4. Total (1) - (2) + (3)	681,707

<u>Table 8</u>

CONTRIBUTION SUMMARY

1. Actuarially Determined Employer Contribution Amount

a. Normal Costb. Amortization Chargesc. Total	681,707 13,681,654	14,363,361
2. Actuarially Determined Employer Contribution Rate		
a. Normal Cost	0.54%	
b. Amortization Charges	10.79%	
c. Total		11.33%
3. Projected Pay for the Upcoming Year		126,830,000

Table 9

ASSET INFORMATION

Statement of Fiduciary Net Position (as provided by SERS staff)

ASSETS	
1. Cash	111,725
2. Short-term investments	912,268
3. Receivables	
a. Interest and Dividends 217,76	57
b. Other receivables 3,01	2
c. Redemption receivable	0
d. Total Receivables	220,779
4. Investments, at fair value	
a. U. S. Fixed Income 22,900,74	19
b. International Fixed Income 830,70)4
c. Fixed Income Mutual Funds 20,230,05	50
d. U.S. Equities 12,208,41	.4
e. International Equities 307,77	
f. Equity Mutual Funds 147,168,42	
g. Real Estate 30,758,87	'5
h. Alternatives 75,509,49	15
i. Total Investments	309,914,488
5. Capitalized software, net of accumulated amortization	158,841
6. Total Assets	311,318,101
LIABILITIES	
1. Accounts Payable85,36	55
2. Current portion employee salary & benefits 7,27	/1
3. Employee leave benefits 74,93	
4. Other current liabilities 11,38	37
5. Total Liabilities	178,959
NET POSITION	311,139,142

<u>Table 10</u>

ASSET INFORMATION

Statement of Changes in Fiduciary Net Position (as provided by SERS staff)

ADDITIONS

1. Contributions	
a. Employer 11,863,726	
b. Plan Members 11,931,102	
c. Intergovernmental Revenue 0	
d. Miscellaneous Revenue 0)
e. Total Contributions	23,794,828
2. Investment Earnings:	
a. Net increase (decrease) in fair value of investments (54,068,120)
b. Interest, dividends and other investment income 4,326,389)
c. Total Investment Earnings (loss)	(49,741,731)
d. Less: investment expense	499,604
e. Net investment earnings (loss)	(50,241,335)
Total additions	(26,446,507)
DEDUCTIONS	
1. Pension benefits 35,057,797	
2. Refund of contributions 1,210,280)
3. Administrative expenses 679,519	•
Total deductions	36,947,596
Change in net assets:	(63,394,103)
Prior period adjustment	0
Plan Fiduciary Net Position, 12/31/2021	374,533,245
Plan Fiduciary Net Position, 12/31/2022	311,139,142

Table 11

NET PENSION LIABILITY

	2022	<u>2021</u>
Total Pension Liability		
Service Cost	10,676,035	10,379,208
Interest	38,404,746	37,498,043
Changes of benefit terms	0	0
Differences between expected and actual experience	13,014,651	(675,673)
Changes of assumptions	11,760,337	0
Benefit Payments, including refunds of member contributions	(36,268,077)	(33,997,369)
Net change in total pension liability	37,587,692	13,204,209
Total pension liability - beginning	529,869,491	516,665,282
Total pension liability - ending (a)	567,457,183	529,869,491
Plan Fiduciary Net Position		
Contributions - employer	11,863,726	11,519,708
Contributions - member	11,931,102	11,519,708
Net investment income	(50,241,335)	46,166,835
Benefit payments, including refunds of member contributions	(36,268,077)	(33,997,369)
Administrative expense	(679,519)	(603,645)
Other	0	0
Net change in plan fiduciary net position	(63,394,103)	34,605,237
Plan fiduciary net position - beginning	374,533,245	339,928,008
Plan fiduciary net position - ending (b)	311,139,142	374,533,245
Net pension liability - ending (a) - (b) *	256,318,041	155,336,246
Plan fiduciary net position as a percentage of the total pension liability	54.8%	70.7%
Covered-employee payroll	126,830,000	116,866,751
Net pension liability as a percentage of covered-employee payroll	202.1%	132.9%
GASB 67 Blended Discount Rate Beginning of Period:	7.50%	7.50%
GASB 67 Blended Discount Rate End of Period:	7.50%	7.50%

* A 1% decrease in the discount rate increases the net pension liability to \$315,900,727, an increase of \$59,582,686.

A 1% increase in the discount rate decreases the net pension liability to \$205,519,330, a decrease of \$50,798,711.

<u>Table 12</u>

SCHEDULE OF EMPLOYER CONTRIBUTIONS (Excludes Member Contributions)

Fiscal Year <u>Ended</u>	Actuarially Determined <u>Contribution</u>	Contributions in Relation to the Actuarially Determined Contribution	Contribution Deficiency <u>(Excess)</u>	Covered Employee <u>Payroll</u>	Percentage Contributed
12/31/2013	8,237,317	6,715,376	1,521,941	86,650,013	7.75%
12/31/2014	8,292,066	6,822,279	1,469,787	86,139,886	7.92%
12/31/2015	9,069,276	7,398,945	1,670,331	89,684,182	8.25%
12/31/2016	9,853,762	7,586,362	2,267,400	91,955,903	8.25%
12/31/2017	9,765,949	8,113,319	1,652,630	98,343,261	8.25%
12/31/2018	10,044,342	9,187,420	856,922	102,082,444	9.00%
12/31/2019	11,078,489	9,824,717	1,253,772	106,213,157	9.25%
12/31/2020	11,527,854	10,659,281	868,573	109,325,959	9.75%
12/31/2021	12,457,475	11,519,708	937,767	115,197,080	10.00%
12/31/2022	11,700,545	11,863,726	(163,181)	115,743,668	10.25%

			GASB 68 Sur Tot:	GASB 68 Summary for 2022 Total Plan					
	Total Pension	Dlan Not Dosition	Net Pension 1 Sobility, ADD	NPL Discount Date ±1%	NPL Discount Data 102	Deferred Outflows of Deconvoire	Deferred Inflows of Decommons	Pension	Amortization Deviad
Balance, Beginning of Y car (1)	516,665,282	339,928,008		130,882,728	230,465,485	29,147,741	60,027,494	rapense	no113 1
Changes for the year Service Cost	10,379,208		10,379,208					10,379,208	
Interest Cost	37,498,043		37,498,043					37,498,043	
Benefit Changes	0		0					0	
Experience loss (gain)	(675,673)		(675, 673)			0	563,061	(112,612)	6.00
Changes in assumptions	0		0			0	0	0	6.00
Contributions - Employer		11,519,708	(11,519,708)						
Contributions - Employee		11,519,708	(11, 519, 708)					(11,519,708)	
Net Investment Income		46,166,835	(46, 166, 835)						
Expected Return on Investments								(25,068,879)	
Investment (gain) loss expensed								(4, 219, 591)	5.00
Investment (gain) loss deferred						0	16,878,365		
Benefits paid including refunds	(33,997,369)	(33,997,369)	0					0	
Administrative Expense		(603, 645)	603,645					603,645	
Other Changes		0	0						
Amortization			0			(13, 285, 765)	(28, 450, 206)	(15,164,441)	
Net Changes	13,204,209	34,605,237	(21, 401, 028)			(13, 285, 765)	(11,008,780)		
Balance, End of Year (2)	529,869,491	374,533,245	155,336,246	108,523,928	210,156,605	15,861,976	49,018,714	(7,604,335)	
 Measurement Date December 31, 2020 Measurement Date December 31, 2021 									

Table 13

			GASB 68 Sur Tot	GASB 68 Summary for 2023 Total Plan					
	Total Pension Liability	Plan Net Position	Net Pension Liability (NPL)	NPL Discount Rate +1%	NPL Discount Rate -1%	Deferred Outflows of Resources	Deferred Inflows of Resources	Pension Expense	Amortization Period
Balance, Beginning of Year (1)	529,869,491	374,533,245	155,336,246	108,523,928	210,156,605	15,861,976	49,018,714		
Changes for the year Service Cost	10,676,035		10,676,035					10,676,035	
Interest Cost	38,404,746		38,404,746					38,404,746	
Benefit Changes	0		0					0	
Experience loss (gain)	13,014,651		13,014,651			10,845,542	0	2,169,109	6.00
Changes in assumptions	11,760,337		11,760,337			9,800,281	0	1,960,056	6.00
Contributions - Employer		11,863,726	(11, 863, 726)						
Contributions - Employee		11,931,102	(11,931,102)					(11, 931, 102)	
Net Investment Income		(50, 241, 335)	50,241,335						
Expected Return on Investments								(27,605,681)	
Investment (gain) loss expensed								15,569,403	5.00
Investment (gain) loss deferred						62,277,613	0		
Benefits paid including refunds	(36, 268, 077)	(36, 268, 077)	0					0	
Administrative Expense		(679,519)	679,519					679,519	
Other Changes		0	0						
Amortization			0			(11, 222, 192)	(25, 814, 803)	(14, 592, 611)	
Net Changes	37,587,692	(63, 394, 103)	100,981,795			71,701,244	(25, 814, 803)		
Balance, End of Year (2)	567,457,183	311,139,142	256,318,041	205,519,330	315,900,727	87,563,220	23,203,911	15,329,474	
 Measurement Date December 31, 2021 Measurement Date December 31, 2022 									

