



SERS

**Spokane Employees'
Retirement System**

Comprehensive Annual Report

FOR THE YEAR ENDED DECEMBER 31, 2020

Photography by James Richman

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Comprehensive Annual Report

FOR THE YEAR ENDED DECEMBER 31, 2020



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Introductory Section

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RETIREMENT SYSTEM**
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To the Honorable Mayor and
Spokane City Council
Spokane, WA 99201

This 79th 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, 2020

Phillip Tencick
Retirement Director

Administrative Organization

BOARD OF ADMINISTRATION

Michael F. Coster (Chair)	Elected Employee	WWTP Operations Superintendent, Advanced Waste Water Treatment Plant
Joseph Cavanaugh	Elected Employee	Water Engineering Tech Foreperson, Water Division
James Tieken	Elected Employee	Refuse District Supervisor, Solid Waste Management
Michael Cathcart	Council Appointee	City Council Member, City of Spokane
Brian Brill	Council Appointee	Portfolio Manager, Washington Trust Bank
Dean Kiefer	Council Appointee	Associate Professor, Finance and Marketing Department, Eastern Washington University
J.D. Morscheck	Board Appointee	Assistant Professor of Finance, Gonzaga University

INVESTMENT ADVISORY COMMITTEE

Gene Fitzpatrick	President, Spokane City Credit Union
Brian Brill	Portfolio Manager, Washington Trust Bank
Dean Kiefer	Associate Professor, Finance and Marketing Department, Eastern Washington University
Phillip Tencick	Retirement Director, Spokane Employees' Retirement System

STAFF

Phillip Tencick	Retirement Director
Christine Shisler	Assistant Retirement Director
Donald G. Brown	Pension Specialist
Timothy Szambelan	Legal Advisor

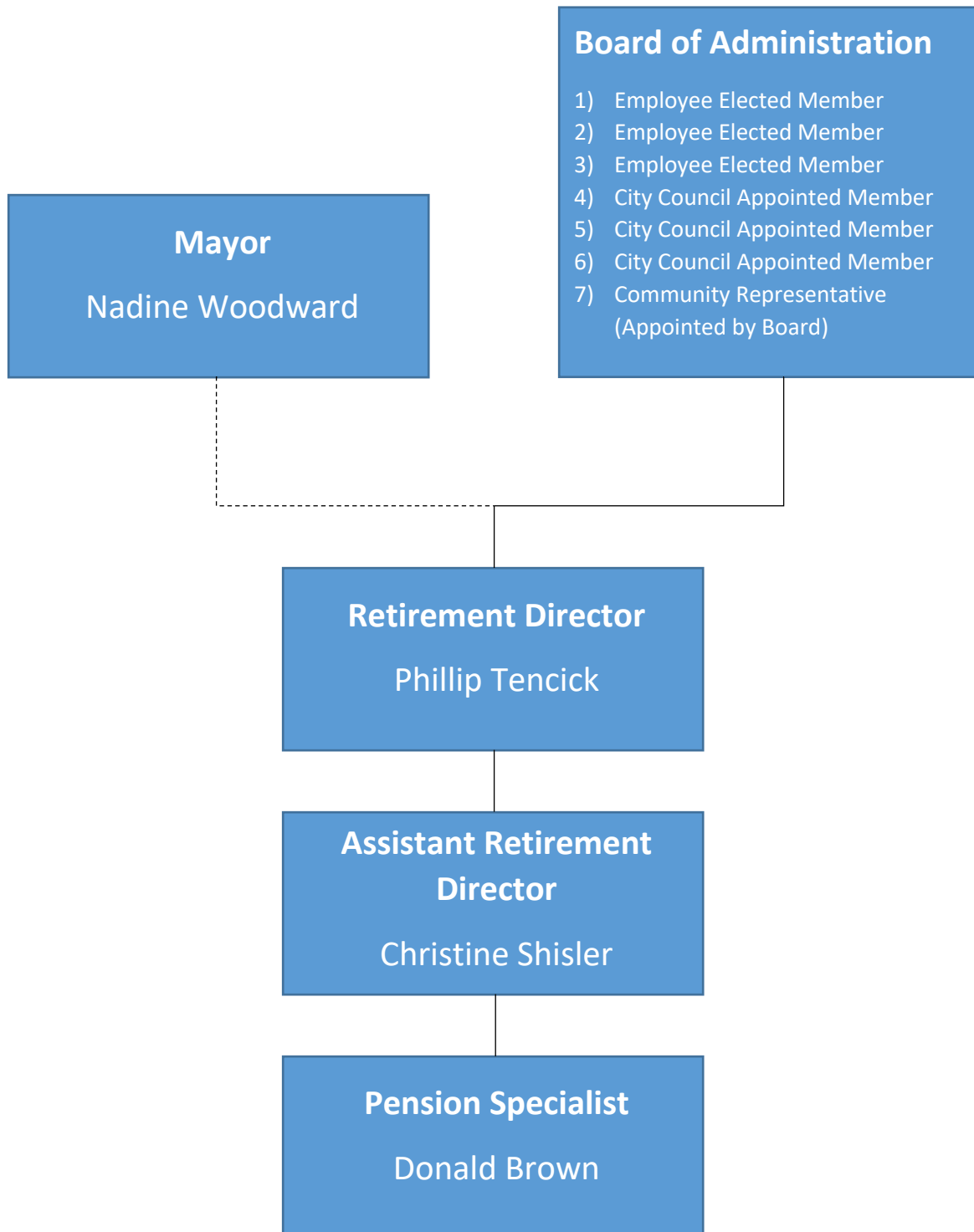
ADVISORY

Auditor	Moss Adams
Actuary	SageView Consulting Group
Investment Consultant	Hyas Group
Custodian	US Bank
Legal Counsel	K&L Gates and Ogletree, Deakins, Nash, Smoak & Stewart, PC

This Annual Report was printed and produced by Sir Speedy Printing, Spokane, WA

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 10.00% 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 10.00% contribution. The City's contributions are used for funding the overall plan. The contribution rate increased from 9.75% to 10.00% for both the member and the City on December 27, 2020.

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 lump-sum cash refund of any remaining balance being paid to a beneficiary upon the retiree's death.

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.

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

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Financial Section

Moss-Adams L.L.P.
Independent Auditor's Report

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Report of Independent Auditors

The Trustees
Spokane Employees' Retirement System

Report on the Financial Statements

We have audited the accompanying financial statements of the Spokane Employees' Retirement System, a component unit of the City of Spokane, Washington, which comprise the statements of fiduciary net position as of December 31, 2020 and 2019, and the related statements of changes in fiduciary net position for the years then ended, and the related notes to the financial statements.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the fiduciary net position of the Spokane Employees' Retirement System as of December 31, 2020 and 2019, and the changes in fiduciary net position for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matter*Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 3 through 9 and the schedules of changes in the employer's net pension liability and related ratios, employer's contributions, and investment returns on pages 22 through 25 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The schedules of administrative expenses and investment expenses, on pages 26 through 27, are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates to the underlying accounting and other records used to prepare the financial statements. The schedules of administrative expenses and investment expenses have been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the schedules of administrative expenses and investment expenses are fairly stated in all material respects in relation to the 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 27, 2021, on our consideration of Spokane Employees' Retirement System's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, 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 the results of that testing, and not to provide an opinion on the effectiveness of the Spokane Employees' Retirement System'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 Spokane Employees' Retirement System's internal control over financial reporting and compliance.



Spokane, Washington
May 27, 2021

Spokane Employees' Retirement System Management Discussion and Analysis

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, 2020. 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 GASB standards. 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 Information** including:
 - a. Schedule of administrative expenses
 - b. Schedule of investment expenses

Spokane Employees' Retirement System Management Discussion and Analysis

The basic financial statements are described as follows:

- The statements of fiduciary net position show the account balances at year end and includes 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 shows 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 increased by \$22.4 million (7.0%) during 2020 and increased by \$38.7 million (13.9%) during 2019. Investments returned 11.5% for the year, providing \$33.8 million of net investment income. The net outflows for benefit payments (benefit payments and refunds less total contributions) were \$10.8 million.
- Total additions to net position were \$55.1 million in 2020, compared to \$69.8 million in the prior year. For 2020, revenue includes member and employer contributions of \$21.3 million and net investment income of \$33.8 million. Member and employer contributions increased by \$1.7 million (8.5%) in 2020 compared to an increase of \$1.3 million (7.0%) in 2019. Net investment income (or loss), which fluctuates year-to-year depending on market conditions, was \$33.8 million in 2020, a decrease of \$16.4 million compared to income of \$50.2 million in 2019.
- Total Plan expenses and payments for 2020 were \$32.7 million, a 5.0% increase from 2019. Total expense amounts and fluctuations are primarily driven by pension benefit payments, which make up 96.5% of total expenses. Retiree benefits increased by \$1.5 million (5.0%) during 2020 and by \$1.7 million (6.2%) during 2019. Administrative expenses increased by \$63 thousand (11.4%) during 2020 compared to an increase of \$1 thousand (0.2%) in 2019.

Spokane Employees' Retirement System Management Discussion and Analysis

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, 2020:

	2020	2019	2018
Additions			
Employer contributions	\$ 10,659,281	\$ 9,824,717	\$ 9,187,420
Plan member contributions	10,659,281	9,827,760	9,188,781
Net investment income (loss)	33,795,088	50,166,728	(18,715,945)
Total additions	55,113,650	69,819,205	(339,744)
Deductions			
Benefits	31,595,115	30,055,864	28,309,344
Refunds of contributions	513,758	544,438	554,422
Net administrative expenses	619,135	555,763	554,484
Total deductions	32,728,008	31,156,065	29,418,250
Net increase (decrease) in net position	22,385,642	38,663,140	(29,757,994)
Net position restricted for pensions			
Beginning of year	317,542,366	278,879,226	308,637,220
End of year	\$ 339,928,008	\$ 317,542,366	\$ 278,879,226

Revenues – Additions to Net Plan Position

- Employer contributions increased by 8.5% (\$835 thousand) and Plan participant contributions increased by 8.5% (\$832 thousand) in 2020. In 2019 Employer contributions increased by 6.9% (\$637 thousand) and Plan participant contributions increased by 7.0% (\$639 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 27, 2020, the contribution rate changed from 9.75% to 10.0% of salary for both employees and employer. Effective December 15, 2019, the contribution rate changed from 9.25% to 9.75% of salary for both parties.

Spokane Employees' Retirement System Management Discussion and Analysis

Revenues – Additions to Net Plan Position (continued)

- Net investment return was \$33.8 million in 2020 compared to \$50.2 million in 2019. In 2020, the portfolio's annual return was 11.5% compared to 18.4% in 2019. In 2020, markets were generally positive, shrugging off the economic impact of the global corona virus pandemic. The year started turbulently as COVID-19 transformed from a localized outbreak to a global pandemic in the first quarter of the year. By March, economies ground to a halt as lockdowns were imposed in an attempt to contain the spread of the virus. In the second quarter, markets began their precipitous rebound as governments and central banks quickly deployed stimulus packages to minimize the economic impact. In the third quarter and fourth quarters, quarterly growth of gross domestic products returned and positive vaccine news further buoyed the market rebound. Equities were the top performing asset class, with US equities returning 18.0% and international equities returning 17.6%. Real estate returned 29.1% for the year, which, when combined with their total target allocation of 45.0%, accounted for 84% of the total investment return. Real estate was the only major asset class the experience a loss for the year, losing 2.7%, as future demand for office and retail was uncertain. The strong performance in 2020 compounded the even stronger returns of 2019 when the portfolio returned 18.4% and saw positive returns in all asset classes.

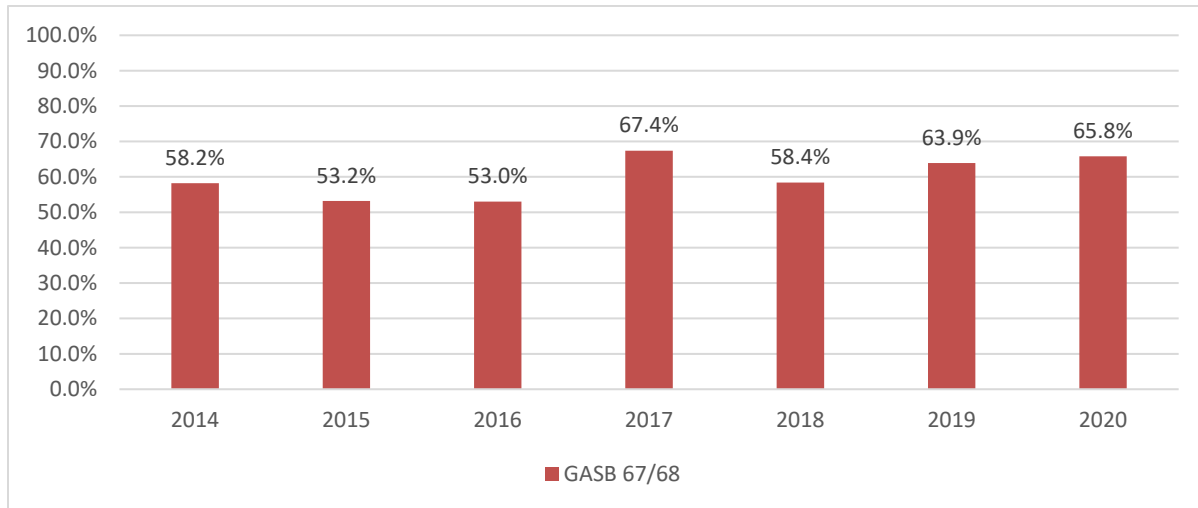
Expenses – Deductions from Net Plan Assets

- Retiree benefits paid increased by \$1.5 million (5.1%) in 2020 and \$1.7 million (6.2%) in 2019. The number of retirees and beneficiaries increased by 47 (3.2%) in 2020 and by 33 (2.3%) in 2019. SERS' active member age is an average of 47.33 years old, which is a slight increase from 47.26 in 2019. Similarly, average active participant service has remained relatively unchanged, increasing slightly from 11.11 years in 2019 to 11.15 years in 2020.
- Refunds of contributions decreased by \$31 thousand (5.6%) in 2020 compared to decrease by \$10 thousand (1.8%) in 2019. 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 Board continue to be diligent about Plan operating expenses. The net administrative expenses were \$619 thousand, an increase of 11.4% compared to 2019. The increase to administrative expenses is primarily due to an increase in staff salary and benefits and to interfund expenses. Administrative expenses represent only 1.9% of total annual expenditures and remained flat as a proportion of total assets at 0.18%.

Spokane Employees' Retirement System Management Discussion and Analysis

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.