Spokane Employees' Retirement System

Table 14

Actuarial Section

<u>Table 15</u>

Deferred Outflows/(Inflows) Amortization Schedule as of December 31, 2023 (Measurement Date: December 31, 2022)

Reporting Date Established	Source	Initial Amount	Deferred Amount	Remaining Years	Amortization Payment
12/31/2023	Experience Loss	13,014,651	10,845,542	5.00	2,169,109
12/31/2023	Assumption Change	11,760,337	9,800,281	5.00	1,960,056
12/31/2023	Investment Loss	77,847,016	62,277,613	4.00	15,569,403
12/31/2022	Experience Gain	(675,673)	(450,449)	4.00	(112,612)
12/31/2022	Investment Gain	(21,097,956)	(12,658,774)	3.00	(4,219,591)
12/31/2021	Experience Loss	5,368,635	2,684,316	3.00	894,773
12/31/2021	Investment Gain	(10,399,530)	(4,159,812)	2.00	(2,079,906)
12/31/2020	Experience Loss	5,866,404	1,955,468	2.00	977,734
12/31/2020	Investment Gain	(29,674,372)	(5,934,876)	1.00	(5,934,876)
Total			64,359,309		9,224,090

<u>Table 16</u>

HISTORICAL SUMMARY OF FUND ADDITIONS AND DEDUCTIONS

Fiscal Year <u>Ended</u>	Employer Contributions as a Percent <u>of Payroll</u>	Employer Contributions	Employee Contributions	Net Investment <u>Income</u>	Total
12/31/2013	7.75%	6,715,376	6,715,376	45,323,533	58,754,285
12/31/2014	7.75%	6,822,279	6,822,279	14,497,901	28,142,459
12/31/2015	8.25%	7,398,945	7,402,905	(3,228,439)	11,573,411
12/31/2016	8.25%	7,586,362	7,586,362	16,802,274	31,974,998
12/31/2017	8.25%	8,113,319	8,113,319	43,085,572	59,312,210
12/31/2018	9.00%	9,187,420	9,188,781	(18,715,945)	(339,744)
12/31/2019	9.25%	9,824,717	9,827,760	50,166,728	69,819,205
12/31/2020	9.75%	10,659,281	10,659,281	33,795,088	55,113,650
12/31/2021	10.00%	11,519,708	11,519,708	46,166,835	69,206,251
12/31/2022	10.25%	11,863,726	11,931,102	(50,241,335)	(26,446,507)

ADDITIONS BY SOURCE

DEDUCTIONS BY TYPE

Fiscal Year <u>Ended</u>	Benefit <u>Payments</u>	<u>Refunds</u>	Admin <u>Expenses</u>	<u>Total</u>
12/31/2013	20,346,281	393,954	385,675	21,125,910
12/31/2014	22,258,842	625,184	386,713	23,270,739
12/31/2015	23,959,198	637,822	447,921	25,044,941
12/31/2016	25,737,515	729,741	477,252	26,944,508
12/31/2017	26,891,785	551,908	563,078	28,006,771
12/31/2018	28,309,344	554,422	554,484	29,418,250
12/31/2019	30,055,864	544,438	555,763	31,156,065
12/31/2020	31,595,115	513,758	619,135	32,728,008
12/31/2021	33,256,350	741,019	603,645	34,601,014
12/31/2022	35,057,797	1,210,280	679,519	36,947,596

<u>Table 17</u>

SCHEDULE OF MEMBERSHIP

Fiscal Year <u>Ended</u>	Active <u>Members</u>	Terminated Vested <u>Members</u>	Service Retirees and <u>Beneficiaries</u>	Disabled <u>Retirees</u>	Total in <u>Pay Status</u>	Total <u>Members</u>
12/31/2013	1,422	98	1,171	9	1,180	2,700
12/31/2014	1,407	105	1,234	9	1,243	2,755
12/31/2015	1,424	97	1,291	9	1,300	2,821
12/31/2016	1,460	109	1,333	9	1,342	2,911
12/31/2017	1,444	113	1,367	9	1,376	2,933
12/31/2018	1,481	123	1,415	9	1,424	3,028
12/31/2019	1,499	119	1,449	8	1,457	3,075
12/31/2020	1,464	131	1,496	8	1,504	3,099
12/31/2021	1,494	134	1,526	8	1,534	3,162
12/31/2022	1,535	161	1,574	8	1,582	3,278

<u>Table 18</u>

SCHEDULE OF ACTIVE MEMBERS VALUATION DATA

Fiscal Year	Active	Covered	Average Payroll	Annual Percentage Increase in Average
Ended	<u>Members</u>	<u>Payroll</u>	Rate	Payroll Rate
12/31/2013	1,422	87,337,232	61,419	0.25%
12/31/2014	1,407	89,034,522	63,280	3.03%
12/31/2015	1,424	93,899,096	65,940	4.20%
12/31/2016	1,460	102,378,550	70,122	6.34%
12/31/2017	1,444	102,844,614	71,222	1.57%
12/31/2018	1,481	107,017,146	72,260	1.46%
12/31/2019	1,499	111,746,539	74,547	3.16%
12/31/2020	1,464	112,984,469	77,175	3.53%
12/31/2021	1,494	116,866,751	78,224	1.36%
12/31/2022	1,535	126,830,000	82,625	5.63%

<u>Table 19</u>

SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS

Fiscal Year		Annual Benefits		Annual Benefits		Annual	Percent	Average Annual	Retirees as P of Active Me	
Ended	Added	Added	<u>Removed</u>	Removed	Total	Benefits	<u>Change</u>	Benefits	Number	Pay
12/31/2013	95	2,351,086	43	532,395	1,180	20,996,762	9.5%	17,794	83.0%	24.0%
12/31/2014	100	2,552,358	37	573,123	1,243	22,975,997	9.4%	18,484	88.3%	25.8%
12/31/2015	96	2,379,741	39	667,843	1,300	24,687,895	7.5%	18,991	91.3%	26.3%
12/31/2016	82	2,262,702	40	753,144	1,342	26,197,453	6.1%	19,521	91.9%	25.6%
12/31/2017	75	1,862,418	41	685,721	1,376	27,374,150	4.5%	19,894	95.3%	26.6%
12/31/2018	81	2,054,117	33	488,082	1,424	28,940,185	5.7%	20,323	96.2%	27.0%
12/31/2019	80	2,240,959	47	715,467	1,457	30,465,677	5.3%	20,910	97.2%	27.3%
12/31/2020	83	2,566,143	36	554,098	1,504	32,477,722	6.6%	21,594	102.7%	28.7%
12/31/2021	72	2,059,726	42	814,979	1,534	33,722,469	3.8%	21,983	102.7%	28.9%
12/31/2022	100	2,851,536	52	893,180	1,582	35,680,825	5.8%	22,554	103.1%	28.1%

Table 20

SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

Amount of	Number										
Monthly	of	Тур	e of Retireme	ent*			Option S	elected**			
Benefit	Retirees	<u>1</u>	<u>2</u>	<u>3</u>	LIFE	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>	<u>D</u>	E
1 - 100	2	1	0	1	1	0	0	0	0	1	0
		1		I C	1	0	0	0	0	1	0
101 - 200	11	5	0	6	3	0	Ū.	0	0	1	/
201 - 300	22	18	0	4	13	2	0	0	0	1	6
301 - 400	47	36	0	11	24	1	0	0	1	3	18
401 - 500	60	43	0	17	27	0	0	0	1	8	24
501 - 600	58	52	0	6	31	0	2	1	0	2	22
601 - 700	58	49	1	8	27	1	0	0	0	8	22
701 - 800	59	48	1	10	27	0	0	0	2	11	19
801 - 900	52	45	0	7	31	0	1	0	0	7	13
901 - 1,000	71	64	0	7	30	3	0	0	1	9	28
1,001 - 1,500	269	224	4	41	122	1	2	2	1	31	110
1,501 - 2,000	242	215	2	25	107	0	1	0	0	33	101
Over 2,000	<u>631</u>	601	<u>0</u>	<u>30</u>	<u>255</u>	10	2	<u>3</u>	7	<u>92</u>	262
Total	1,582	1,401	8	173	698	18	8	6	13	207	632