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 2020, active members contributed 9.75% of their salaries to the Plan and the City contributed 9.75%, for a total of 19.50%. Starting December 27, 2020, active members contribute 10.00% of their salaries to the Plan and the City contributes 10.00%, for a total of 20.00%. The current 10.00% employer and employee contribution rate is expected to allow the Plan to gradually improve its funded position.

The SERS Board of Administration 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, 2021. 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.

Spokane Employees' Retirement System Management Discussion and Analysis

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	
	2020	2019
Total portfolio	11.5%	18.4%
<i>Policy Index</i>	12.5%	17.5%
Capital Preservation	3.3%	8.7%
<i>Capital Preservation Policy Index</i>	7.2%	9.1%
Total Return Bonds	9.3%	9.4%
<i>Barclays US Aggregate Bond Index</i>	7.5%	8.7%
High Yield Bonds	3.0%	9.7%
<i>Barclays US Corporate High Yield Index</i>	7.1%	14.3%
Absolute Return	-2.6%	8.1%
<i>HFRI FOF Conservative Index</i>	6.5%	6.4%
Domestic Equity	18.0%	29.1%
<i>Domestic Equity Policy Index</i>	19.2%	30.2%
US Large Cap Equities	17.5%	30.1%
<i>S&P 500 Index</i>	18.4%	31.5%
US Small/Mid Cap Equities	19.4%	27.3%
<i>Russell 2500 Index</i>	20.0%	27.8%
International Equity	17.6%	25.0%
<i>International Equity Policy Index</i>	12.4%	21.3%
International Large Cap Equities	17.1%	25.8%
<i>MSCI ACWI Ex-US Index</i>	10.7%	21.5%
International Small/Mid Cap Equities	15.4%	27.9%
<i>MSCI ACWI Ex-US Small Cap Index</i>	14.2%	22.4%
Emerging Market Equities	23.4%	18.6%
<i>MSCI EM Free Index</i>	18.3%	18.4%
Long Biased Hedge Funds	16.5%	12.7%
<i>HFRI FOF Composite Index</i>	10.8%	8.4%
Opportunistic Credit	1.8%	1.1%
<i>HFRI Distressed Restructuring Index</i>	12.7%	2.9%
Real Estate	-2.7%	16.6%
<i>NCREIF ODCE Index</i>	0.3%	5.3%
Special Opportunities	10.2%	10.5%
<i>Russell 3000 Index</i>	20.9%	31.0%

Spokane Employees' Retirement System Management Discussion and Analysis

Investment Activities (continued)

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.

In 2020, investments generated \$33.8 million of net returns, with an investment return of 11.5%. The increase was composed of \$30.5 million of market appreciation, \$3.8 million of income, and investment expenses of \$0.5 million. In 2019, investments generated \$50.2 million of net returns, with an investment return of 18.4%. The increase was composed of \$44.4 million of market appreciation, \$6.2 million of income, and investment expenses of \$0.4 million. In 2020, markets were generally positive, shrugging off the economic impact of the global corona virus pandemic. The year started turbulently as COVID-19 transformed from a localized outbreak to a global pandemic in the first quarter of the year. By March, economies ground to a halt as lockdowns were imposed in an attempt to contain the spread of the virus. In the second quarter, markets began their precipitous rebound as governments and central banks quickly deployed stimulus packages to minimize the economic impact. In the third quarter and fourth quarters, quarterly growth of gross domestic products returned and positive vaccine news further buoyed the market rebound. Equities were the top performing assets, with domestic and international equity up 18.0% and 17.6%, respectively. Interest sensitive assets performed well as decreased interest rates produced appreciation. Real estate was the only major asset class the experience a loss for the year, losing 2.7%, as future demand for office and retail was uncertain. SERS continued to utilize alternative investments to provide diversification and reduce short-term volatility, as seen with the contribution provided by long/short hedge funds. Over a full market cycle, SERS expects these strategies to provide equity-like returns and lower portfolio volatility due to their low correlations with traditional equity and fixed income markets.

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 investments increases the expected return and reduces the risk of the Plan compared to 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,	
	2020	2019
Assets		
Cash	\$ 141,000	\$ 138,989
Short-term investments	1,060,143	802,670
Total cash and short-term investments	<u>1,201,143</u>	<u>941,659</u>
Receivables		
Investment income	204,815	200,409
Other	128	13,364
Total receivables	<u>204,943</u>	<u>213,773</u>
Investments	338,480,497	316,328,393
Capitalized software, net	<u>194,139</u>	<u>211,788</u>
Total assets	<u><u>\$ 340,080,722</u></u>	<u><u>\$ 317,695,613</u></u>
Liabilities		
Payables		
Accounts payable	\$ 85,044	\$ 96,261
Employee salaries and benefits	4,704	15,191
Employee leave benefits	49,925	28,684
Other liabilities	<u>13,041</u>	<u>13,111</u>
Total liabilities	<u>152,714</u>	<u>153,247</u>
Net position restricted for pensions	<u><u>\$ 339,928,008</u></u>	<u><u>\$ 317,542,366</u></u>

Spokane Employees' Retirement System Statements of Changes in Fiduciary Net Position

	Years Ended December 31,	
	2020	2019
Additions		
Contributions		
Employer	\$ 10,659,281	\$ 9,824,717
Member	10,659,281	9,827,760
Total contributions	<u>21,318,562</u>	<u>19,652,477</u>
Investment income		
Net appreciation (depreciation) in fair value of investments	30,455,175	44,429,487
Interest and dividends	3,789,747	6,183,982
Less investment expense	<u>(449,834)</u>	<u>(446,741)</u>
Net investment income (loss)	<u>33,795,088</u>	<u>50,166,728</u>
Total additions	<u>55,113,650</u>	<u>69,819,205</u>
Deductions		
Benefit payments	31,595,115	30,055,864
Refunds of member contributions	513,758	544,438
Administrative expenses, net of administrative income	<u>619,135</u>	<u>555,763</u>
Total deductions	<u>32,728,008</u>	<u>31,156,065</u>
Net increase in net position	22,385,642	38,663,140
Net position restricted for pensions		
Beginning of year	<u>317,542,366</u>	<u>278,879,226</u>
End of year	<u>\$ 339,928,008</u>	<u>\$ 317,542,366</u>

See accompanying notes.

Spokane Employees' Retirement System

Notes to Financial Statements

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 Public Facilities District (PFD) or 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, 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.

Plan membership – At December 31, 2020 and 2019, pension Plan membership consisted of the following:

	<u>2020</u>	<u>2019</u>
Retirees or beneficiaries currently receiving benefits	1,504	1,457
Inactive plan members entitled to but not yet receiving benefits	131	119
Active plan members	<u>1,464</u>	<u>1,499</u>
	<u><u>3,099</u></u>	<u><u>3,075</u></u>

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.

Spokane Employees' Retirement System Notes to Financial Statements

Note 1 – Plan Description (continued)

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 31, 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 SERS Board of Administration 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, 2020. 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.

Spokane Employees' Retirement System

Notes to Financial Statements

Note 2 – Summary of Significant Accounting Policies (continued)

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. Short-term investments are reported at cost, which approximates fair 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 detailed in the Schedule of Investment Expenses represent 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. During March 2020, the World Health Organization characterized the outbreak of a novel coronavirus (COVID-19) as a pandemic. A variety of federal, state, and local governments have taken actions in response to COVID-19. The effects of the pandemic have ranged by jurisdiction with a variety of health and economic consequences, the final scope of which are not currently known or quantifiable.

New pronouncements – In May 2020, the GASB issued Statement No. 95, *Postponement of the Effective Dates of Certain Authoritative Guidance*. This statement provides temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. The objective is accomplished by postponing the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for the periods beginning after June 15, 2018, and later. This statement is effective upon issuance. As a result, the Plan will postpone implementation of Statement No. 87, *Leases*.

Reclassifications – Certain items previously reported in the 2019 financial statements have been reclassified to conform to the current 2020 financial statement presentation. Such reclassifications had no effect on the previously reported change in net position restricted for pensions.

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.

Spokane Employees' Retirement System Notes to Financial Statements

Note 3 – Deposits and Investments (continued)

Investment policy – The Plan's policy regarding the allocation of invested assets is established, and may be amended, by a majority vote of the SERS Board. It is the policy of the SERS 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, 2020, and 2019:

<u>Asset Class</u>	<u>Target Allocation</u>	
	<u>2020</u>	<u>2019</u>
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	<u>100%</u>	<u>100%</u>

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

Rate of return – For the year ended December 31, 2020 and 2019, the annual money-weighted rate of return on pension Plan investments, net of pension Plan investment expense, was 11.5% and 18.4%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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, 2020 and 2019, are summarized in the following table:

<u>Asset Class</u>	<u>2020</u>		<u>2019</u>	
	<u>Long-Term Expected Real Rate of Return</u>	<u>Nominal Return</u>	<u>Long-Term Expected Real Rate of Return</u>	<u>Nominal Return</u>
Domestic equities	6.5%	9.54%	6.5%	9.54%
Capital preservation	1.9%	4.92%	1.9%	4.92%
International equities	5.9%	8.90%	5.9%	8.90%
Long biased	3.2%	6.20%	3.2%	6.20%
Opportunistic credit	7.0%	9.95%	7.0%	9.95%
Real estate	2.2%	5.15%	2.2%	5.15%
Inflation		3.00%		3.00%

Spokane Employees' Retirement System

Notes to Financial Statements

Note 3 – Deposits and Investments (continued)

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 10.0% contribution rate, which went into effect December 27, 2020, 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:

	<u>1% Decrease (6.5%)</u>	<u>Current Discount Rate (7.5%)</u>	<u>1% Increase (8.5%)</u>
Net pension liability	\$ 230,465,485	\$ 176,737,274	\$ 130,882,728

Investments – The SERS' investment management policy is set by the Board of Administration. 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 of Administration maintains a formal Statement of Investment Policy, which addresses governing provisions and additional guidelines for the investment process. In fulfilling its responsibilities, the Board of Administration 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 equities, 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.

Spokane Employees' Retirement System Notes to Financial Statements

Note 3 – Deposits and Investments (continued)

Concentration of credit risk – SERS has no holdings by an issuer that represent five percent or more of SERS' investments at December 31, 2020, and 2019. SERS' holdings in organizations that manage five percent or more of the Plan's fiduciary net position at December 31, 2020 and 2019, were:

Organization	2020 % of Net Position	2019 % of Net Position
Fidelity Investments	12.5%	11.5%
Sterling Capital Management	10.1%	9.7%
Hotchkis & Wiley	9.7%	9.4%
American Funds	8.3%	7.3%
Artisan Partners	7.4%	7.3%
Evanston Capital Management	6.2%	5.3%
MFS Investment Management	0.0%	5.4%

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, 2020:

Asset	Fair Value	Less than 1 Year	1-5 Years	6-10 Years	More than 10 Years
Fixed income mutual funds	\$ 15,713,795	\$ 15,713,795	\$ -	\$ -	\$ -
Corporate notes and bonds	12,958,572	230,975	3,683,320	5,052,170	3,992,107
Asset backed securities	6,469,362	-	1,907,756	560,382	4,001,224
Governmental CMOs	5,394,567	-	-	139,583	5,254,984
Municipal bonds	2,028,253	-	1,327,857	438,079	262,317
Mortgage backed governmental passthrough	1,190,588	-	-	344,847	845,741
U.S. government treasuries	974,440	453,813	149,985	56,411	314,231
	<u>\$ 44,729,577</u>	<u>\$ 16,398,583</u>	<u>\$ 7,068,918</u>	<u>\$ 6,591,472</u>	<u>\$ 14,670,604</u>

Spokane Employees' Retirement System

Notes to Financial Statements

Note 3 – Deposits and Investments (continued)

The table below shows the System's fixed income assets by investment type, average effective maturity, and market value as of December 31, 2019:

Asset	Fair Value	Less than 1 Year	1-5 Years	6-10 Years	More than 10 Years
Fixed income mutual funds	\$ 13,686,339	\$ 13,686,339	\$ -	\$ -	\$ -
Corporate notes and bonds	8,828,374	388,229	939,922	2,774,276	4,725,948
Asset backed securities	4,858,867	-	954,522	893,348	3,010,998
Governmental CMOs	5,262,025	-	-	124,361	5,137,664
Municipal bonds	1,988,025	-	704,498	762,599	520,928
Mortgage backed governmental passthrough	1,381,376	-	-	328,155	1,053,221
U.S. government treasuries	2,828,018	787,028	243,584	395,209	1,402,197
	<u>\$ 38,833,024</u>	<u>\$ 14,861,596</u>	<u>\$ 2,842,526</u>	<u>\$ 5,277,948</u>	<u>\$ 15,850,956</u>

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, 2020 and 2019, 32.1% and 29.4%, 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, 2020, were:

	Total Investments	U.S. Issues	Foreign Issues	% Foreign
Cash	\$ 1,060,143	\$ 1,060,143	\$ -	0.0%
Fixed income	44,729,576	43,685,313	1,044,263	2.3%
Equities	186,303,230	104,112,114	82,191,116	44.1%
Real estate	26,689,924	26,689,924	-	0.0%
Alternatives	80,757,767	54,339,772	26,417,995	32.7%
Total	\$ 339,540,640	\$ 229,887,266	\$ 109,653,374	32.3%

The fair market value of the foreign investments as of December 31, 2019, were:

	Total Investments	U.S. Issues	Foreign Issues	% Foreign
Cash	\$ 802,670	\$ 802,670	\$ -	0.0%
Fixed income	38,833,025	34,497,331	4,335,694	11.2%
Equities	166,624,156	109,082,749	57,541,407	34.5%
Real estate	26,471,829	26,471,829	-	0.0%
Alternatives	84,399,383	62,587,925	21,811,458	25.8%
Total	\$ 317,131,063	\$ 233,442,504	\$ 83,688,559	26.4%

Spokane Employees' Retirement System Notes to Financial Statements

Note 4 – 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 markets 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 identical assets.

The following table presents fair value measurements as of December 31, 2020:

	2020				
	Fair Value	Level 1	Level 2	Level 3	NAV
Cash equivalents	\$ 1,060,143	\$ 1,060,143	\$ -	\$ -	\$ -
US Government	7,559,595	-	7,559,595	-	-
US corporate fixed income	11,919,023	-	11,919,023	-	-
International fixed income	1,039,549	-	1,039,549	-	-
Asset backed securities	6,469,361	-	6,469,361	-	-
Municipal bonds	2,028,253	-	2,028,253	-	-
Fixed income mutual funds	15,713,795	15,713,795	-	-	-
Total fixed income	44,729,576	15,713,795	29,015,781	-	-
US Common Stock	25,923,543	11,968,580	-	-	13,954,963
International Common Stock	11,677,862	543,781	-	-	11,134,081
Equity mutual funds	148,701,825	134,746,861	13,954,964	-	-
Total equities	186,303,230	147,259,222	13,954,964	-	25,089,044
Real estate	26,689,924	13,848,991	-	-	12,840,933
Alternatives	80,757,767	-	-	-	80,757,767
Total investments	<u>\$ 339,540,640</u>	<u>\$ 177,882,151</u>	<u>\$ 42,970,745</u>	<u>\$ -</u>	<u>\$ 118,687,744</u>

Spokane Employees' Retirement System

Notes to Financial Statements

Note 4 – Fair Value Measurement (continued)

The following table presents fair value measurements as of December 31, 2019:

	2019				
	Fair Value	Level 1	Level 2	Level 3	NAV
Cash equivalents	\$ 802,670	\$ 802,670	\$ -	\$ -	\$ -
US Government	9,471,419	9,471,419	-	-	-
US corporate fixed income	7,873,206	7,873,206	-	-	-
International fixed income	955,169	955,169	-	-	-
Asset backed securities	4,858,867	4,858,867	-	-	-
Municipal bonds	1,988,025	1,988,025	-	-	-
Fixed income mutual funds	13,686,339	13,686,339	-	-	-
Total fixed income	38,833,025	38,833,025	-	-	-
US Common Stock	9,524,359	9,524,359	-	-	-
International Common Stock	1,160,064	1,160,064	-	-	-
Equity mutual funds	155,939,733	140,034,820	-	-	15,904,913
Total equities	166,624,156	150,719,243	-	-	15,904,913
Real estate	26,471,829	12,464,207	-	-	14,007,622
Alternatives	84,399,383	-	-	-	84,399,383
Total investments	<u>\$ 317,131,063</u>	<u>\$ 202,819,145</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 114,311,918</u>

The valuation method for investments measured at the NAV per share, or equivalent, at December 31, 2020 and 2019, is presented in the table below:

	2020			
	Net Asset Value (NAV)	Unfunded Commitments	Redemption Frequency	Redemption Notice
Equity fund	\$ 25,089,045	\$ -	Monthly, annually	15-90 days
Long/short hedge fund	27,765,375	-	Quarterly	60-65 days
Real estate fund	12,840,933	6,578,976	N/A, quarterly with queue	90 days
Absolute return hedge fund	25,165,458	-	Monthly, quarterly, semi-annual	30-45 days
Closed-end hedge fund	2,249,691	2,780,081	N/A	N/A
Fixed income fund	25,577,242	-	Quarterly	90 days
Total investments valued at NAV	<u>\$ 118,687,744</u>	<u>\$ 9,359,057</u>		
	2019			
	Net Asset Value (NAV)	Unfunded Commitments	Redemption Frequency	Redemption Notice
Equity fund	\$ 15,904,913	\$ -	Monthly, annually	15-90 days
Long/short hedge fund	21,552,029	-	Quarterly	60-65 days
Real estate fund	14,007,622	1,398,976	N/A, quarterly with queue	90 days
Absolute return hedge fund	32,163,209	-	Monthly, quarterly, semi-annual	30-45 days
Closed-end hedge fund	4,469,676	2,780,081	N/A	N/A
Fixed income fund	26,214,470	-	Quarterly	90 days
Total investments valued at NAV	<u>\$ 114,311,919</u>	<u>\$ 4,179,057</u>		

Spokane Employees' Retirement System Notes to Financial Statements

Note 4 – Fair Value Measurement (continued)

Equity fund – One international fund that invests long-only in less efficient markets seeking to capture illiquidity and information asymmetry premiums. 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 – Five 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.

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 5 – Contributions Required and Contributions Made

Member and employer contribution rates are established by City Code, Chapter 4.14. Effective December 27, 2020, member contributions are 10.00% of eligible compensation and are deducted from the member's salary and paid into the retirement fund; the City contributes 10.00% of eligible compensation for a combined total of 20.0%. Member and employer contribution rates are established by City Code, Chapter 4.14. Effective December 15, 2019, member contributions are 9.75% of eligible compensation and are deducted from the member's salary and paid into the retirement fund; the City contributes 9.75% of eligible compensation for a combined total of 19.5%. Previously, the contribution rate was 18.50% of payroll (9.25% of pay paid by the employee, 9.25% of pay paid by the City).

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

**Spokane Employees' Retirement System
Schedule of Changes in the Employer's Net Pension Liability and Related Ratios**

	2020	2019	2018	2017	2016	2015
Total pension liability						
Service cost	\$ 10,326,519	\$ 9,814,459	\$ 9,397,166	\$ 13,133,393	\$ 12,896,547	\$ 12,384,960
Interest	36,091,730	34,666,267	33,296,148	29,336,782	27,443,176	26,359,257
Changes of benefit terms	-	-	-	165,092	-	-
Differences between expected and actual experience	5,368,635	5,866,404	5,291,272	(3,830,239)	12,381,445	6,483,011
Changes of assumptions	-	-	-	(76,976,691)	(14,542,266)	-
Benefit payments, including refunds of member contributions	(32,108,873)	(30,600,302)	(28,863,766)	(27,443,693)	(26,467,256)	(24,597,020)
Net change in total pension liability	19,678,011	19,746,828	19,120,820	(65,615,356)	11,711,646	20,630,208
Total pension liability—beginning	496,987,271	477,240,443	458,119,623	523,734,979	512,023,333	491,393,125
Total pension liability—ending (a)	\$ 516,665,282	\$ 496,987,271	\$ 477,240,443	\$ 458,119,623	\$ 523,734,979	\$ 512,023,333
Plan fiduciary net position						
Contributions—employer	\$ 10,659,281	\$ 9,824,717	\$ 9,187,420	\$ 8,113,319	\$ 7,586,365	\$ 7,398,945
Contributions—member	10,659,281	9,827,760	9,188,781	8,113,319	7,586,362	7,402,905
Net investment income	33,795,088	50,166,728	(18,715,945)	43,085,572	16,802,274	(3,228,439)
Benefit payments, including refunds of member contributions	(32,108,873)	(30,600,302)	(28,863,766)	(27,443,693)	(26,467,256)	(24,597,020)
Administrative expense	(619,135)	(555,763)	(554,484)	(563,078)	(477,252)	(447,921)
Net change in plan fiduciary net position	22,385,642	38,663,140	(29,757,994)	31,305,439	5,030,493	(13,471,530)
Plan fiduciary net position—beginning	317,542,366	278,879,226	308,637,220	277,331,781	272,301,291	285,772,821
Plan fiduciary net position—ending (b)	\$ 339,928,008	\$ 317,542,366	\$ 278,879,226	\$ 308,637,220	\$ 277,331,784	\$ 272,301,291
Plan's net pension liability—ending (a) – (b)	\$ 176,737,274	\$ 179,444,905	\$ 198,361,217	\$ 149,482,403	\$ 246,403,195	\$ 239,722,042
Plan fiduciary net position as a percentage of the total pension liability	65.8%	63.9%	58.4%	67.4%	53.0%	53.18%
Covered-payroll, as of December 31	\$ 112,984,469	\$ 111,746,539	\$ 107,017,146	\$ 102,844,614	\$ 102,378,550	\$ 93,899,096
Plan's net pension liability as a percentage of covered-payroll	156.4%	160.6%	185.4%	145.3%	240.7%	255.3%

Notes to Schedule:

Legislative and administrative changes: The contribution rate for all participants and the City increased to 10.00% on December 27, 2020. The contribution rate is tied to the Actuarially Determined Contribution (ADC) rate as determined by the Plan's actuary in the annual valuation.

See report of independent auditors.

**Spokane Employees' Retirement System
Schedule of Employer's Contributions**

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Actuarially determined contribution	\$ 11,527,854	\$ 11,078,489	\$ 10,044,342	\$ 9,765,949	\$ 9,853,762	\$ 9,069,276	\$ 8,292,066	\$ 8,237,317	\$ 8,325,936	\$ 10,010,885
Contributions in relation to the actuarially determined contribution	10,659,281	9,824,717	9,187,420	8,113,319	7,586,362	7,398,945	6,822,279	6,715,376	6,937,750	6,799,258
Contribution deficiency (excess)	\$ 868,573	\$ 1,253,772	\$ 856,922	\$ 1,652,630	\$ 2,267,400	\$ 1,670,331	\$ 1,469,787	\$ 1,521,941	\$ 1,388,186	\$ 3,211,627
Covered-payroll	\$ 109,325,959	\$ 106,213,157	\$ 102,082,444	\$ 98,343,261	\$ 91,955,903	\$ 89,684,182	\$ 86,139,886	\$ 86,650,013	\$ 89,519,355	\$ 90,264,062
Contributions as a percentage of covered payroll	9.75%	9.25%	9.00%	8.25%	8.25%	8.25%	7.92%	7.75%	7.75%	7.75%

See report of independent auditors.

Spokane Employees' Retirement System Schedule of Employer's Contributions

Valuation date: December 31, 2020

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

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal
Amortization method	Level percentage of payroll, closed
Remaining amortization period	22 years
Asset valuation method	5-year smoothed market
Inflation	2.25%
Salary increases	In accordance with the following table based on service:

<u>Years of Service</u>	<u>Annual Increase</u>
<1	12.0%
1-2	10.0%
3	8.0%
4	5.0%
5-9	4.0%
10-19	3.0%
20+	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:

<u>Age</u>	<u>Retirement Probability</u>
<50	0.0%
50-58	5.0%
59-61	10.0%
62	25.0%
63	20.0%
64	25.0%
65	30.0%
66	25.0%
67	20.0%
68	10.0%
69	25.0%
70	15.0%
71-74	30.0%
75+	100.0%

Mortality	RP - 2000 Fully Generational
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See report of independent auditors.

**Spokane Employees' Retirement System
Schedule of Investment Returns**

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Annual money-weighted rate of return, net of investment expense	11.47%	18.35%	-6.27%	15.40%	6.70%	-0.94%	5.34%	18.89%	11.70%	-2.80%

See report of independent auditors.

Additional Supplementary Information

Spokane Employees' Retirement System Schedule of Administrative Expenses

	<u>2020 Budget</u>	<u>2020 Actual</u>	<u>2019 Actual</u>
Personnel services			
Salaries and wages	\$ 305,857	\$ 315,165	\$ 287,887
Personnel benefits	86,518	85,294	82,456
Administrative income	<u>(20,000)</u>	<u>(16,886)</u>	<u>(21,009)</u>
Total personnel services	<u>372,375</u>	<u>383,573</u>	<u>349,334</u>
Supplies			
Office supplies	2,000	361	178
Publications	250	-	35
Postage	1,250	1,220	619
Software (non-capitalized)	200	105	124
Minor equipment	500	544	-
Office Furniture (non-capitalized)	-	1,576	-
Other	<u>1,000</u>	<u>192</u>	<u>261</u>
Total supplies	<u>5,200</u>	<u>3,998</u>	<u>1,217</u>
Other services and charges			
State audit charges	15,000	12,991	11,147
Professional services	175,000	142,162	133,696
Travel	15,000	109	3,489
Registration and schooling	16,000	5,995	810
Other dues, subscriptions and memberships	2,500	1,753	2,274
Printing	1,000	105	1,136
Depreciation/Amortization	-	17,649	17,649
Other miscellaneous charges	<u>1,300</u>	<u>1,074</u>	<u>2,000</u>
Total other services and charges	<u>225,800</u>	<u>181,838</u>	<u>172,201</u>
Interfund (IF) payments for services			
IF office performance mgmt services	389	389	4,190
IF centralized purchasing	516	449	1,252
IF centralized accounting	1,917	1,377	2,016
IF risk management	586	293	584
IF unemployment	-	-	-
IF workers' compensation	134	134	122
IF reprographics	39,237	39,242	12,896
IF IT	5,000	5,044	9,376
IF IT replacement	1,827	1,827	1,965
IF My Spokane	<u>580</u>	<u>971</u>	<u>610</u>
Total interfund services	<u>50,186</u>	<u>49,726</u>	<u>33,011</u>
TOTAL ADMINISTRATIVE EXPENSES, NET OF ADMINISTRATIVE INCOME	<u>\$ 653,561</u>	<u>\$ 619,135</u>	<u>\$ 555,763</u>

See report of independent auditors.

Spokane Employees' Retirement System
Additional Supplementary Information
Schedule of Investment Expenses

	Year Ended December 31, 2020
Investment services	
Bridge City Capital LLC	\$ 17,452
Champlain Small Cap Fund LLC	66,480
Principal Real Estate Investors LLC	83,618
Sterling Capital Management LLC	101,606
	<hr/>
	269,156
Investment consulting	
Hyas Group, LLC	128,500
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Custodial services	
U.S. Bank	52,178
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TOTAL INVESTMENT EXPENSES	<u><u>\$ 449,834</u></u>

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 Trustees
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 Spokane Employees' Retirement System (the System), a component unit of the City of Spokane, Washington, as of and for the year ended December 31, 2020, and the related notes to the financial statements, which collectively comprise Spokane Employees' Retirement System's basic financial statements, and have issued our report thereon dated May 27, 2021.

Internal Control Over Financial Reporting

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

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or 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 may exist that have not been identified.

Compliance and Other Matters

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

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the 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.

Moss Adams LLP

Spokane, Washington

May 27, 2021

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Actuarial Section

SageView Consulting Group, L.L.C.
Actuarial Valuation

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**SPOKANE EMPLOYEES'
RETIREMENT SYSTEM**

**ACTUARIAL VALUATION
AS OF DECEMBER 31, 2020**



Sageview Consulting Group
4510 Cox Road, Suite 200, Glen Allen, VA 23060
www.sageviewadvisory.com

May 5, 2021

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, 2020, 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 10.00% of pay) and Employer Contributions (currently 10.00% of pay).

The December 31, 2020 valuation develops an Actuarially Determined Employer Contribution Rate (ADC), exclusive of employee contributions, of 10.43% of total payroll. The ADC rate compares with an actual Employer Contribution rate of 10.00% of total payroll. The Employer Contribution for the 2020 fiscal year of \$10,659,281 was less than the ADC of \$11,527,854 by \$868,573.