*Type of Retirement:

1 Service Retirement

2 Disability Retirement

3 Beneficiary

**Option Selected:

Life	Remaining accumulated balance paid to beneficiary
Opt. C1	60 months guaranteed
Opt. C2	120 months guaranteed
Opt. C3	180 months guaranteed
Opt. C4	240 months guaranteed
Opt. D	50% continuation to beneficiary
Opt. E	100% continuation to beneficiary

SCHEDULE OF BENEFIT PAYMENTS BY TYPE

Fiscal					
Year	Service	Disability			Total
Ended	Retirement	Retirement	Beneficiaries	Refunds	Benefits
12/31/2013	18,887,269	125,353	1,333,659	393,954	20,740,235
12/31/2014	20,659,575	125,329	1,473,938	625,184	22,884,026
12/31/2015	22,192,756	125,328	1,641,114	637,822	24,597,020
12/31/2016	23,765,713	125,328	1,846,474	729,742	26,467,257
12/31/2017	24,852,640	125,328	1,913,817	551,908	27,443,693
12/31/2018	26,202,801	125,328	1,981,215	554,422	28,863,766
12/31/2019	27,788,707	124,164	2,142,993	544,438	30,600,302
12/31/2020	29,378,701	114,580	2,101,834	513,758	32,108,873
12/31/2021	30,993,999	114,580	2,147,773	741,019	33,997,371
12/31/2022	32,696,266	114,580	2,246,952	1,210,280	36,268,078

<u>Table 21</u>

SCHEDULE OF AVERAGE ANNUAL BENEFIT PAYMENTS

Fiscal Year <u>Ended</u>	Service Retirement and Beneficiaries	Disability Retirement	Total	Annual Percentage Increase in Average <u>Benefits</u>
12/31/2013	17,268	13,928	17,243	4.83%
12/31/2014	17,936	13,925	17,907	3.85%
12/31/2015	18,462	13,925	18,430	2.92%
12/31/2016	19,214	13,925	19,178	4.06%
12/31/2017	19,580	13,925	19,543	1.90%
12/31/2018	19,918	13,925	19,880	1.72%
12/31/2019	20,657	15,521	20,629	3.77%
12/31/2020	21,043	14,323	21,007	1.83%
12/31/2021	21,718	14,323	21,679	3.20%
12/31/2022	22,200	14,323	22,160	2.22%

<u>Table 22</u>

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

Actuarial Cost Method

The actuarial cost method used to determine the actuarial accrued liability and the normal cost for both funding and financial reporting purposes is the Entry Age Normal (EAN) Actuarial Cost Method. The accrued liability and the normal cost are used to determine the City's contribution requirement. Under this method, the cost of each individual's pension is allocated on a level percent of payroll basis between the time employment starts (entry age) and the assumed retirement date. The normal cost is the amount allocated for a given year and accrued liability is the accumulation of prior normal costs as of the determination date. The total actuarial liability for retirement benefits is the sum of the accrued liability for each active member.

The actuarial accrued liability and normal cost for termination benefits, disability benefits, and pre-retirement spouse's death benefits are determined in a similar manner as for retirement benefits described above.

The actuarial accrued liability for inactive members is determined as the actuarial present value of the benefits expected to be paid; no normal cost is determined for these members.

Prior to December 31, 2012 the Projected Unit Credit (PUC) Actuarial Cost Method was used.

Unless otherwise specified, the following actuarial assumptions and methods were adopted December 31, 2022.

Actuarial Assumptions

Mortality:	Healthy Lives	Pub-2010 Table for General Employees/Retirees with ages set forward 2 years for males and 1 year for females using Projection Scale MP-2021.
	Disabled Lives	Pub-2010 Table for General Disabled Employees with ages set forward 2 years for males and 1 year for females using Projection Scale MP-2021.
Interest:	7.5% per annum, c	ompounded annually
GASB 67 Blended Discount Rate:	Beginning of Perio End of Period:	d: 7.50% 7.50%
	d Closed 30 year amortization as a level percent of payroll. Payroll growth assumed to be 3.5% per year. Prior bases established between December 31, 2017 and December 31, 2021 were combined into one base with a weighted average remaining amortization period of 25 years.	
Turnover:	In accordance with	the following table based on service:

Years of	Turnover
Service	Probability
<1	12.0%
1	8.0%
2-3	7.0%
4	6.0%
5-7	5.0%
8	4.0%
9-10	3.0%
11+	2.0%

Table 22

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

Retirement:	In accordance with	the following tab	le based on age:		
		Retirement			Retirement
	Age	Probability		Age	Probability
	<50	0.0%		<u></u>	<u>,</u>
	50	10.0%		67	40.0%
	51-53	4.0%		68	25.0%
	54-59	5.0%		69	33.0%
	60	10.0%		70	45.0%
	61	15.0%		71	25.0%
	62	20.0%		72	45.0%
	63	15.0%		73	30.0%
	64	20.0%		74	15.0%
	65-66	25.0%		75+	100.0%
Disability:	None assumed				
Salary Increases:	In accordance with	the following tab	le based on servic	e:	
		X. C	A 1		
		Years of	Annual		
		<u>Service</u>	Increase		
		<1	10.0%		
		1	9.0%		
		2	8.0%		
		3	7.0%		
		4	6.0%		
		5	5.0%		
		6	4.0%		
		7-11	3.5%		
		12-18	3.0%		
		19+	2.5%		
	0% minimum salary in umption in year 4.	crease assumption	for the next 3 year	ars and a 4% m	inimum salary
Inflation Rate:	2.50% per year				

Non-Investment Expenses:	Prior year's actual amount rounded up to next \$100,000
Family Composition:	75% of employees are assumed to be married with males assumed to be four years older than their spouses.

Asset Valuation Basis

In order to smooth out market value fluctuations for purposes of developing the ADC, the difference between actual investment earnings over expected investment earnings will be recognized in equal amounts over a five-year period with the restriction that the smoothed value of assets may not be less than 90% nor greater than 110% of market value.

Table 23

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Outlined on the following pages are the principal features of the Plan reflected in the 2022 valuation.

Definitions:		
Creditable Service	made as an eligible member of The maximum is 35 years for e December 31, 2017. The maxi	the of the City of Spokane during which contributions were the Retirement System up to a maximum of 40 years. Employees hired after January 1, 2015, but before mum is 30 years for employees hired prior to January 1, ary 1, 2009 and who do not elect the alternate benefit
Service Buy-Back	which members who had withd buy back prior service time cou	the from October 1, 2009 through March 31, 2010 during drawn their retirement accumulations and not elected to ald do so. Future rehired employees will have one year et to buy back prior service time.
Compensation	holiday pay, hazardous duty pa reduction contributions to the C	nployee including base pay, shift differential, overtime, y and out-of-classification pay and not reduced by salary City's cafeteria plan or Section 457 plan. For employees ertime compensation will be capped at 120% of an
Final Compensation	consecutive years. For employ	mpensation received by a member during any three yees hired prior to January 1, 2015, the highest average by a member during any two consecutive years.
Normal Retirement Date	and completion of 7 years of C	ciding with or next following the attainment of age 65 reditable Service. For employees hired prior to January nth coinciding with or next following the attainment of ars of Creditable Service.
Early Retirement Date	and with the sum of age plus C hired between January 1, 2015 coinciding with or next followi Creditable Service greater than 2009 and December 31, 2014, 1 following the attainment of age greater than or equal to 75. En after January 1, 2009 and who	ciding with or next following the attainment of age 50 reditable Service greater than or equal to 90. Employees and December 31, 2017, the first day of the month ing the attainment of age 50 and with the sum of age plus or equal to 80. Employees hired between January 1, the first day of the month coinciding with or next e 50 and with the sum of age plus Creditable Service inployees hired prior to January 1, 2009 who terminate do not elect the alternate benefit formula described below ge 50 with 5 years of Creditable Service.
Member and City Contributions	Effective 12/26/2021 12/27/2020 - 12/25/2021 12/15/2019 - 12/26/2020 12/16/2018 - 12/14/2019 12/17/2017 - 12/15/2018 09/01/2014 - 12/16/2017 Prior to 9/1/2014	10.25% 10.00% 9.75% 9.25% 9.00% 8.25% 7.75%

Member contributions are credited with 2.5% interest annually, compounded quarterly.

<u>Table 23</u>

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Service Retirement Eligibility	A member is eligible for normal retirement on his Normal Retirement Date. For members hired after January 1, 2018, early retirement is permitted at any time after attaining age 50 if the sum of age plus Creditable Service is greater than or equal to 90.For members hired between January 1, 2015 and December 31, 2017, early retirement is permitted at any time after attaining age 50 if the sum of age plus Creditable Service is greater than or equal to 80. For member hired between January 1, 2009 and December 31, 2014, early retirement is permitted at any time after attaining age 50 if the sum of age plus Creditable Service is greater than or equal to 75. Early retirement is permitted at any time after attaining age 50 with 5 years of Credited Service for employees hired prior to January 1, 2009 who terminate after January 1, 2009 and who do not elect the alternate benefit formula described below.
Service Retirement Allowance	Upon service retirement, a member becomes eligible to receive an annual allowance, payable in equal monthly installments. The annual allowance is computed as follows:
	Normal Retirement Allowance Applies to all employees hired after December 31, 2017. Employees hired before January 1, 2018 who terminate after January 1, 2018 may elect this formula at retirement.
	An amount equal to 2.00% of the member's Final Compensation, multiplied by the number of years of Creditable Service up to 40 years. The maximum annual benefit is 80.0% of Final Compensation.
	Normal Retirement Allowance under Alternate Benefit Formula Applies to all employees hired between January 1, 2009 and December 31, 2017. Employees hired before January 1, 2009 who terminate after January 1, 2009 may elect this formula at retirement.
	An amount equal to 2.00% of the member's Final Compensation, multiplied by the number of years of Creditable Service up to 35 years. The maximum annual benefit is 70.0% of Final Compensation.
	Normal Retirement Allowance under Benefit Formula in SMC 3.05.160 Employees hired before January 1, 2009 who terminate after January 1, 2009 may elect this formula at retirement.
	An amount equal to 2.15% of the member's Final Compensation, multiplied by the number of years of Creditable Service up to 30 years. The maximum annual benefit is 64.5% of Final Compensation.
	Early Retirement Allowance The Normal Retirement Allowance calculated using Creditable Service and Final Compensation as of the member's Early Retirement Date. For employees hired after January 1, 2018, a reduction of 2.5% will be applied for each year under age 65.
Disability Retirement Eligibility	Permanent and total disability, as determined by the Board, prior to Normal Retirement Age provided the member has at least 7 years (5 years for employees hired prior to January 1, 2015) of City service in the ten-year period prior to disability. The 7 (or 5) year service requirement does not apply if the disability is due to accidental causes while engaged in City service.
Disability Retirement Allowance	An amount equal to 1.25% of the member's Final Compensation, multiplied by the number of years of Creditable Service projected to Normal Retirement Age. The minimum annual benefit is \$2,400 per year for "Duty Related" disability and \$1,200 per year for "Non-duty Related" disability.

<u>Table 23</u>

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Withdrawal Benefits	If termination occurs after seven years of service (five years of service for members hired prior to January 1, 2015), a member is entitled to a retirement allowance commencing on his Early Retirement Date or later, up to his Normal Retirement Date, based on his years of Creditable Service and Final Compensation as of his termination date provided he has not withdrawn his Member Contributions.
Death Benefit Before Retirement	Not married or not completed 7 years of service (5 years of service if hired prior to January 1, 2015)
	Beneficiary will receive a refund of the member's contributions with interest.
	Married with 7 years of service (5 years of service if hired prior to January 1, 2015)
	The surviving spouse of a member may elect to receive the survivor's portion of the benefit that would have been payable if the member had survived to his earliest retirement date and elected the 100% Joint & Survivor option in lieu of a refund of the member's contribution account.
Post-retirement Death	An amount determined in accordance with the optional form of payment elected at retirement, but not less than the accumulated value of the member's contributions with interest less actual payments made.

Appendix I - Plan Risks (ASOP 51 Compliance)

Risk may be broadly defined as the chance an outcome or result will differ from the expected outcome or result. In the context of defined benefit pension plans risk is the potential for the future financial condition of the plan to deviate from that expected due to future actual experience different from assumed or expected experience. ASOP 51 requires the actuary to identify and assess risks that may reasonably be expected to impact the plan. Some of the more significant risks are described below. Please let us know if you would like us to quantify or model these risks or any others in more detail.

A. Investment Risk

Investment risk is the risk that actual investment returns differ from the assumed rate of return. Investment returns can be very volatile. Even if the assumed rate of return is realized over the long term, this volatility can lead to significant swings in the plan's funded status and contribution requirement from year to year. Furthermore there is the risk that the assumed rate of return may not be realized.

The assumed rate of return for the plan was 7.50% for 2022. Investment returns below the assumed rate of return increase plan costs and decrease the plan's funded status while investment returns in excess of the assumed rate of return decrease plan costs and improve the plan's funded status.

B. Interest Rate Risk

Interest rate risk is the risk that future interest rates differ from expected interest rates. The interest rate is used to discount future expected benefit payments in order to determine a plan's liability as of the measurement date. Higher interest rates result in lower liabilities and lower interest rates result in higher liabilities.

The liability of your plan has a duration of 9.73 as of December 31, 2022. This means a 1% change in interest rates would result in approximately a 10% change in liability. A 1% increase in interest rates would lower plan liability and vice versa.

C. Asset/Liability Mismatch Risk

Asset/Liability mismatch risk is the risk that changes in future asset values are not matched by changes in the value of plan liabilities. Both assets and liabilities are sensitive to interest rates however the same change in interest rates may have differing impact on assets versus liabilities both in terms of direction and magnitude. Matching the duration of interest rate sensitive assets in the plan's portfolio with the duration of the plan's liabilities (see Interest Rate Risk above) is a method that can be employed to protect the plan's funded status from interest rate fluctuations.

D. Longevity Risk

Longevity risk is the risk that mortality experience will be different than expected. Since the plan is not large enough to have credible mortality experience, standard tables are used. The standard tables are comprised of "base rates" and a mortality improvement projection scale which anticipates continued improvement in mortality in the future. If plan participants live longer than expected, the cost of providing lifetime benefits increases and vice versa.

E. Contribution Risk

Contribution risk is the risk that required contributions as determined by the actuary are not made. A comparison of the actuarially determined contribution (ADC) to employer contributions actually made may be found in Table 12.

Appendix I - Plan Risks (ASOP 51 Compliance) (continued)

F. Plan Maturity Measures

Plan maturity measures are ratios intended to measure the maturity level of a plan. As a plan becomes more mature contribution requirements become more sensitive to investment volatility and more conservative investment strategies may be considered. A high ratio indicates a mature plan.

1. Ratio of retired life liability to total liability: 0.61

A high ratio of retired life liability to total liability indicates a larger proportion of the liability is due to "fixed" benefit amounts. As a result, attempts to mitigate fluctuating contribution requirements through plan amendments affecting future benefit accruals will have less of an impact.

2. Ratio of net cash flow to market value of assets: (0.04)

Net cash flow represents contributions received for the year less benefit payments and expenses. Investment income is excluded. A large negative ratio indicates a significant percentage of the assumed rate of return must be realized to cover the annual cash outflow.

1.52

3. Ratio of benefit payments to contributions:

A high ratio of benefit payments to contributions indicates the extent to which investment return is relied upon to improve the funded status and reduce future costs. A fully funded plan would expect benefit payments to equal or exceed contributions.

Appendix II - Data Tables

Exhibit A	Summary of Membership Data as of December 31, 2022
Exhibit B	20 Year Benefit Payment Projections
Exhibit C	Age and Service Distributions
Exhibit D	Age, Salary and Service Distributions
Exhibit E	Average Benefits for Service Retirement
Exhibit F	Average Benefits for Survivor Beneficiary
Exhibit G	Average Benefits for Disability Retirement
Exhibit H	Average Benefits for Vested Terminations
Exhibit I	Average Benefits for Portables

ltem	Male	Female	Total
Number of Members	1,058	477	1,535
Annual Salaries	\$84,146,623	\$35,359,295	\$119,505,918
Average Age	46.4	47.0	46.6
Average Service	10.3	10.0	10.2

EXHIBIT A

Summary of Membership Data as of December 31, 2022

Active Members

◄	
L	ned
IIB	ntin
XF	C01
(\mathbf{T})	

Summary of Membership Data as of December 31, 2022

Retirees and Beneficiaries

Item	Number	Annual Annuities	Average Annuities
Retired Members	1,401	\$32,946,193	\$23,516
Survivor Annuitants	173	\$2,620,052	\$15,145
Disabled Annuitants	×	\$114,580	\$14,323
Total Annuitants	1,582	\$35,680,825	\$22,554

Item	Number	Annual Annuities	Average Annuities
Vested Terminations	87	\$1,298,409	\$14,924
Portables*	74	\$783,294	\$10,585

* Annuity amounts are estimates based on last known earnings projected to retirement. Actual annuity amounts will be calculated using actual earnings at retirement.