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, 2020 and December 31, 2019 is as follows:

	December 31 2020	December 31 2019
Total Pension Liability:	\$516,665,282	\$496,987,271
Fiduciary Net Position:	\$339,928,008	\$317,542,366
Net Pension Liability:	\$176,737,274	\$179,444,905
Fiduciary Net Position as a Percentage of Total Pension Liability:	65.8%	63.9%
GASB 67 Discount Rate:	7.50%	7.50%

Spokane Employees' Retirement System
May 5, 2021
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, 2016. This study resulted in the Board adopting several changes in assumptions as of December 31, 2017, at the recommendation of the actuary, in order to better anticipate emerging experience under the System.

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.

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

Employer and Employee contribution rates were both increased from 9.75% to 10.00%, effective the last pay period in 2020.

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

Spokane Employees' Retirement System
May 5, 2021
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, 2020.

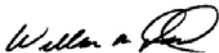
To the best of our knowledge, this report is complete and accurate. All costs and liabilities have been determined in conformance with generally accepted actuarial principles and on the basis of actuarial assumptions and methods which are individually reasonable (taking into account past experience and 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 M. Dowd, FCA, EA
Principal



William J. Reid, FCA, EA
Principal

Summary of Valuation Results

Presented in this report are the results of the actuarial valuation as of December 31, 2020 for the Spokane Employees' Retirement System.

The principal results include:

- The Actuarially Determined Employer Contribution Rate (ADC) is 10.43% of total payroll. This compares to an actual Employer Contribution rate of 10.00% 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, 2020 and December 31, 2019 is as follows:

	December 31 2020	December 31 2019
Total Pension Liability:	\$516,665,282	\$496,987,271
Fiduciary Net Position:	\$339,928,008	\$317,542,366
Net Pension Liability:	\$176,737,274	\$179,444,905
Fiduciary Net Position as a Percentage of Total Pension Liability:	65.8%	63.9%
 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, 2016. This study resulted in the Board adopting several changes in assumptions as of December 31, 2017, at the recommendation of the actuary, in order to better anticipate emerging experience under the System.

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**

Employer and Employee contribution rates were both increased from 9.75% to 10.00%, effective the last pay period in 2020.

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

Summary of Valuation Results (continued)

<u>Demographics</u>	<u>2020</u>	<u>2019</u>
<u>Active</u>		
Number	1,464	1,499
Average Pay for Coming Year	\$ 77,175	\$ 74,547
<u>Retired and Beneficiaries</u>		
Number	1,504	1,457
Average Annual Allowance	21,594	20,910
<u>Terminated Vested and Portables</u>		
Number	131	119
<u>Total Membership</u>	3,099	3,075
<u>Net Pension Liability</u>		
Total Pension Liability	\$516,665,282	\$496,987,271
Fiduciary Net Position	\$339,928,008	\$317,542,366
Net Pension Liability	\$176,737,274	\$179,444,905
Fiduciary Net Position as a Percentage of the Total Pension Liability	65.8%	63.9%
<u>Contribution Rates</u>		
Actuarially Determined Employer Contribution Rate (ADC)*	10.43%	10.17%
Actual Employer Contribution Rate	10.00%	9.75%
Effective 12/27/2020	10.00%	
12/15/2019 - 12/26/2020	9.75%	
12/16/2018 - 12/14/2019	9.25%	
12/17/2017 - 12/15/2018	9.00%	
09/01/2014 - 12/16/2017	8.25%	
Prior to 9/1/2014	7.75%	

* Exclusive of Employee Contributions

Summary of Valuation Results (continued)

Contribution Rates (ADC)

The results of the valuation as of December 31, 2020 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, 2020 the actual Employer Contribution rate of 10.00% is less than the ADC rate of 10.43%.

Reasons for Change in the ADC

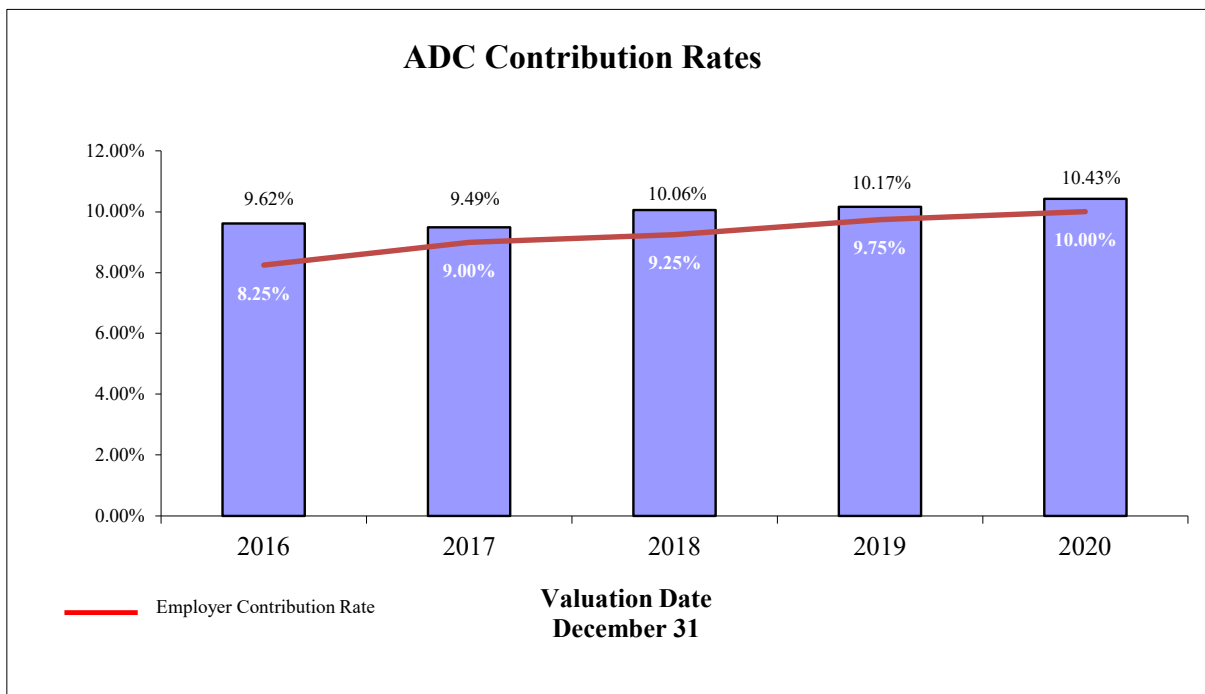
The recommended employer contribution rate as determined by the ADC increased from 10.17% as of December 31, 2019 to 10.43% as of December 31, 2020. The increase of 0.26% is due to the following reasons:

● Decrease due to return on actuarial assets	(0.16%)
● Decrease due to change in normal cost rate	(0.21%)
● Increase due to change in benefit provisions	0.00%
● Decrease due to legislative changes	0.00%
● Increase due to change in assumptions	0.00%
● Decrease due to change in funding method	0.00%
● Increase due to lower than expected payroll growth	0.29%
● Increase due to other factors	0.34%
● Total	<u>0.26%</u>

Summary of Valuation Results (continued)

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

Valuation Date	ADC	Employer Rate
2016	9.62%	8.25%
2017	9.49%	9.00%
2018	10.06%	9.25%
2019	10.17%	9.75%
2020	10.43%	10.00%



Summary of Valuation Results (continued)

Unfunded Accrued Liability

The financing objective of the System is to:

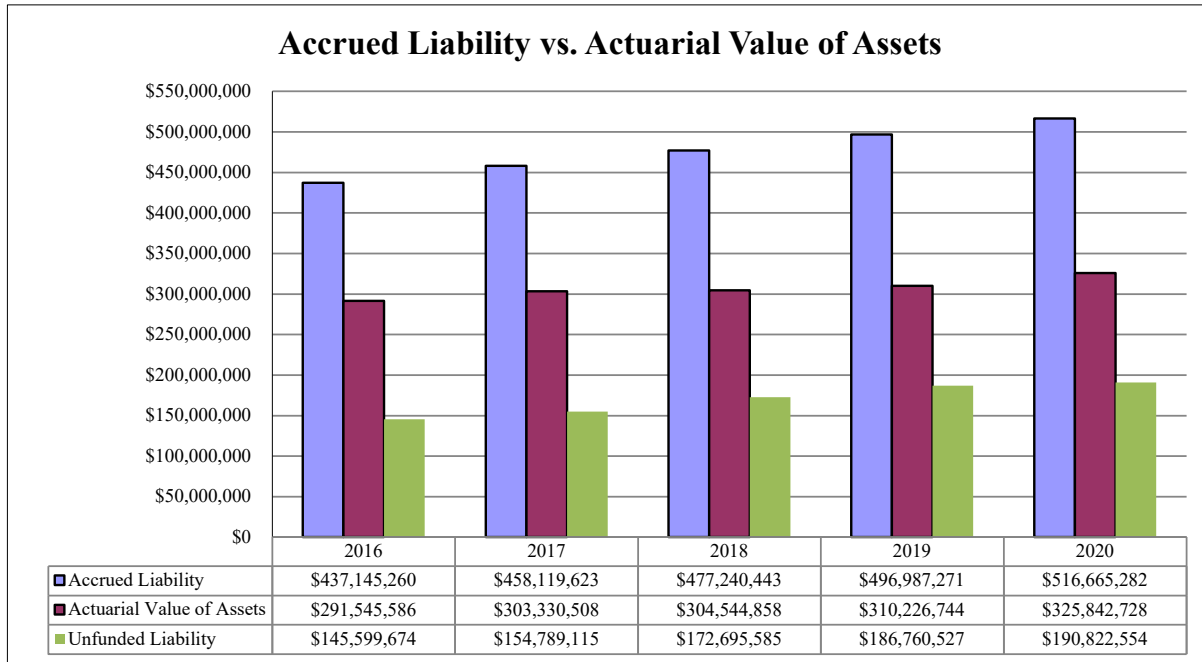
- fully fund all current costs based on the normal contribution rate payable by the System determined under the funding method; and
- liquidate the unfunded accrued liability based on accrued liability contributions payable by the System over an amortization period of no more than 30 years; and
- accomplish the above through a combination of Employee Contributions (currently 10.00% of pay) and Employer Contributions (currently 10.00% 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 \$190,822,554 as of December 31, 2020. The unfunded actuarial liability is based on an actuarial value of assets of \$325,842,728 and an actuarial liability of \$516,665,282.

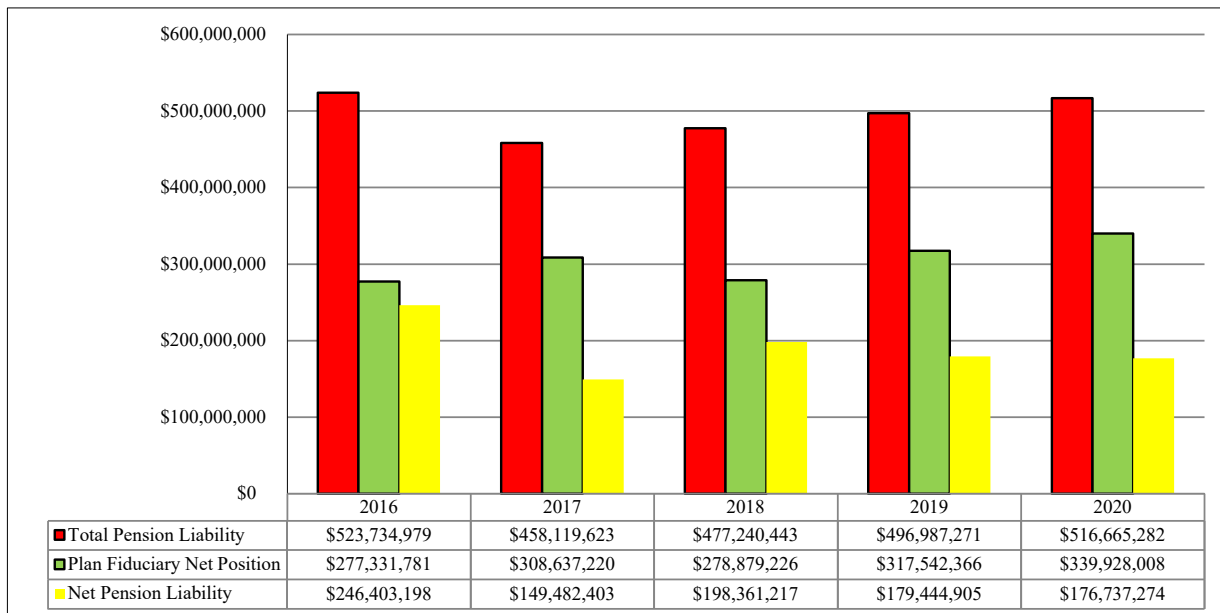
For purposes of financial reporting, the Fund's unfunded liability (net pension liability) is measured by comparing the market value of assets (fiduciary net position) with the actuarial liability (total pension liability). The total pension liability is determined under the entry age cost method. On this basis, the Fund's net pension liability is \$176,737,274 as of December 31, 2020. The net pension liability is based on an fiduciary net position of \$339,928,008 and a total pension liability of \$516,665,282.