Summary of Membership Data as of December 31, 2022

EXHIBIT A (continued) **Vested Terminations and Portables**

97	

EXHIBIT B

20 Year Benefit Payment Projection

Current Retirees Only	\$35,440,487	34,899,027	34, 321, 067	33,706,010	33,052,858	32,360,477	31,628,502	30,853,469	30,035,875	29,178,153	28,277,452	27,334,017	26,352,144	25, 324, 198	24,260,272	23,161,618	22,007,042	20,824,337	19,645,088	18,432,529	
Current and Future Retirees	\$39,666,935	41,181,221	42,752,082	44,212,168	45,647,820	47,054,744	48,351,146	49,618,641	50,798,651	51,943,843	52,949,917	53,871,273	54,866,359	55,719,201	56,558,488	57,335,303	57,946,869	58,491,370	58,925,949	59,319,138	
Y ear Ended December 31	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041	2042	

Age and Service Distribution

Total	22	85	176	198	217	212	221	199	141	55	6	1,535	100.0%
40 & Up	0	0	0	0	0	0	0	0	1	2	ю	9	0.4%
35 to 39	0	0	0	0	0	0	0	С	С	2	0	8	0.5%
30 to 34	0	0	0	0	0	1	7	20	18	7	7	55	3.6%
25 to 29	0	0	0	0	0	2	14	20	19	ŝ	0	58	3.8%
ble Service 20 to 24	0	0	0	0	11	25	34	29	17	7	1	124	8.1%
Years of Creditable Service 15 to 19 20 to 24	0	0	0	14	33	34	29	25	20	6	1	165	10.7%
Ye 10 to 14	0	0	5	26	39	31	32	33	18	5	0	189	12.3%
5 to 9	0	11	46	59	57	52	47	31	22	13	1	339	22.1%
1 to 4	9	35	83	72	43	49	39	32	17	ю	0	379	24.7%
Under 1	16	39	42	27	34	18	19	9	9	4	1	212	13.8%
Attained Age	Under 25	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 & Up	Total	Freq. Pct.

Age, Salary and Service Distribution

Total	1,008,867	4,824,786 11,627,895	14,730,056	17,600,396	17,388,557	18, 376, 507	16,654,753	12,241,750	4,347,868	704,484	119,505,918	100.0%	77,854
40 & Up	0	0 0	0	0	0	0	0	83,926	151,606	272,442	507,973	0.4%	84,662
35 to 39	0	0 0	0	0	0	0	247,356	226,073	113,060	0	586,488	0.5%	73,311
30 to 34	0	0 0	0	0	137,571	489,782	1,852,119	1,592,342	615,095	118,558	4,805,467	4.0%	87,372
25 to 29	0	0 0	0	0	148,501	1,316,608	1,751,145	1,808,670	215,733	0	5,240,657	4.4%	90,356
table Service 20 to 24	0	0 0	0	928,209	2,279,864	3,205,709	2,482,860	1,499,326	575,132	57,552	11,028,652	9.2%	88,941
Years of Creditable Service 15 to 19 20 to 24	0	0 0	1,052,603	2,807,015	2,802,706	2,635,733	1,984,280	1,729,370	796,856	73,534	13,882,097	11.6%	84,134
Y 10 to 14	0	0 386,357	2,390,317	3,527,501	2,562,997	2,678,918	2,758,468	1,639,789	365,402	0	16,309,749	13.7%	86,295
5 to 9	0	848,611 $3,792,482$	5,202,080	5,330,733	4,849,975	4,219,002	2,956,327	1,926,508	1,073,440	106,633	30,305,791	25.4%	89,398
1 to 4	324,385	2,017,194 5,394,590	4,735,215	2,848,960	3,336,249	2,779,240	2,301,933	1,455,305	149,415	0	11,496,558 25,342,486 30,305,791	21.2%	66,867
Under 1	684,482	1,958,981 2,054,466	1,349,841	2,157,978	1,270,694	1,051,515	320,266	280,441	292,129	75,765	11,496,558	9.6%	54,229
Attained Age	Under 25	25 to 29 30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 & Up	Total	Freq. Pct.	Avg. Sal.

Average Benefits for Service Retirement

Attained	Mal	o	Female	<u> </u>	Total	-
Age	Number	Number Avg. Ben.	Number Avg. Ben.	Avg. Ben.	Number	Number Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	29	28,202	22	28,935	51	28,518
55 to 59	61	27,630	33	21,987	94	25,649
60 to 64	66	31,066	76	25,844	175	28,798
65 to 69	210	28,293	133	21,488	343	25,655
70 to 74	208	25,713	134	19,576	342	23,308
75 to 79	129	24,826	75	14,573	204	21,056
80 to 84	60	20,070	51	13,179	111	16,904
85 to 89	26	17,453	26	10,327	52	13,890
90 to 94	13	14,820	8	11,510	21	13,559
95 & Up	4	13,771	4	9,067	8	11,419
Total	839	26,194	562	19,518	1,401	23,516
Average Age	70.6		71.1		70.8	
Freq. Pct.	59.9%		40.1%		100.0%	

Average Benefits for Survivor Beneficiary

Attained	Male		Feme	lle	Tota	1
Age	Number Avg. Ben.	Avg. Ben.	Number	Number Avg. Ben.	Number	Number Avg. Ben.
Under 50	0	0	1	15,194	1	15,194
50 to 54	0	0	1	24,705	1	24,705
55 to 59	0	0	3	24,912	3	24,912
60 to 64	1	11,020	12	20,279	13	19,567
65 to 69	2	6,764	21	17,757	23	16,801
70 to 74	2	11,331	36	19,717	38	19,275
75 to 79	2	12,412	21	13,173	23	13,107
80 to 84	1	8,819	29	13,088	30	12,945
85 to 89	33	7,069	26	11,731	29	11,248
90 to 94	1	12,922	L	11,002	8	11,242
95 & Up	1	1,382	3	8,272	4	6,550
Total	13	8,951	160	15,648	173	15,145
Average Age	79.3		76.6		76.8	
Freq. Pct.	7.5%		92.5%		100.0%	

Average Benefits for Disability Retirement

Attained	Male	e	Female	ale	Total	al
Age	Number	Number Avg. Ben.	Number	Number Avg. Ben.	Number	Number Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	0	0	0	0	0	0
55 to 59	1	18,583	1	19,080	2	18,831
60 to 64	0	0	0	0	0	0
65 to 69	3	14,293	0	0	3	14,293
70 to 74	0	0	1	7,844	1	7,844
75 to 79	1	13,295	1	12,898	2	13,096
80 to 84	0	0	0	0	0	0
85 to 89	0	0	0	0	0	0
90 to 94	0	0	0	0	0	0
95 & Up	0	0	0	0	0	0
Total	5	14,952	3	13,274	8	14,323
Average Age	66.6		68.6		67.3	
Freq. Pct.	62.5%		37.5%		100.0%	

Average Benefits for Vested Terminations

Total	Number Avg. Ben.	0 0	3 15,398	17 13,910	15 17,196	30 15,880	10 15,586	8 12,185	3 7,896	1 4,363	87 14,924	46.3	100.0%
ale	Number Avg. Ben.	0	17,296	11,087	17,051	14,097	5,333	7,326	7,472	4,363	12,987		
Fema	Number	0	2	5	L	17	2	3	1	1	38	46.1	43.7%
	Avg. Ben.	0	11,603	15,086	17,324	18,212	18,149	15,100	8,109	0	16,426		
Male	Number Avg. Ben.	0	1	12	8	13	8	5	2	0	49	46.4	56.3%
Attained	Age	Under 30	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 & Up	Total	Average Age	Freq. Pct.

Average Benefits for Portables

Spokane Employees' Retirement System

Attained Age	Male Number Avg. Ben.*	vg. Ben.*	Female Number Avg. Ben.*	e .vg. Ben.*	Total Number A	Total Number Avg. Ben.*
Under 30	0	0	1	614	1	614
30 to 34	0	0	5	3,909	5	3,909
35 to 39	5	3,411	9	8,301	11	6,078
40 to 44	9	16,431	10	5,953	16	9,882
45 to 49	б	7,418	2	40,098	5	20,490
50 to 54	8	14,789	9	17,533	14	15,965
55 to 59	10	6,405	4	21,494	14	10,716
60 to 64	0	0	7	8,292	L	8,292
65 & Up	1	4,128	0	0	1	4,128
Total	33	9,830	41	11,193	74	10,585
Average Age	50.1		46.9		48.3	
Freq. Pct.	44.6%		55.4%		100.0%	
	-					-

* Annuity amounts are estimates based on last known earnings projected to retirement. Actual annuity amounts will be calculated using actual earnings at retirement.

Statistical Section

This page intentionally left blank

Schedule of Revenues by Source

Fiscal <u>Year</u>	Employer Contribution	Employer Contributions	Member Contributions	Net Investment Income	Total Revenues
2013	7.75%	6,715,376	6,715,376	45,323,533	58,754,285
2014 ¹	7.92%	6,822,279	6,822,279	14,497,901	28,142,459
2015	8.25%	7,398,945	7,402,905	(3,228,439)	11,573,411
2016	8.25%	7,586,362	7,586,362	16,802,274	31,974,998
2017 ²	8.25%	8,113,319	8,113,319	43,085,572	59,312,210
2018 ³	9.00%	9,187,420	9,188,781	(18,715,945)	(339,744)
2019 4	9.25%	9,824,717	9,827,760	50,166,728	69,819,205
2020 5	9.75%	10,659,281	10,659,281	33,795,088	55,113,650
2021 ⁶	10.00%	11,519,708	11,519,708	46,166,835	69,206,251
2022	10.25%	11,863,726	11,931,102	(50,241,335)	(26,446,507)

Effective September 1, 2014, the annual Contribution Rate changed frm 7.75% to 8.25%.
 7.92% represents the average rate of contributions received during 2014.

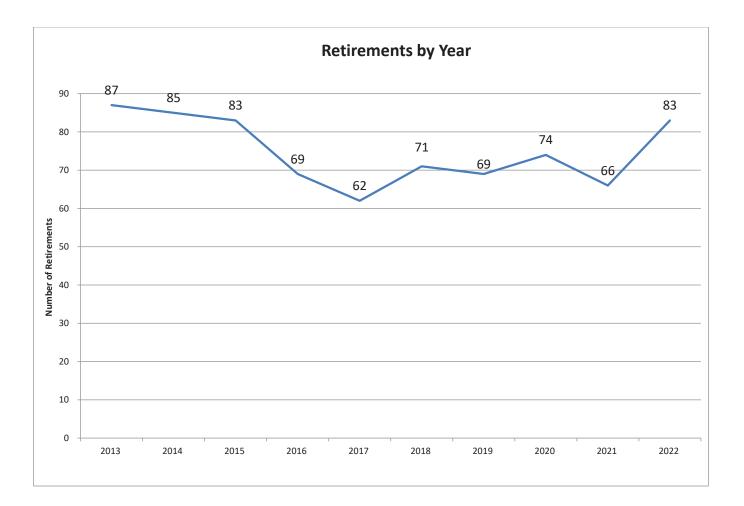
- ² Effective December 17, 2017, the annual Contribution Rate changed from 8.25% to 9.00%.
 8.25% represents the average rate of contributions received during 2017.
- ³ Effective December 16, 2018, the annual Contribution Rate changed from 9.00% to 9.25%. 9.00% represents the average rate of contributions received during 2018.
- ⁴ Effective December 15, 2019, the annual Contribution Rate changed from 9.25% to 9.75%. 9.25% represents the average rate of contributions received during 2019.
- ⁵ Effective December 27, 2020, the annual Contribution Rate changed from 9.75% to 10.0%.
 9.75% represents the average rate of contributions received during 2020.
- ⁶ Effective December 26, 2021, the annual Contribution Rate changed from 10.0% to 10.25%. 10.0% represents the average rate of contributions received during 2021.

Fiscal			Net	Total
Year	Benefits	Refunds	Administrative	Expenses
2013	20,346,281	393,954	385,675	21,125,910
2014	22,258,842	625,184	386,713	23,270,739
2015	23,959,198	637,822	447,921	25,044,941
2016	25,737,515	729,741	477,252	26,944,508
2017	26,891,785	551,908	563,078	28,006,771
2018	28,309,344	554,422	554,484	29,418,250
2019	30,055,864	544,438	555,763	31,156,065
2020	31,595,115	513,758	619,135	32,728,008
2021	33,256,350	741,019	603,645	34,601,014
2022	35,057,797	1,210,280	679,519	36,947,596

Schedule of Expenses by Type

Schedule of Benefit Expenses by Type

Veer	Service Retiree	Survivor	Disability Retiree	Defunde	Tatal
Year	Benefits	Benefits	Benefits	Refunds	Total
2013	18,887,269	1,333,659	125,353	393,954	20,740,235
2014	20,659,575	1,473,938	125,329	625,184	22,884,026
2015	22,192,756	1,641,114	125,328	637,822	24,597,020
2016	23,765,713	1,846,474	125,328	729,741	26,467,256
2017	24,852,640	1,913,817	125,328	551,908	27,443,693
2018	26,202,801	1,981,215	125,328	554,422	28,863,766
2019	27,788,707	2,142,993	124,164	544,438	30,600,302
2020	29,378,701	2,101,834	114,580	513,758	32,108,873
2021	30,993,999	2,147,773	114,580	741,019	33,997,371
2022	32,696,265	2,246,952	114,580	1,210,280	36,268,077