Summary of Valuation Results (continued)

History of Accrued Liability and Actuarial Value of Assets



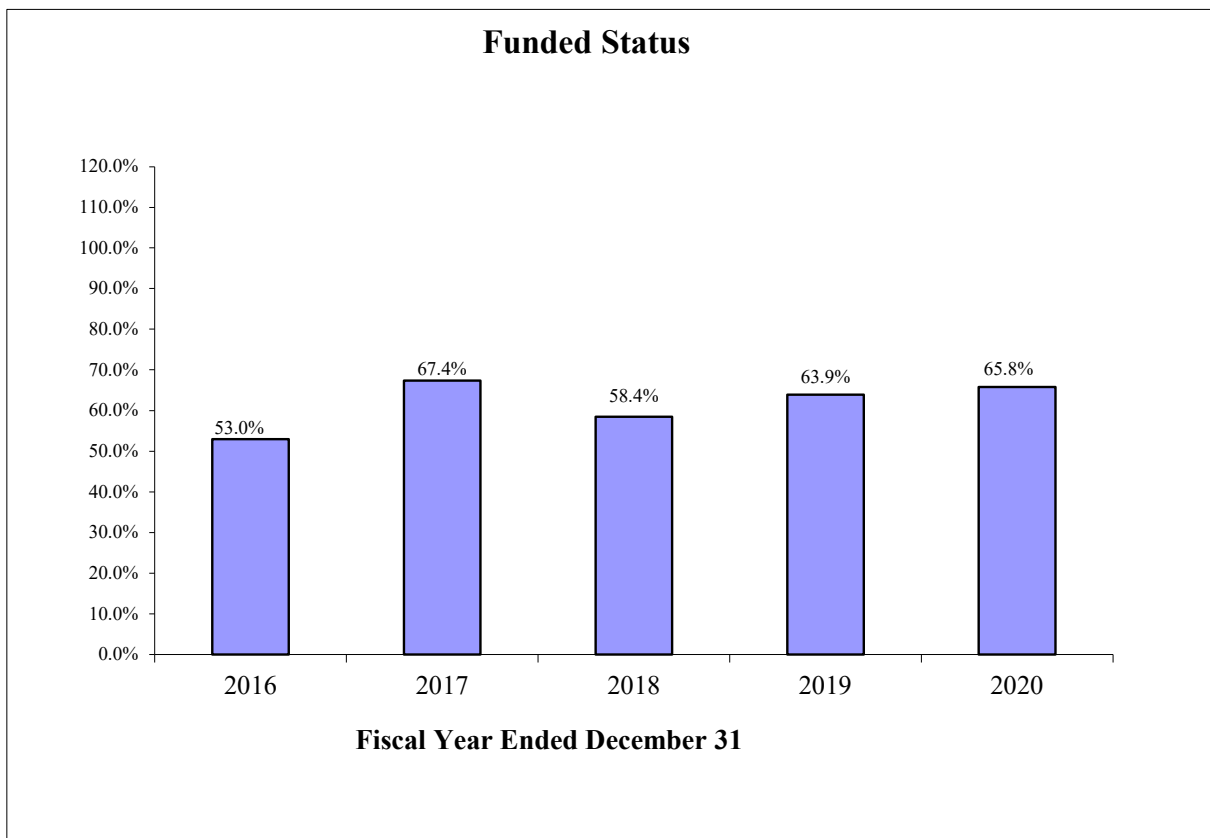
History of Net Pension Liability



Summary of Valuation Results (continued)

Five-Year History of Funded Status

Fiscal Year Ending	Funded Status
2016	53.0%
2017	67.4%
2018	58.4%
2019	63.9%
2020	65.8%



Summary of Valuation Results (continued)

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, 2020 was 11.50%. 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 10.84%. The investment return on the smoothed fair value of assets was 8.87%. 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.

Summary of Valuation Results (continued)

Five-Year History of Rates of Return

Fiscal Year Ending	Rate of Return on Assets			
	Invested	Total	Actuarial	Assumed
2016	6.70%	6.31%	7.35%	7.50%
2017	15.40%	15.87%	8.25%	7.50%
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%

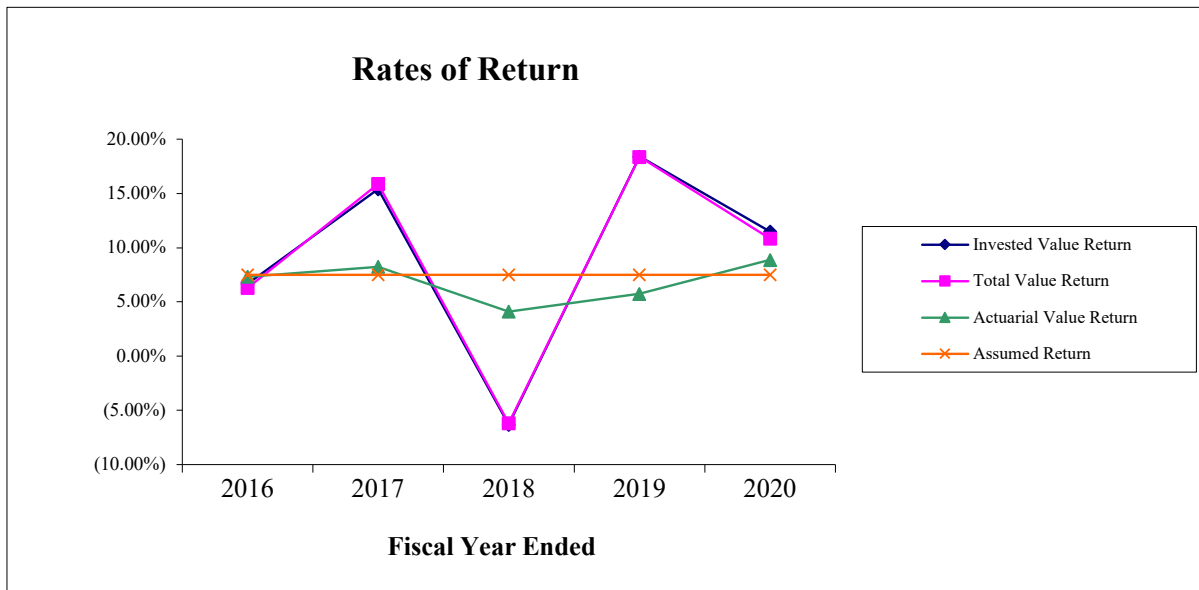


Table 1**DEMOGRAPHICS**

	<u>2020</u>	<u>2019</u>	<u>Increase/ (Decrease)</u>
Number of Members:			
Retirees	1,328	1,284	44
Beneficiaries	168	165	3
Disabled	8	8	0
Terminated Vested	78	64	14
Portables	53	55	(2)
Active	1,464	1,499	(35)
Total Members	3,099	3,075	24
Projected Compensation for Coming Year	112,984,469	111,746,539	1,237,930
Average Compensation for Coming Year	77,175	74,547	2,628
Average Age (Active Members)	47.33	47.26	0.07
Average Service (Active Members)	11.15	11.11	0.04
Annual Retirement Allowance	32,477,722	30,465,677	2,012,045
Average Annual Retirement Allowance	21,594	20,910	684
Average Monthly Retirement Allowance	1,800	1,743	57

Table 2**ASSET INFORMATION****Market Value Reconciliation**

1. Total Market Value of Net Assets, 12/31/2019		317,542,366
2. Audit Adjustment		0
3. Contributions		
a. Employer	10,659,281	
b. Employee	10,659,281	
c. Total Contributions		21,318,562
4. Miscellaneous Revenue		-
5. Investment Earnings		
a. Interest & Dividends & Other Income	3,789,747	
b. Realized & Unrealized Gain/(Loss)	30,455,175	
c. Investment Expenses	(449,834)	
d. Total Investment Earnings		33,795,088
6. Benefit Payments		
a. Benefits	(31,595,115)	
b. Refund of Contributions	(513,758)	
c. Total Benefit Payments		(32,108,873)
7. Administrative Expenses		(619,135)
8. Total Market Value of Net Assets, 12/31/2020		339,928,008
9. Approximate Rate of Return on Total Assets		10.84%
10. Approximate Rate of Return on Invested Assets		11.50%

Table 4**ACCRUED LIABILITY**

1. Accrued Liability prior to Changes in Benefit Provisions and Assumptions		
a. Active	192,734,383	
b. Terminated Vested & Portables	14,076,169	
c. Retirees	289,330,818	
d. Beneficiaries	19,388,639	
e. Disableds	1,135,273	
f. Total Accrued Liability prior to Changes		516,665,282
2. Actuarial Value of Assets		325,842,728
3. Unfunded Accrued Liability prior to Changes (1.f. - 2.)		190,822,554
4. Change in Unfunded Accrued Liability		
a. Due to Changes in Plan Provisions	0	
b. Due to Changes in Assumptions	0	
c. Due to Change in Funding Method	0	
d. Due to Change in Asset Method	0	
e. Total Change in Unfunded Accrued Liability		0
5. Actual Unfunded Accrued Liability (3. + 4.e.)		190,822,554

Table 5**ACTUARIAL (GAIN)/LOSS**

1. Increase (decrease) in Unfunded Accrued Liability	
a. Unfunded Accrued Liability, prior year	186,760,527
b. Entry Age Normal Cost (excluding expenses)	9,606,064
c. Contributions	21,318,562
d. Interest	13,942,501
e. Expected Unfunded Accrued Liability, current year (a. + b. - c. + d.)	188,990,530
f. Actual Unfunded Accrued Liability, current year before benefit, assumption, and method changes	190,822,554
g. (Gain)/Loss (f. -e.)	1,832,024
2. Reasons for (Gain)/Loss	
a. Investment Return on Smoothed Fair Value of Assets	(3,536,611)
b. Other	5,368,635
c. Total	1,832,024

Table 6**AMORTIZATION SCHEDULE***

<u>Date Established</u>	<u>Source</u>	<u>Initial Amount</u>	<u>Remaining Balance</u>	<u>Years to Amortize</u>	<u>Required Payment</u>
12/31/2020	Actuarial Loss	1,832,024	1,832,024	30	94,748
12/31/2019	Actuarial Loss	11,674,436	11,960,484	29	631,067
12/31/2018	Actuarial Loss	15,952,971	16,737,009	28	901,924
12/31/2017	Actuarial Gain	(5,056,189)	(5,417,726)	27	(298,532)
12/31/2017	Assumption Change	10,524,826	11,277,391	27	621,416
12/31/2017	Plan Amendment	165,092	176,897	27	9,748
12/31/2017	Reamortization of Prior Amounts	118,016,263	154,256,475	19	10,758,502
Total		153,109,423	190,822,554		12,718,873

* Effective December 31, 2017, prior bases established between December 31, 2007 and December 31, 2016 were combined into one base with a weighted average remaining amortization period of 22 years.

Table 7**NORMAL COST**

1. Normal Cost for All Benefits	9,655,077
2. Offset for Employee Contributions	(11,298,447)
3. Estimated Expenses	700,000
4. Total (1) - (2) + (3)	(943,370)

Table 8**CONTRIBUTION SUMMARY**

1. Actuarially Determined Employer Contribution Amount		
a. Normal Cost	(943,370)	
b. Amortization Charges	12,718,873	
c. Total		11,775,503
2. Actuarially Determined Employer Contribution Rate		
a. Normal Cost	-0.83%	
b. Amortization Charges	11.26%	
c. Total		10.43%
3. Projected Pay for the Upcoming Year		112,984,469

Table 9**ASSET INFORMATION****Statement of Fiduciary Net Position
(as provided by SERS staff)****ASSETS**

1. Cash		141,000
2. Short-term investments		1,060,143
3. Receivables		
a. Interest and Dividends	204,815	
b. Other receivables	128	
c. Total Receivables		<u>204,943</u>
4. Investments, at fair value		
a. U. S. Fixed Income	39,918,717	
b. International Fixed Income	1,039,549	
c. U.S. Equities	106,974,730	
d. International Equities	83,099,810	
e. Real Estate	26,689,924	
f. Alternatives	80,757,767	
g. Total Investments		<u>338,480,497</u>
5. Capitalized software, net of accumulated amortization		194,139
6. Total Assets		<u>340,080,722</u>

LIABILITIES

1. Accounts Payable	85,044	
2. Current portion employee salary & benefits	4,704	
3. Employee leave benefits	49,925	
4. Other current liabilities	13,041	
5. Total Liabilities		<u>152,714</u>

NET POSITION339,928,008

Table 10**ASSET INFORMATION****Statement of Changes in Fiduciary Net Position
(as provided by SERS staff)****ADDITIONS**

1. Contributions		
a. Employer	10,659,281	
b. Plan Members	10,659,281	
c. Miscellaneous Revenue	-	
d. Total Contributions		21,318,562
2. Investment Earnings:		
a. Net increase (decrease) in fair value of investments	30,455,175	
b. Interest, dividends and other investment income	3,789,747	
c. Total Investment Earnings (loss)		<u>34,244,922</u>
d. Less: investment expense		<u>449,834</u>
e. Net investment earnings (loss)		<u>33,795,088</u>
Total additions		<u>55,113,650</u>

DEDUCTIONS

1. Pension benefits	31,595,115	
2. Refund of contributions	513,758	
3. Administrative expenses	619,135	
Total deductions		<u>32,728,008</u>
Change in net assets:		22,385,642
Prior period adjustment		0
Plan Fiduciary Net Position, 12/31/2019		<u>317,542,366</u>
Plan Fiduciary Net Position, 12/31/2020		<u>339,928,008</u>

Table 11**NET PENSION LIABILITY**

	<u>2020</u>	<u>2019</u>
Total Pension Liability		
Service Cost	10,326,519	9,814,459
Interest	36,091,730	34,666,267
Changes of benefit terms	0	0
Differences between expected and actual experience	5,368,635	5,866,404
Changes of assumptions	0	0
Benefit Payments, including refunds of member contributions	(32,108,873)	(30,600,302)
Net change in total pension liability	19,678,011	19,746,828
Total pension liability - beginning	496,987,271	477,240,443
Total pension liability - ending (a)	516,665,282	496,987,271
Plan Fiduciary Net Position		
Contributions - employer	10,659,281	9,824,717
Contributions - member	10,659,281	9,827,760
Net investment income	33,795,088	50,166,728
Benefit payments, including refunds of member contributions	(32,108,873)	(30,600,302)
Administrative expense	(619,135)	(555,763)
Other	0	0
Net change in plan fiduciary net position	22,385,642	38,663,140
Plan fiduciary net position - beginning	317,542,366	278,879,226
Plan fiduciary net position - ending (b)	339,928,008	317,542,366
Net pension liability - ending (a) - (b) *	176,737,274	179,444,905
Plan fiduciary net position as a percentage of the total pension liability	65.8%	63.9%
Covered-employee payroll	112,984,469	111,746,539
Net pension liability as a percentage of covered-employee payroll	156.4%	160.6%
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 \$230,465,485, an increase of \$53,728,211.

A 1% increase in the discount rate decreases the net pension liability to \$130,882,728, a decrease of \$45,854,546.