Retirements During 2022

Name	Department	Position	Date Retired	Option	Serv Yrs	Age
Anderson, Russell D.	Parks & Recreation	Electrician	11/3/2022	E	31.2	62
Avenger, Donald V.	Solid Waste Disposall	WTE Shift Supervisor	7/24/2022	ST	7.7	62
Barry, Randy N.	Advanced Wastewater Treatment	WWTP Maintenance Mechanic	6/4/2022	ST	30.5	63
Beardslee, David L.	Street	Street Maintenance Operator II	10/28/2022	E	41.0	65
Becker, Kristen J.	Development Services Center	Director	7/7/2022	A	19.9	50
Bierig, Brian W. Braviroff, Jeffrey S. #	Solid Waste Management Street	Refuse Collector III Laborer II	1/8/2022 11/1/2022	E E	25.4 2.8	66 54
Brazington, Cynthia M.	Accounting	Accounting Clerk	12/7/2022	Ē	19.2	63
Castillo, Cass J.	Advanced Wastewater Treatment	Heavy Equipment Operator	2/5/2022	Ď	26.9	75
Clarke, Pamela G.	Parks & Recreation	Clerk IV	9/3/2022	ST	8.7	63
Clarry, Raymond M.	Street	Bridge Maintainer II	9/2/2022	E	16.3	56
Como, David A. *	Water	Instrument Repair Techician	9/1/2022	E	6.8	50
Coster, Michael F. Davis, Mark W.	Advanced Wastewater Treatment Water	WWTP Plant Manager Certified Water Service Specialist	1/8/2022 1/7/2022	E ST	44.6 33.5	69 62
Dean, Riva H.	Library	Senior Librarian	1/22/2022	ST	13.3	65
Dodson, Deborah C. #	Parks & Recreation	Assistant Riverfront Park Manager	6/1/2022	ST	16.2	55
Donder, Kay L	Public Works & Utilities	Utilities Account Services Specialist	7/6/2022	C15	13.7	64
Dornquast, Willard H.	Sewer Maintenance	Wastewater Inspector	1/8/2022	D	29.5	60
Dowers, Ronald J.	Solid Waste Disposal	Environmental Technician	10/7/2022	E	29.6	66
Duffey, Valarie J.	Municipal Court	Court Clerk I	6/4/2022 6/24/2022	D E	15.6 30.8	61 58
Elvidge, Channing C. Erret, Randall E.	Solid Waste Management Engineering Services	Refuse Collector III Water Inspector	6/4/2022	E	23.6	50
Fagan, Michael J.	City Council	Councilmember	4/1/2022	ST	8.0	62
Franke, Lynn D.	Public Works & Utilities	Utilities Accout Services Sepcialist	1/7/2022	ST	13.6	68
Frazier, Thomas L.	Street	Laborer II	8/3/2022	ST	15.6	56
Fritz, Michael A.	Water	Laborer I	4/12/2022	ST	29.7	57
Furfaro, Steven C.	Parking Meter Revenue	Parking Enforcement Specialist I	2/1/2022	ST	7.8	56
Gale, Scott A.	Street Public Facilities District	Bridge Inspector	2/12/2022 12/1/2022	B A	19.3 25.5	63 53
Garwood, Brittany A. * Gibson, Matthew E. *	Public Facilities District	Director of Finance Marketing Assistant	2/1/2022	Ē	20.7	50
Glasser, Rodney M.	Stormwater	Waste Water Inspector	5/14/2022	Ē	30.0	66
Greer, Samuel P.	Fleet Services	Fleet Service Writer	3/26/2022	Е	13.0	63
Halpin, Melissa D.	Street	Traffic Engineering Specialist I	4/5/2022	ST	20.0	65
Hammersley, Grace A.	Combined Communications Center	Fire Communications Center Shift Supervisor	4/17/2022	E	12.0	62
Hansard Busse, Lisa A.	Solid Waste Disposal	Cash Accounting Clerk II	7/6/2022	E	25.3	59
Hood, David W. Jenness, Kenneth R.	Sewer Maintenance Development Services Center	Waste Water Specialist Lead Building/Plumbing Inspector	2/5/2022 9/10/2022	ST E	12.9 19.8	66 52
Jensen, Jeffrey L.	Development Services Center	Certified Combination Inspector	1/1/2022	Ē	15.7	66
Johanns, Cynthia D.	Sewer Maintenance	Engineering Technician III	3/4/2022	ST	12.6	65
Kendall, Thomas B.	Asset Management	Building Engineer I	2/17/2022	E	8.6	53
Kokot, Robyn J.	Accounting	Senior Accountant	6/18/2022	ST	16.3	63
LaForce, Timothy A.	Water	Laborer II	10/4/2022	E	7.9	63
Larribeau, John D.	Fleet Services Street	Parts Technician Signal Maintenance Technician	10/1/2022 4/2/2022	ST E	14.5 12.1	70 63
Lawrence, Russell D. Lawton, Robert R.	Parks & Recreation	Carpenter	7/26/2022	A	13.6	67
Lehrhaupt, Liesel E. *	Legal	Attorney II	11/1/2022	ST	5.0	53
Lewis, Kathryn	Probation Services	Clerk II	4/30/2022	А	30.0	66
Lopez, Michael C.	EMSFund	Integrated Medical Services Manager	5/26/2022	ST	8.0	67
Lund, David E. *	Police	Police Planner	5/1/2022	E	11.5	50
Marshall, Charles R.	Fleet Services	Heavy Equipment Mechanic	3/5/2022	D B	17.4 42.6	65 74
Martin, Gregory O. Maurer, Dale G.	Street Fleet Services	Traffic Engineering Specialist I Auto Body Specialist	2/12/2022 3/5/2022	E	27.3	67
Melvin, Valla D.	Street	Senior Traffic Engineer	8/6/2022	ST	16.7	61
Meuler, Louis W.	Planning	Principal Planner	2/12/2022	C20	25.5	52
Mullerleile, Stephen G.	Solid Waste Disposal	WTE Maintenance Specialist	6/3/2022	ST	7.1	66
Murphy, Rollin S.	Water	Certified Water Service Specialist	9/7/2022	E	30.0	58
Niemeier, Scott L.	Parks & Recreation	Recreation Supervisor	4/2/2022	ST	32.1	59
O'Donnell, Mark W. Opfer, Monica E. *	Street Public Works & Utilities	Street Maintenance Foreperson Clerk II	1/5/2022 4/1/2022	E E	20.0 19.5	53 51
Owens, Martin S.	Street	Street Maintenance Operator II	6/10/2022	E	34.7	59
Parks, Michael E.	Parks & Recreation	Laborer II	7/16/2022	ST	7.1	66
Patrick, Lori K.	Development Services Center	Office Manager	7/9/2022	Е	29.0	52
Peone, Tonya R.	Combined Communications Center	Fire Communications Center Shift Supervisor	11/1/2022	ST	23.7	52
Peterson, Richard R.	IT	Information Systems Analyst II	4/9/2022	ST	15.7	64
Pfennig, Clinton W.	Street	Street Maintenance Operator II Librarian	6/3/2022	E ST	20.6 17.4	55 63
Pritchard, Cheryl A. Reiss, Robert J.	Library Water	Certified Water Service Specialist	1/1/2022 6/2/2022	E	25.0	56
Rhodes, Steven E.	Development Services Center	Certified Combination Inspector	1/1/2022	Ē	29.5	67
Rogers, David T.	Water	Certified Water Service Specialist	5/3/2022	E	43.0	64
Ryan, Tiffiny S.	Police	Police Records Specialist	3/15/2022	ST	17.4	52
Sanders, Theresa M. *	Mayor	City Administrator	5/1/2022	E	10.5	62
Sayer, Gillian M. F.	Library Engineering Services	Customer Experience Manager	3/9/2022	ST E	27.9 16.8	52 50
Schulte, Ryan E. * Simmons, Michael D.	Sewer Maintenance	Field Engineer Waste Water Inspector	12/1/2022 4/2/2022	E E	41.8	50 62
Skow, Donald W.	Solid Waste Management	Refuse Collector III	1/1/2022	D	23.1	67
Smith, Steve E.	Parks & Recreation	Gardener II	4/5/2022	E	32.8	67
Stevens, Tracy L.	Advanced Wastewater Treatment	Laboratory Technician	3/7/2022	C20	11.8	63
Stipe, Scott Ŵ.	IT	Network Éngineer	3/5/2022	ST	20.0	65
Tagariello, Michael J. *	Water	Meter Reader	2/1/2022	ST	8.2	50
Towne, Jeffrey T.	Parks & Recreation	Irrigation Specialist	8/2/2022	E	28.2 15.9	57 58
						54
Wamsley, Leonora L. Weinfurtner, Jeffrey J.	Solid Waste Disposal Police	Cash Accounting Clerk I Police Records Specialist	1/1/2022 12/2/2022	ST E	25.0	65

* Retired as vested employee # Retired under membership through Portability ^ Retired as spouse of deceased vested employee

Retiree Deaths During 2022

Name	Date Retired	Date of Death	Age	Retirement Option
Aguilar, Jesus T.	7/22/2014	12/20/2022	94	E
Badeaux, Mary T.	9/7/2013	11/13/2022	72	ST
Beck, Marlene J.	10/31/2009	2/8/2022	80	E
Bergstrom, John R.	4/29/2006	5/7/2022	79	ST
Berry, Velda M.	5/11/2001	8/8/2022	95	D
Bingham, Frances J.	5/5/2001 5/1/2017	10/2/2022 1/30/2022	85 78	ST D
Brueher, Gary J. Burkart, Kenneth G.	11/1/1996	7/5/2022	78	ST
Cates, Eddie G.	8/7/2010	1/10/2022	76	D
Doss, Clifton	10/1/1999	11/3/2022	73	ST
Ellefsen, Edward G.	1/12/1994	8/22/2022	78	ŠŤ
Evans, Helen I.	5/15/1999	1/12/2022	83	D
Folk, Harold R.	11/3/2020	1/4/2022	76	E
Freese, Janice L.	6/2/2007	2/23/2022	81	D
Gibford, Ronald H.	2/15/1986	4/6/2022	89	D
Guffey, Myron E.	2/6/2010	8/10/2022	68	P
Hall, Janice L.	7/18/2011	9/12/2022	83	E
Hone, Larry M.	1/8/2000 2/2/2005	12/14/2022 3/1/2022	76 67	E D
Huffman, Virginia L. James, David P.	4/9/1994	11/9/2022	81	ST
Johnson, Erma J.	1/13/2017	6/5/2022	80	F
Joireman, James E.	7/2/2006	10/22/2022	85	E
Keeling, Robert E.	4/1/2011	10/21/2022	74	ST
Kreshel, James S.	5/13/1995	6/29/2022	79	E
Langston, Nicolas D.	3/30/2013	11/7/2022	74	E
Lewis, Kathryn	4/30/2022	5/7/2022	66	ST
Liedkie, Ina L.	5/7/2016	6/15/2022	84	ST
Lindsey, Gary L.	1/20/1996	4/16/2022	82	D
Mauget, Richard R.	12/4/2012 9/3/2005	12/9/2022 2/1/2022	70 88	E ST
McDonald, June M. Medley, Glennavon J.	10/31/1992	6/22/2022	95	ST
Nelson, Bertram I.	12/31/2004	8/20/2022	72	
Nunn, James A.	5/4/1999	10/21/2022	74	A E E
Phillipson, Camilla J.	3/1/1995	10/14/2022	92	Ē
Piche-Schafer, Catherine A.	11/14/2014	6/25/2022	70	D
Porter, Lisa G.	5/2/2017	8/16/2022	63	ST
Pratt, Alvey W.	1/2/1997	9/26/2022	78	C20
Provost, Elaine E.	11/29/2006	7/5/2022	97	D
Richardson, Warren J. Roderick, Sam R.	1/8/1983 12/31/2004	2/8/2022 11/2/2022	86 83	A E
Rollins, Andrea E.	9/4/2013	4/10/2022	63 67	ST
Salinas, Donald D.	6/2/2007	5/20/2022	68	F
Schmitz, Rose C.	8/2/2003	6/17/2022	88	E
Schram, Deanna M.	2/15/2010	12/26/2022	85	D
Sherman, Berta	3/18/2019	10/22/2022	93	E
Stevens, Tracy L.	3/7/2022	3/9/2022	63	C20
Stoltz, David A.	5/29/1999	5/16/2022	80	ST
Thain, Richard A.	3/10/2007	3/29/2022	78	E
Thompson, Loran A.	2/16/2008	7/16/2022	76	ST
Tillett, Betty J.	5/31/1994	11/8/2022 1/17/2022	92 84	E ST
Tipke, Ronald L. Weathermon, Stephen D.	11/2/1996 1/9/2016	4/1/2022	0 4 71	A
Winner, Larry D.	7/2/2002	9/17/2022	77	Ē
		C, TTEOLL		<u> </u>