Table 12

**SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Excludes Member Contributions)**

<u>Fiscal Year Ended</u>	<u>Actuarially Determined Contribution</u>	<u>Contributions in Relation to the Actuarially Determined Contribution</u>	<u>Contribution Deficiency (Excess)</u>	<u>Covered Employee Payroll</u>	<u>Percentage Contributed</u>
12/31/2012	8,325,936	6,937,750	1,388,186	89,519,355	7.75%
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%

Table 13

GASB 68 Summary for 2020									
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)	477,240,443	278,879,226	198,361,217	155,541,772	248,551,705	55,256,312	74,774,094		
Changes for the year									
Service Cost	9,814,459		9,814,459					9,814,459	
Interest Cost	34,666,267		34,666,267					34,666,267	
Benefit Changes	-		-					-	
Experience loss (gain)	5,866,404		5,866,404			4,888,670		977,734	6.00
Changes in assumptions	-		-			-		-	6.00
Contributions - Employer		9,824,717	(9,824,717)						
Contributions - Employee		9,827,760	(9,827,760)					(9,827,760)	
Net Investment Income		50,166,728	(50,166,728)						
Expected Return on Investments									
Investment (gain) loss expensed									
Investment (gain) loss deferred							23,739,498		
Benefits paid including refunds	(30,600,302)	(30,600,302)						(20,492,356)	
Administrative Expense		(555,763)	555,763					(5,934,874)	5.00
Other Changes		-	-					555,763	
Amortization									
Net Changes	19,746,828	38,663,140	(18,916,312)			(21,363,834)	(20,435,424)	928,410	
Balance, End of Year (2)	496,987,271	317,542,366	179,444,905	135,023,895	231,504,737	38,781,148	78,078,168	10,687,643	
(1) Measurement Date December 31, 2018									
(2) Measurement Date December 31, 2019									

Table 14

GASB 68 Summary for 2021

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)	496,987,271	317,542,366	179,444,905	135,023,895	231,504,737	38,781,148	78,078,168		
Changes for the year									
Service Cost	10,326,519		10,326,519					10,326,519	
Interest Cost	36,091,730		36,091,730					36,091,730	
Benefit Changes	-		-					-	
Experience loss (gain)	5,368,635		5,368,635			4,473,862	-	894,773	6.00
Changes in assumptions	-		-			-	-	-	6.00
Contributions - Employer		10,659,281	(10,659,281)						
Contributions - Employee		10,659,281	(10,659,281)					(10,659,281)	
Net Investment Income		33,795,088	(33,795,088)						
Expected Return on Investments									
Investment (gain) loss expensed								(23,395,558)	
Investment (gain) loss deferred							8,319,624	(2,079,906)	5.00
Benefits paid including refunds	(32,108,873)	(32,108,873)	-					-	
Administrative Expense		(619,135)	619,135					619,135	
Other Changes		-	-						
Amortization						(14,107,269)	(26,370,298)	(12,263,029)	
Net Changes	19,678,011	22,385,642	(2,707,631)			(9,633,407)	(18,050,674)		
Balance, End of Year (2)	516,665,282	339,928,008	176,737,274	130,882,728	230,465,485	29,147,741	60,027,494	(465,617)	
(1) Measurement Date December 31, 2019									
(2) Measurement Date December 31, 2020									

Table 15**Deferred Outflows/(Inflows) Amortization Schedule as of December 31, 2021
(Measurement Date: December 31, 2020)**

Date Established	Source	Initial Amount	Deferred Amount	Remaining Years	Amortization Payment
12/31/2021	Experience Loss	5,368,635	4,473,862	5.00	894,773
12/31/2021	Investment Gain	(10,399,530)	(8,319,624)	4.00	(2,079,906)
12/31/2020	Experience Loss	5,866,404	3,910,936	4.00	977,734
12/31/2020	Investment Gain	(29,674,372)	(17,804,624)	3.00	(5,934,874)
12/31/2019	Experience Loss	5,291,272	2,116,510	2.00	1,058,254
12/31/2019	Investment Loss	41,457,145	16,582,858	2.00	8,291,429
12/31/2018	Experience Gain	(3,830,239)	(1,276,747)	2.00	(638,373)
12/31/2018	Assumption Change	(76,976,691)	(25,658,895)	2.00	(12,829,449)
12/31/2018	Investment Gain	(22,719,457)	(4,543,893)	1.00	(4,543,893)
12/31/2017	Experience Loss	12,381,445	2,063,575	1.00	2,063,575
12/31/2017	Assumption Change	(14,542,266)	<u>(2,423,711)</u>	1.00	<u>(2,423,711)</u>
Total			(30,879,753)		(15,164,441)

Table 16**HISTORICAL SUMMARY OF FUND ADDITIONS AND DEDUCTIONS****ADDITIONS BY SOURCE**

<u>Fiscal Year Ended</u>	<u>Employer Contributions as a Percent of Payroll</u>	<u>Employer Contributions</u>	<u>Employee Contributions</u>	<u>Net Investment Income</u>	<u>Total</u>
12/31/11	7.75%	6,799,258	6,831,742	(6,440,146)	7,190,854
12/31/12	7.75%	6,937,750	7,019,684	25,667,673	39,625,107
12/31/13	7.75%	6,715,376	6,715,376	45,323,533	58,754,285
12/31/14	7.75%	6,822,279	6,822,279	14,497,901	28,142,459
12/31/15	8.25%	7,398,945	7,402,905	(3,228,439)	11,573,411
12/31/16	8.25%	7,586,362	7,586,362	16,802,274	31,974,998
12/31/17	8.25%	8,113,319	8,113,319	43,085,572	59,312,210
12/31/18	9.00%	9,187,420	9,188,781	(18,715,945)	(339,744)
12/31/19	9.25%	9,824,717	9,827,760	50,166,728	69,819,205
12/31/20	9.75%	10,659,281	10,659,281	33,795,088	55,113,650

DEDUCTIONS BY TYPE

<u>Fiscal Year Ended</u>	<u>Benefit Payments</u>	<u>Refunds</u>	<u>Admin Expenses</u>	<u>Total</u>
12/31/11	17,216,853	502,566	490,611	18,210,030
12/31/12	18,554,194	569,058	520,955	19,644,207
12/31/13	20,346,281	393,954	385,675	21,125,910
12/31/14	22,258,842	625,184	386,713	23,270,739
12/31/15	23,959,198	637,822	447,921	25,044,941
12/31/16	25,737,515	729,741	477,252	26,944,508
12/31/17	26,891,785	551,908	563,078	28,006,771
12/31/18	28,309,344	554,422	554,484	29,418,250
12/31/19	30,055,864	544,438	555,763	31,156,065
12/31/20	31,595,115	513,758	619,135	32,728,008

Table 17**SCHEDULE OF MEMBERSHIP**

<u>Fiscal Year Ended</u>	<u>Active Members</u>	<u>Terminated Vested Members</u>	<u>Service Retirees and Beneficiaries</u>	<u>Disabled Retirees</u>	<u>Total Retirees</u>	<u>Total Members</u>
12/31/11	1,491	84	1,079	9	1,088	2,663
12/31/12	1,453	96	1,119	9	1,128	2,677
12/31/13	1,422	98	1,171	9	1,180	2,700
12/31/14	1,407	105	1,234	9	1,243	2,755
12/31/15	1,424	97	1,291	9	1,300	2,821
12/31/16	1,460	109	1,333	9	1,342	2,911
12/31/17	1,444	113	1,367	9	1,376	2,933
12/31/18	1,481	123	1,415	9	1,424	3,028
12/31/19	1,499	119	1,449	8	1,457	3,075
12/31/20	1,464	131	1,496	8	1,504	3,099

Table 18**SCHEDULE OF ACTIVE MEMBERS VALUATION DATA**

<u>Fiscal Year Ended</u>	<u>Active Members</u>	<u>Covered Payroll</u>	<u>Average Payroll Rate</u>	<u>Annual Percentage Increase in Average Payroll Rate</u>
12/31/2011	1,491	90,264,062	60,539	4.18%
12/31/2012	1,453	89,015,136	61,263	1.20%
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%

Table 19**SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS**

<u>Fiscal Year Ended</u>	<u>Added</u>	<u>Annual Allowances</u>		<u>Total</u>	<u>Annual Allowances</u>	<u>Percent Change</u>	<u>Average Annual Allowances</u>	<u>Retirees as Percent of Active Members</u>		
		<u>Added</u>	<u>Removed</u>					<u>Number</u>	<u>Pay</u>	
12/31/2011	66	1,326,502	38	546,291	1,088	17,655,333	4.6%	16,227	73.0%	19.6%
12/31/2012	72	1,945,840	32	423,102	1,128	19,178,071	8.6%	17,002	77.6%	21.5%
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%

Table 20**SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT**

Amount of Monthly Benefit	Number of Retirees	Type of Retirement*			Option Selected**						
		<u>1</u>	<u>2</u>	<u>3</u>	<u>LIFE</u>	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>	<u>D</u>	<u>E</u>
1 - 100	1	1	0	0	1	0	0	0	0	0	0
101 - 200	13	7	0	6	3	0	0	0	0	1	9
201 - 300	24	20	0	4	14	2	0	0	0	2	6
301 - 400	51	41	0	10	28	1	0	0	1	3	18
401 - 500	64	44	0	20	26	0	0	0	1	8	29
501 - 600	59	52	0	7	33	0	2	1	0	2	21
601 - 700	55	46	1	8	25	1	0	0	0	7	22
701 - 800	55	43	1	11	25	0	0	0	1	12	17
801 - 900	52	46	0	6	31	0	1	0	0	6	14
901 - 1,000	70	62	0	8	28	3	0	0	1	10	28
1,001 - 1,500	262	224	4	34	120	1	2	1	0	30	108
1,501 - 2,000	235	207	2	26	103	0	0	0	1	31	100
Over 2,000	<u>563</u>	<u>535</u>	<u>0</u>	<u>28</u>	<u>235</u>	<u>10</u>	<u>1</u>	<u>3</u>	<u>6</u>	<u>88</u>	<u>220</u>
Total	1,504	1,328	8	168	672	18	6	5	11	200	592

*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 Ended	Service Retirement	Disability Retirement	Beneficiaries	Refunds	Total Benefits
12/31/2011	15,863,198	113,271	1,240,384	502,566	17,719,419
12/31/2012	17,161,187	109,122	1,283,885	569,058	19,123,252
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	729,741	26,467,256
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

Table 21**SCHEDULE OF AVERAGE ANNUAL BENEFIT PAYMENTS**

<u>Fiscal Year Ended</u>	<u>Service Retirement and Beneficiaries</u>	<u>Disability Retirement</u>	<u>Total</u>	<u>Annual Percentage Increase in Average Benefits</u>
12/31/2011	15,851	12,586	15,824	1.36%
12/31/2012	16,484	12,125	16,449	3.95%
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%

Table 22**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, 2017.

Actuarial Assumptions

Mortality: Healthy Lives RP - 2000 Fully Generational
Disabled Lives RP - 2000 Fully Generational

Interest: 7.5% per annum, compounded annually

GASB 67 Blended Beginning of Period: 7.50%
Discount Rate: End of Period: 7.50%

Amortization of Unfunded Liability: Closed 30 year amortization as a level percent of payroll. Payroll growth assumed to be 4.0% per year. Prior bases established between December 31, 2007 and December 31, 2016 were combined into one base with a weighted average remaining amortization period of 22 years.

Turnover: In accordance with the following table based on service:

<u>Years of Service</u>	<u>Turnover Probability</u>
<1	12.0%
1-3	8.0%
4-6	6.0%
7-9	5.0%
10-11	4.0%
12+	2.0%

Table 22**DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS**

Retirement: In accordance with the following table based on age:

<u>Age</u>	<u>Retirement Probability</u>
<50	0.0%
50-58	5.0%
59-61	10.0%
62	25.0%
63	20.0%
64	25.0%
65	30.0%
66	25.0%
67	20.0%
68	10.0%
69	25.0%
70	15.0%
71-74	30.0%
75+	100.0%

Disability: None assumed

Salary Increases: In accordance with the following table based on service:

<u>Years of Service</u>	<u>Annual Increase</u>
<1	12.0%
1-2	10.0%
3	8.0%
4	5.0%
5-9	4.0%
10-19	3.0%
20+	2.5%

Inflation Rate: 2.25% 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 2020 valuation.

Definitions:Creditable Service

Service credited as an employee of the City of Spokane during which contributions were made as an eligible member of the Retirement System up to a maximum of 40 years. The maximum is 35 years for employees hired after January 1, 2015, but before December 31, 2017. The maximum is 30 years for employees hired prior to January 1, 2009 who terminate after January 1, 2009 and who do not elect the alternate benefit formula.

Service Buy-Back

A six-month window was opened from October 1, 2009 through March 31, 2010 during which members who had withdrawn their retirement accumulations and not elected to buy back prior service time could do so. Future rehired employees will have one year from their date of rehire to elect to buy back prior service time

Compensation

Total amount received by an employee including base pay, shift differential, overtime, holiday pay, hazardous duty pay and out-of-classification pay and not reduced by salary reduction contributions to the City's cafeteria plan or Section 457 plan. For employees hired after January 1, 2018, overtime compensation will be capped at 120% of an employee's annual base salary.

Final Compensation

The highest average annual Compensation received by a member during any three consecutive years. For employees hired prior to January 1, 2015, the highest average annual Compensation received by a member during any two consecutive years.

Normal Retirement Date

The first day of the month coinciding with or next following the attainment of age 65 and completion of 7 years of Creditable Service. For employees hired prior to January 1, 2015, the first day of the month coinciding with or next following the attainment of age 62 and completion of 5 years of Creditable Service.

Early Retirement Date

The first day of the month coinciding with or next following the attainment of age 50 and with the sum of age plus Creditable Service greater than or equal to 90. Employees hired between January 1, 2015 and December 31, 2017, the first day of the month coinciding with or next following the attainment of age 50 and with the sum of age plus Creditable Service greater than or equal to 80. Employees hired between January 1, 2009 and December 31, 2014, the first day of the month coinciding with or next following the attainment of age 50 and with the sum of age plus Creditable Service greater than or equal to 75. Employees hired prior to January 1, 2009 who terminate after January 1, 2009 and who do not elect the alternate benefit formula described below may retire after attainment of age 50 with 5 years of Creditable Service.

Member and City Contributions

Effective 12/27/2020	10.00%
12/15/2019 - 12/26/2020	9.75%
12/16/2018 - 12/14/2019	9.25%
12/17/2017 - 12/15/2018	9.00%
09/01/2014 - 12/16/2017	8.25%
Prior to 9/1/2014	7.75%

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

Table 23**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:	<p>Upon service retirement, a member becomes eligible to receive an annual allowance, payable in equal monthly installments. The annual allowance is computed as follows:</p> <p><u>Normal Retirement Allowance</u> 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.</p> <p>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.</p> <p><u>Normal Retirement Allowance under Alternate Benefit Formula</u> 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.</p> <p>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.</p> <p><u>Normal Retirement Allowance under Benefit Formula in SMC 3.05.160</u> Employees hired before January 1, 2009 who terminate after January 1, 2009 may elect this formula at retirement.</p> <p>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.</p> <p>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.</p>
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.

Table 23**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 2020. 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 9.64 as of December 31, 2020. 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: 0.60

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: (0.03)

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.

3. Ratio of benefit payments to contributions: 1.51

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, 2020
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

EXHIBIT A

Summary of Membership Data as of December 31, 2020

Active Members

Item	Male	Female	Total
Number of Members	986	478	1,464
Annual Salaries	\$74,381,514	\$33,267,000	\$107,648,514
Average Age	47.3	47.5	47.3
Average Service	11.4	10.5	11.2

EXHIBIT A
(continued)

Summary of Membership Data as of December 31, 2020

Retirees and Beneficiaries

Item	Number	Annual Annuities	Average Annuities
Retired Members	1,328	\$29,889,264	\$22,507
Survivor Annuitants	168	\$2,473,878	\$14,725
Disabled Annuitants	8	\$114,580	\$14,323
Total Annuitants	1,504	\$32,477,722	\$21,594

EXHIBIT A
(continued)

Summary of Membership Data as of December 31, 2020

Vested Terminations and Portables

Item	Number	Annual Annuities	Average Annuities
Vested Terminations	78	\$1,083,613	\$13,892
Portables*	53	\$427,042	\$8,057

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

EXHIBIT B

20 Year Benefit Payment Projection

Spokane Employees' Retirement System

Year Ended December 31	Current and Future Retirees	Current Retirees Only
2021	\$36,500,700	\$32,257,251
2022	38,105,203	31,760,075
2023	39,507,891	31,227,669
2024	40,877,934	30,658,447
2025	42,123,334	30,051,891
2026	43,265,394	29,405,413
2027	44,266,970	28,718,595
2028	45,259,773	27,989,640
2029	46,175,417	27,217,849
2030	47,087,579	26,401,272
2031	47,774,940	25,539,956
2032	48,563,226	24,638,771
2033	49,143,297	23,696,032
2034	49,726,421	22,713,571
2035	50,289,614	21,696,317
2036	50,669,364	20,638,063
2037	50,960,572	19,552,352
2038	51,170,700	18,443,575
2039	51,233,239	17,287,975
2040	51,215,622	16,119,205

EXHIBIT C

Age and Service Distribution

Spokane Employees' Retirement System

Attained Age	Years of Creditable Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up		
Under 25	6	6	0	0	0	0	0	0	0	0	0	12
25 to 29	10	60	8	0	0	0	0	0	0	0	0	78
30 to 34	12	82	40	11	0	0	0	0	0	0	0	145
35 to 39	17	73	49	44	3	0	0	0	0	0	0	186
40 to 44	6	70	48	48	31	6	0	0	0	0	0	209
45 to 49	6	57	35	47	24	24	1	0	0	0	0	194
50 to 54	7	34	35	42	32	41	17	4	0	0	0	212
55 to 59	5	33	32	31	33	27	35	16	1	0	0	213
60 to 64	2	18	19	30	24	16	23	15	6	3	3	156
65 to 69	1	2	12	7	4	6	6	4	1	4	4	47
70 & Up	0	0	1	2	1	2	2	1	0	3	3	12
Total	72	435	279	262	152	122	84	40	8	10	1,464	
Freq. Pct.	4.9%	29.7%	19.1%	17.9%	10.4%	8.3%	5.8%	2.7%	0.5%	0.7%	100.0%	

EXHIBIT D

Age, Salary and Service Distribution

Spokane Employees' Retirement System

Attained Age	Years of Creditable Service										Total	
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & Up		
Under 25	247,355	277,132	0	0	0	0	0	0	0	0	0	524,487
25 to 29	430,732	3,231,776	559,176	0	0	0	0	0	0	0	0	4,221,684
30 to 34	560,955	4,606,557	3,072,677	807,196	0	0	0	0	0	0	0	9,047,385
35 to 39	858,404	4,725,536	4,147,867	3,418,618	192,773	0	0	0	0	0	0	13,343,198
40 to 44	330,392	4,632,172	4,191,497	3,694,491	2,325,281	525,156	0	0	0	0	0	15,698,990
45 to 49	301,010	3,893,508	2,888,447	3,813,163	2,225,753	1,968,581	52,707	0	0	0	0	15,143,169
50 to 54	417,896	2,312,971	2,801,529	3,131,776	2,607,250	3,748,799	1,385,009	261,653	0	0	0	16,666,883
55 to 59	288,007	2,155,469	2,660,294	2,577,337	2,547,168	2,032,793	2,774,824	1,337,027	85,176	0	0	16,458,095
60 to 64	144,307	1,384,151	1,492,566	2,325,498	1,916,238	1,372,595	1,842,829	1,070,060	439,355	192,566	12,180,164	
65 to 69	46,741	122,613	924,584	473,645	355,076	404,199	483,430	315,393	52,277	424,588	3,602,546	
70 & Up	0	0	33,350	124,993	56,534	152,284	128,073	54,209	0	212,469	761,912	
Total	3,625,798	27,341,885	22,771,987	20,366,717	12,226,075	10,204,407	6,666,873	3,038,341	576,808	829,622	107,648,514	

Freq. Pct.	3.4%	25.4%	21.1%	18.9%	11.4%	9.5%	6.2%	2.8%	0.5%	0.8%	100.0%	
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Avg. Sal.	50,358	62,855	81,620	77,736	80,435	83,643	79,368	75,959	72,101	82,962	73,530	
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EXHIBIT E

**Average Benefits for Service Retirement
Spokane Employees' Retirement System**

Attained Age	Male		Female		Total	
	Number	Avg. Ben.	Number	Avg. Ben.	Number	Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	25	26,187	19	22,137	44	24,438
55 to 59	58	27,625	37	22,402	95	25,591
60 to 64	112	28,587	81	24,883	193	27,032
65 to 69	197	27,079	140	20,460	337	24,329
70 to 74	205	24,818	114	18,755	319	22,651
75 to 79	106	21,073	70	12,740	176	17,759
80 to 84	51	22,067	47	13,509	98	17,962
85 to 89	22	15,636	14	10,779	36	13,747
90 to 94	14	14,732	9	11,401	23	13,428
95 & Up	2	11,223	5	5,748	7	7,312
Total	792	25,016	536	18,799	1,328	22,507
Average Age	70.2		70.5		70.3	
Freq. Pct.	59.6%		40.4%		100.0%	

EXHIBIT F

**Average Benefits for Survivor Beneficiary
Spokane Employees' Retirement System**

Attained Age	Male		Female		Total	
	Number	Avg. Ben.	Number	Avg. Ben.	Number	Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	0	0	0	0	0	0
55 to 59	0	0	3	12,605	3	12,605
60 to 64	4	18,000	15	19,491	19	19,177
65 to 69	2	10,738	31	16,775	33	16,409
70 to 74	0	0	18	19,486	18	19,486
75 to 79	0	0	26	16,334	26	16,334
80 to 84	0	0	32	12,197	32	12,197
85 to 89	3	9,803	18	12,721	21	12,304
90 to 94	1	2,339	10	6,352	11	5,988
95 & Up	0	0	5	8,037	5	8,037
Total	10	12,522	158	14,865	168	14,725
Average Age	74.3		77.0		76.8	
Freq. Pct.	6.0%		94.0%		100.0%	

EXHIBIT C

**Average Benefits for Disability Retirement
Spokane Employees' Retirement System**

Attained Age	Male		Female		Total	
	Number	Avg. Ben.	Number	Avg. Ben.	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	3	14,293	0	0	3	14,293
65 to 69	0	0	0	0	0	0
70 to 74	0	0	2	10,371	2	10,371
75 to 79	1	13,295	0	0	1	13,295
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	64.6		66.6		65.3	
Freq. Pct.	62.5%		37.5%		100.0%	

EXHIBIT H

**Average Benefits for Vested Terminations
Spokane Employees' Retirement System**

Attained Age	Male		Female		Total	
	Number	Avg. Ben.	Number	Avg. Ben.	Number	Avg. Ben.
Under 30	0	0	0	0	0	0
30 to 34	4	10,449	1	5,553	5	9,470
35 to 39	6	13,942	5	10,492	11	12,374
40 to 44	6	14,597	10	12,900	16	13,536
45 to 49	15	19,313	12	12,079	27	16,098
50 to 54	3	7,207	4	14,908	7	11,608
55 to 59	4	15,490	2	6,037	6	12,339
60 to 64	2	7,810	2	23,013	4	15,412
65 & Up	1	27,627	1	4,363	2	15,995
Total	41	15,355	37	12,272	78	13,892
Average Age	46.4		47.0		46.7	
Freq. Pct.	52.6%		47.4%		100.0%	

EXHIBIT I

Average Benefits for Portables

Spokane Employees' Retirement System

Attained Age	Male		Female		Total	
	Number	Avg. Ben.*	Number	Avg. Ben.*	Number	Avg. Ben.*
Under 30	0	0	2	418	2	418
30 to 34	1	3,462	2	2,364	3	2,730
35 to 39	2	9,397	4	5,852	6	7,034
40 to 44	5	5,157	3	5,217	8	5,179
45 to 49	4	19,139	2	2,709	6	13,662
50 to 54	7	3,659	5	20,719	12	10,768
55 to 59	7	7,723	5	6,443	12	7,190
60 to 64	0	0	3	10,929	3	10,929
65 & Up	1	4,128	0	0	1	4,128
Total	27	7,719	26	8,409	53	8,057
Average Age	49.8		47.1		48.5	
Freq. Pct.	50.9%		49.1%		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

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Schedule of Revenues by Source

Fiscal Year	Employer Contribution	Employer Contributions	Member Contributions	Net Investment Income	Total Revenues
2011	7.75%	6,799,258	6,831,742	(6,440,146)	7,190,854
2012	7.75%	6,937,750	7,019,684	25,667,673	39,625,107
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

1 Effective September 1, 2014, the annual Contribution Rate changed from 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.

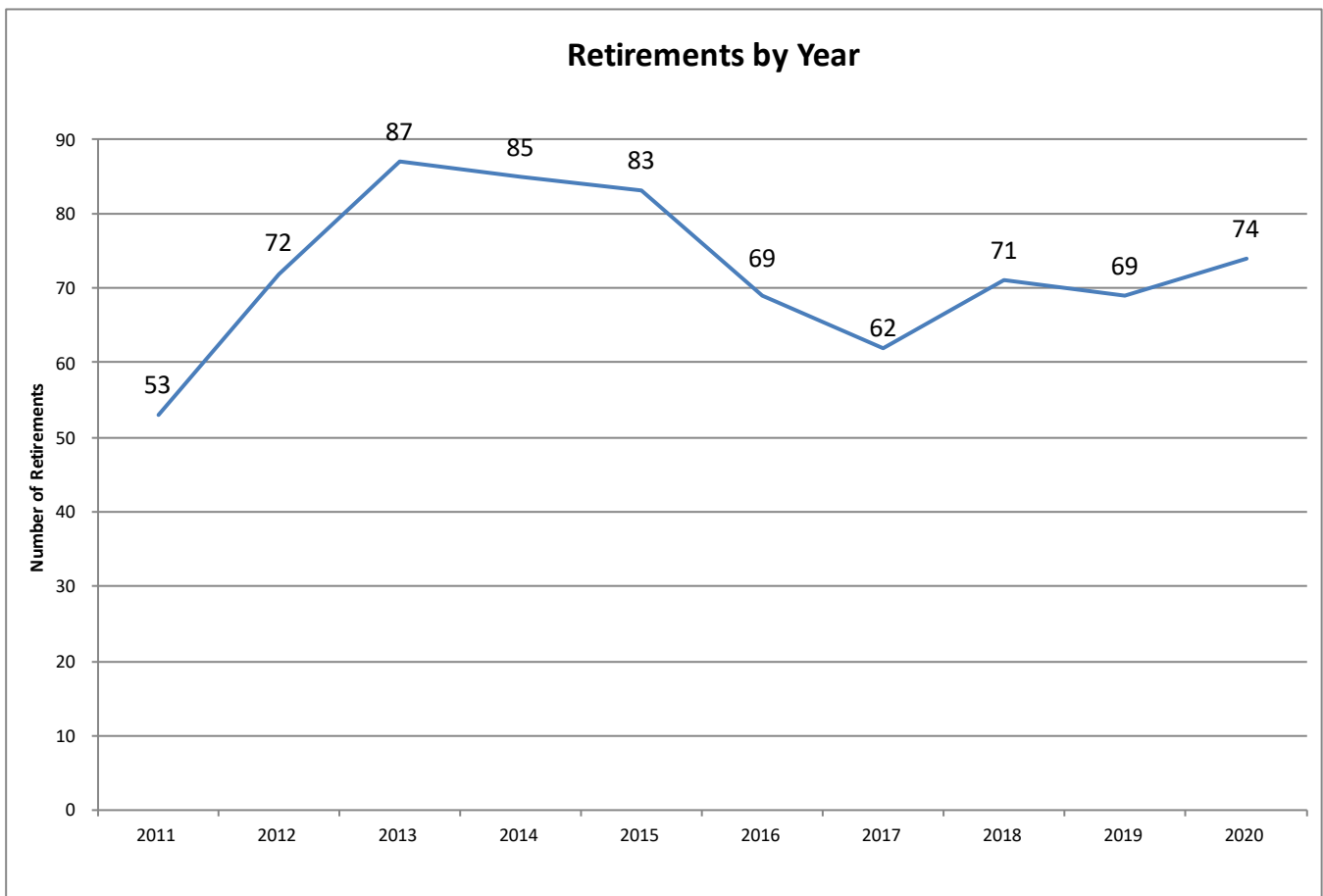
5 Effective December 27, 2020, the annual Contribution Rate changed from 9.75% to 10.0%. 9.75% represents the average rate of contributions received during 2020.