Active Member Deaths During 2022

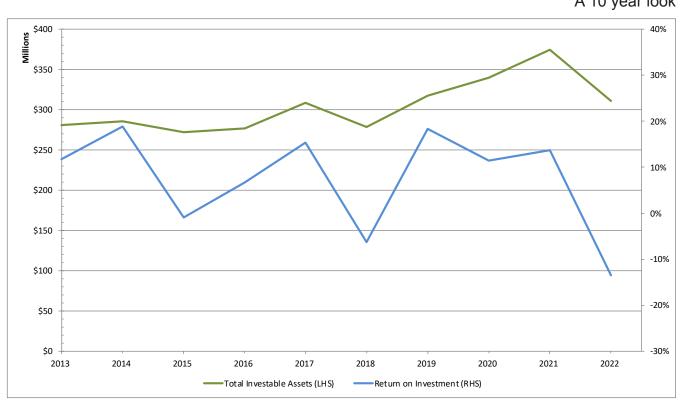
Name	Department	Date of Death	Age	Years of Service
Wood, Kimberley M.	Municipal Court	3/22/2022	53	13.6

Investment Section

This page intentionally left blank

Total Retirement Assets

A 10 year look



Schedule of Investment Results

	Market Value of Investments	Net Investment Income	Investment Rate of Return (net of fees)
2013	280,670,090	45,323,533	18.89%
2014	285,567,005	14,497,901	5.34%
2015	272,332,285	(3,228,439)	-0.94%
2016	276,992,752	16,802,274	6.71%
2017	308,520,137	43,084,584	15.40%
2018	278,768,297	(18,715,945)	-6.27%
2019	317,470,461	50,166,728	18.35%
2020	339,886,455	33,795,088	11.47%
2021	374,540,809	46,166,835	13.67%
2022	311,156,246	(50,241,335)	-13.50%

Investments Listed by Type As of December 31, 2022

Domestic Equities:Hotchkis & Wiley Large Cap Value16,922,664MFS Large Cap Growth13,288,280Fidelity S&P 500 Index32,790,657Sterling Mid Cap Value5,657,900Westfield Mid Cap Growth4,632,220Fidelity Mid Cap Index2,748,569Champlain Small Cap7,729,347Wells Fargo Small Cap Growth6,858,290Fidelity Mid Cap Index465,440International Equities:465,440Artisan International Value23,920,024EuroPacific Growth18,639,548Trivalent Small Cap Value11,525,994Emerging Markets:9,041,815Vanguard Emerging Markets Strategic Portfolio9,041,815Vanguard Emerging Market Equity446,810Real Estate:1,087Metropolitan Real Estate Partners1,087Morrison Street Fund VII950,965Morrison Street Fund VII950,965Morrison Street Fund VII8,688,629Principal (REITs)11,715,116Long Biased Hedge Funds:20,291,912Weatherlow Offshore20,291,912Royalty Opportunities I5,45,455Royalty Opportunities II272,444Opportunistic Credit:13,292,026Beach Point Select Fund13,292,026Contrarian Capital Fund I9,796,840Special Opportunities II5,108,060OrbiMed Partners II5,108,060OrbiMed Partners II5,108,060OrbiMed Partners II5,108,060OrbiMed Partners II5,108,060 <th>Capital Preservation: Cash Held by Treasurer Fidelity Government Money Market Sterling Capital Core Bond Hotchkis & Wiley High Yield Pimco Dynamic Bond Fund Polar Long/Short Fund Post Limited Term High Yield Rimrock Low Volatility</th> <th>\$111,725 947,268 23,731,453 14,676,847 5,553,203 9,041,806 6,670,996 10,333,388</th>	Capital Preservation: Cash Held by Treasurer Fidelity Government Money Market Sterling Capital Core Bond Hotchkis & Wiley High Yield Pimco Dynamic Bond Fund Polar Long/Short Fund Post Limited Term High Yield Rimrock Low Volatility	\$111,725 947,268 23,731,453 14,676,847 5,553,203 9,041,806 6,670,996 10,333,388
Artisan International Value23,920,024EuroPacific Growth18,639,548Trivalent Small Cap Value11,525,994Emerging Markets:ABS Emerging Markets Strategic Portfolio9,041,815Vanguard Emerging Market Equity446,810Real Estate:1,087Metropolitan Real Estate Partners1,087Morrison Street Fund VI6,704,712Morrison Street Fund VII950,965Morrison Street Income Fund2,663,364Morgan Stanley PRIME Fund8,688,629Principal (REITs)11,715,116Long Biased Hedge Funds:20,291,912Weatherlow Offshore20,291,912Royalty Opportunities I545,455Royalty Opportunities II272,444Opportunistic Credit:9,796,840Beach Point Select Fund13,292,026Contrarian Capital Fund I9,796,840Special Opportunities:5,108,060OrbiMed Partners II546,569	Hotchkis & Wiley Large Cap Value MFS Large Cap Growth Fidelity S&P 500 Index Sterling Mid Cap Value Westfield Mid Cap Growth Fidelity Mid Cap Index Champlain Small Cap Wells Fargo Small Cap Value Bridge City Small Cap Growth	13,288,280 32,790,657 5,657,900 4,632,220 2,748,569 7,729,347 5,017,058 6,858,290
ABS Emerging Markets Strategic Portfolio9,041,815Vanguard Emerging Market Equity446,810Real Estate:1,087Metropolitan Real Estate Partners1,087Morrison Street Fund VI6,704,712Morrison Street Fund VII950,965Morrison Street Income Fund2,663,364Morgan Stanley PRIME Fund8,688,629Principal (REITs)11,715,116Long Biased Hedge Funds:20,291,912Weatherlow Offshore20,291,912Royalty Opportunities I545,455Royalty Opportunities II272,444Opportunistic Credit:9,796,840Special Opportunities:5,108,060Contrarian Emerging Markets5,108,060OrbiMed Partners II156,569	Artisan International Value EuroPacific Growth	18,639,548
Metropolitan Real Estate Partners1,087Morrison Street Fund VI6,704,712Morrison Street Fund VII950,965Morrison Street Income Fund2,663,364Morgan Stanley PRIME Fund8,688,629Principal (REITs)11,715,116Long Biased Hedge Funds:20,291,912Weatherlow Offshore20,291,912Royalty Opportunities I545,455Royalty Opportunities II272,444Opportunistic Credit:272,444Beach Point Select Fund13,292,026Contrarian Capital Fund I9,796,840Special Opportunities:5,108,060OrbiMed Partners II156,569	ABS Emerging Markets Strategic Portfolio	
Weatherlow Offshore20,291,912Royalty Opportunities I545,455Royalty Opportunities II272,444Opportunistic Credit:272,444Beach Point Select Fund13,292,026Contrarian Capital Fund I9,796,840Special Opportunities:5,108,060OrbiMed Partners II156,569	Metropolitan Real Estate Partners Morrison Street Fund VI Morrison Street Fund VII Morrison Street Income Fund Morgan Stanley PRIME Fund	6,704,712 950,965 2,663,364 8,688,629
Beach Point Select Fund13,292,026Contrarian Capital Fund I9,796,840Special Opportunities: Contrarian Emerging Markets5,108,060OrbiMed Partners II156,569	Weatherlow Offshore Royalty Opportunities I	545,455
Contrarian Emerging Markets5,108,060OrbiMed Partners II156,569	Beach Point Select Fund	
Total Cash and Investments \$310,938,481	Contrarian Emerging Markets	
	Total Cash and Investments	\$310,938,481

Note: Totals may not add due to rounding

This page intentionally left blank