Schedule of Expenses by Type

Fiscal Year	Benefits	Refunds	Net Administrative	Total Expenses
2011	17,216,853	502,566	490,611	18,210,030
2012	18,554,194	569,058	520,955	19,644,207
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

Schedule of Benefit Expenses by Type

Year	Service Retiree Benefits	Survivor Benefits	Disability Retiree Benefits	Refunds	Total
2011	15,863,198	1,240,384	113,271	502,566	17,719,419
2012	17,161,187	1,283,885	109,122	569,058	19,123,252
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



Retirements During 2020

Name	Department	Position	Date Retired	Option	Serv Yrs	Age
Allen, Rama D.	Solid Waste Management	Clerk III	4/4/2020	D	20.9	57
Allison, David M.	Street	Laborer II	1/8/2020	E	30.8	54
Archer, Daniel W. *	Public Affairs/Communications	Audio/Video Technician	7/1/2020	E	8.2	50
Bieber, Scott L.	Solid Waste Disposal	Cash Accounting Clerk I	9/3/2020	ST	21.3	50
Bisaro, Kay F.	Parks & Recreation	Clerk II	1/8/2020	ST	13.0	66
Borders, Curtis L.	Street	Street Maintenance Operator I	11/14/2020	E	23.9	60
Brown, Vickie R.	Combined Communications Center	Fire Communications Center Shift Supervisor	6/30/2020	E	22.5	61
Brurud, Bruce A.	Advanced Wastewater Treatment	Wastewater Instrumentation & Data Supervisor	9/2/2020	D	23.1	61
Carrano, Arthur J. *	Probation Services	Probation Officer I	4/1/2020	E	13.8	50
Cash, Michael V.	Engineering Services	Field Engineer	5/2/2020	C-10	27.2	54
Cavanaugh, Christine M.	Human Resources	Director	2/8/2020	D	22.0	61
Cavanaugh, Michael J.	Water	Water Service Foreperson	2/8/2020	E	30.1	59
Charbonneau, Paul D.	Water	Laborer II	3/3/2020	E	30.8	65
Clark, Terrence W.	Stormwater	Laborer II	5/29/2020	ST	10.2	65
Compton, David B.	Development Services Center	Assistant Planner II	11/2/1/2020	E	20.0	62
Conklin III, Charles H. *	Solid Waste Disposal	Utilities Facilities Director	11/1/2020	D	6.0	62
Cooley, Gavin J.	Treasurer	Chief Financial Officer	2/8/2020	E	16.8	61
Craft, Allen R.	Solid Waste Management	Refuse Collector II	2/6/2020	C-20	29.8	63
Dalton, Patrick J.	Legal	Chief Assistant City Attorney	6/20/2020	E	12.2	66
Davis, Rhoda J.	Library	Library Clerical Assistant I	6/27/2020	ST	26.9	61
Earls, Dean L.	Stormwater	Waste Water Specialist	4/4/2020	E	40.0	61
Eaton, Daniel H.	Engineering Services	Public Works Lead Inspector	7/11/2020	B	32.9	56
Ebey, Kemmer C.	Water	Water Service Specialist	9/2/2020	E	42.4	66
Fisher, Keith E.	Solid Waste Management	Refuse Collector II	4/4/2020	E	29.5	66
Folk, Harold R.	Police	Laborer I	11/3/2020	E	14.4	75
Hammond, Elizabeth G.	Spokane Public Facilities District	Administration Manager	8/7/2020	ST	23.0	64
Hill, Chris J.	Stormwater	Waste Water Specialist	6/27/2020	ST	32.1	59
Howerton, Ronald L.	Street	Street Maintenance Supervisor	7/3/2020	ST	35.1	60
Irby, Monte R.	Advanced Wastewater Treatment	WWTP Operations III	10/10/2020	ST	15.4	50
James, Michael D.	Fleet Services	Parts Technician	9/2/2020	E	28.5	56
Johnson, Kenneth W.	Water	Facilities Maintenance Foreperson	5/16/2020	E	15.8	68
Johnson, Mark A.	Water	Certified Water Hydro Plant Mechanic	9/19/2020	ST	17.8	62
Jones, Vernon W.	Engineering Services	Public Works Lead Inspector	6/3/2020	ST	12.0	66
Kegley, Daniel R.	Water	Director, Water-Hydroelectric Services	6/2/2020	E	29.1	60
Kestell, James C.	Water	Certified Water Service Specialist	3/3/2020	E	28.2	63
Kimbrel, Alvin E.	Development Services Center	Certified Boiler Inspector	2/15/2020	ST	20.5	65
Kirkpatrick, Larry W.	Engineering Services	Public Works Lead Inspector	11/14/2020	ST	12.4	58
Knie, Michelle L.	Municipal Court	Court Clerk I	11/3/2020	E	11.9	51
Lozier, Curtis L.	Street	Street Maintenance Foreperson	4/2/2020	E	26.8	65
Miller, Cheryl E.	Parks & Recreation	Clerk III	5/2/2020	ST	14.3	61
Miller, Susanne	Library	Librarian	1/4/2020	E	12.0	66
Mitchell, May D.	Street	Clerk III	9/11/2020	ST	25.8	62
Morgan, Timothy J.	Solid Waste Management	Refuse Collector III	6/2/2020	E	36.1	64
Moss, Craig A.	Parks & Recreation	Equipment Operator	3/3/2020	D	21.5	62
Penaluna, Randy J. *	Advanced Wastewater Treatment	WWTP Operator I	10/1/2020	B	11.9	59
Phare, Edward A.	Street	Street Maintenance Operator I	11/7/2020	E	23.6	68
Pilcher, Steven R. #	Planning Services	City Planner II	8/1/2020	ST	9.2	64
Pope, Allen L.	Parks & Recreation	Park Caretaker	3/3/2020	E	31.4	65
Reiland, Cletus D.	Fleet Services	Heavy Equipment Mechanic	10/3/2020	B	8.0	67
Riedinger, Rebecca L.	Legal	Attorney Assistant	12/1/2020	ST	18.6	54
Robb, George G.	Advanced Wastewater Treatment	Custodian I	3/20/2020	E	21.4	72
Robole, Debra D.	Council	Senior Research & Policy Analyst	1/1/2020	E	8.1	65
Stambaugh, Donna J. #	Treasurer	Accountant I	11/1/2020	ST	0.8	64
Stevenson, Martha E.	Street	Clerk III	8/27/2020	C-10	6.7	56
Stewart, Rebecca L. *	Legal	Assistant Prosecutor	10/1/2020	E	13.4	50
Storm, Robert N.	Water	Water Hydroelectric Maintenance Foreperson	5/16/2020	ST	20.9	63
Stragier, Doris L.	Legal	Attorney Assistant	1/11/2020	E	40.8	60
Strom, Clara F.	Library	Librarian	6/30/2020	ST	10.5	63
Teaford, Tami M.	Police	Police Records Specailist	9/2/2020	E	30.3	60
Thrash, Brent H.	Stormwater	Laborer II	8/5/2020	E	12.7	62
Threlfall, William M.	Workers' Compensation	Safety Coordinator	9/19/2020	ST	23.3	67
Titchenal, Anthony J. *	Water	Water Service Specialist	2/1/2020	ST	21.9	50
Trautman, Heather L. *	Neighborhood Services	Director	5/1/2020	E	23.2	50
Trautman, Paul D.	CD/HS Operations	Program Manager CHHS	11/1/2020	E	25.1	61
Tucker, Marvin D. *	Police	Police Communications Supervisor	6/1/2020	C-20	18.2	50
Turner, Michael L.	Parks & Recreation	Gardener II	10/3/2020	E	40.1	69
Turner, Robert B.	Street	Senior Traffic Engineer	5/20/2020	E	25.7	58
Vazquez, Michele Y. #	Engineering Services	Program Professional	1/1/2020	ST	1.8	58
Walton, Susan M.	Municipal Court	Court Clerk II	7/14/2020	ST	23.0	62
Ward, Harry P.	Water	Certified Water Inspector	9/2/2020	B	28.2	63
Wheeler, Robert A.	Fleet Services	Custodian I	10/3/2020	E	12.1	65
Wigen, Cynthia M.	Library	Library Associate	6/27/2020	ST	14.7	64
Williams, Laura E.	Finance	Administrative Specialist	8/8/2020	ST	21.3	50
Windsor, Scott K.	Solid Waste Landfills	Environmental Analyst	9/15/2020	E	22.9	59

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

Retiree Deaths During 2020

Name	Date Retired	Date of Death	Age	Retirement Option
Ahrendt, Darlene	5/3/2016	9/1/2020	76	ST
Bender, Betty W.	4/16/1988	1/15/2020	94	A
Beyer, Raymond C.	6/4/1991	11/16/2020	91	St
Bias, James M.	2/24/2020	2/24/2020	69	E
Bolles, Aurla R.	5/16/1998	9/6/2020	87	D
Bradley, Briana L.	5/8/2015	11/19/2020	65	ST
Brown, Bernice G.	12/5/2003	10/4/2020	91	D
Byrnes, David L.	8/2/2011	6/14/2020	73	E
Compau, Nancy G.	3/15/2020	3/15/2020	84	E
Cox, Travis H.	11/21/2001	4/11/2020	68	ST
Frome, Dorothy C.	6/5/1999	3/4/2020	76	ST
Gheri, Helen M.	9/1/1995	7/13/2020	97	E
Guyor, Kim E.	1/4/2006	4/1/2020	70	ST
Haine, Marion T.	6/29/2018	7/13/2020	59	E
Long, Ronald E.	6/4/2004	1/13/2020	77	D
Makela, Thomas A.	9/9/2011	12/7/2020	72	ST
Markarian, Peter S.	12/31/2004	7/31/2020	88	E
McKenna, Irene D.	10/30/2007	7/11/2020	92	D
Miller, Gary L.	5/8/2003	5/29/2020	79	C-15
Montgomery, Joyann A.	10/30/2015	10/15/2020	78	E
Nist, Jennifer A.	2/17/2012	1/8/2020	68	ST
Osborne, June L.	8/4/1990	8/15/2020	92	A
Owen, Michael C.	12/29/2018	7/3/2020	67	E
Pierce, Patricia R.	11/7/2020	11/7/2020	99	ST
Rickerson, Charles J.	1/6/2000	11/3/2020	70	E
Rossi, Tony C.	1/15/1988	8/23/2020	85	E
Shane, Mary M.	11/3/1999	3/16/2020	74	ST
Shields, Gregory G.	8/2/2013	3/22/2020	69	ST
Tatro, David B.	11/3/2007	3/27/2020	77	ST
Thomas, Ruth	4/4/1987	5/18/2020	86	ST
Thompson, Julie A.	8/6/2004	11/5/2020	66	A
Tucker, Edward G.	8/20/2020	8/20/2020	82	E
Wilbourn, Travis	7/7/2012	1/31/2020	69	D

Active Member Deaths During 2020

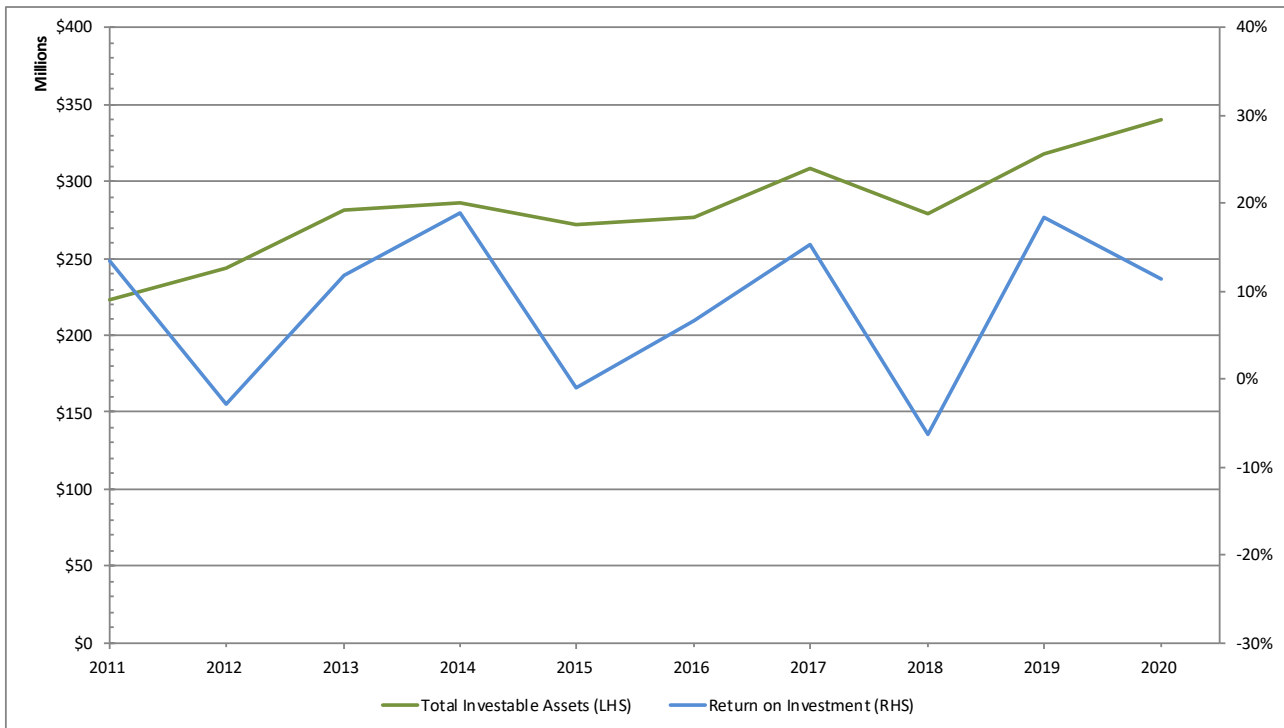
Name	Department	Date of Death	Age	Years of Service
Goldschmitz, Molly L.	Municipal Court	2/8/2020	36	11.5
Garland, Priscilla D.	Street	3/4/2020	44	13.4
James, Michael E.	Street	6/1/2020	53	23.8

Investment Section

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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)
2011	222,991,899	(6,440,146)	-2.80%
2012	243,036,215	25,667,673	11.70%
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%

Investments Listed by Type

As of December 31, 2020

	Market Value
Capital Preservation:	
Cash Held by Treasurer	\$141,000
Fidelity Government Money Market	105,334
Sterling Capital Core Bond	29,676,684
Hotchkis & Wiley High Yield	15,713,795
Polar Long/Short Fund	8,377,873
Post Limited Term High Yield	6,742,426
Rimrock Low Volatility	10,045,161
Domestic Equities:	
Hotchkis & Wiley Large Cap Value	17,184,535
MFS Large Cap Growth	15,579,502
Fidelity S&P 500 Index	36,584,084
Sterling Mid Cap Value	5,478,458
Westfield Mid Cap Growth	5,352,448
Fidelity Mid Cap Index	5,404,461
Champlain Small Cap	8,602,515
Wells Fargo Small Cap Value	4,522,648
Bridge City Small Cap Growth	7,338,192
Fidelity Small Cap Index	508,894
International Equities:	
Artisan International Value	25,123,045
EuroPacific Growth	28,241,755
Trivalent Small Cap Value	15,014,097
Emerging Markets:	
ABS Emerging Markets Strategic Portfolio	11,134,081
Vanguard Emerging Market Equity	538,804
Real Estate:	
Metropolitan Real Estate Partners	134,890
Morrison Street Fund V	845,387
Morrison Street Fund VI	1,585,413
Morrison Street Debt Opportunities	2,998,211
Morgan Stanley PRIME Fund	7,277,032
Principal (REITs)	14,043,424
Long Biased Hedge Funds:	
Weatherlow Offshore	21,110,483
Royalty Opportunities I	1,256,821
Royalty Opportunities II	992,870
Opportunistic Credit:	
Beach Point Select Fund	12,537,349
Contrarian Capital Fund I	8,295,348
Special Opportunities:	
Contrarian Emerging Markets	4,744,545
OrbiMed Partners II	6,654,892
Total Cash and Investments	\$339,886,457

Note: Totals may not add due to rounding

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