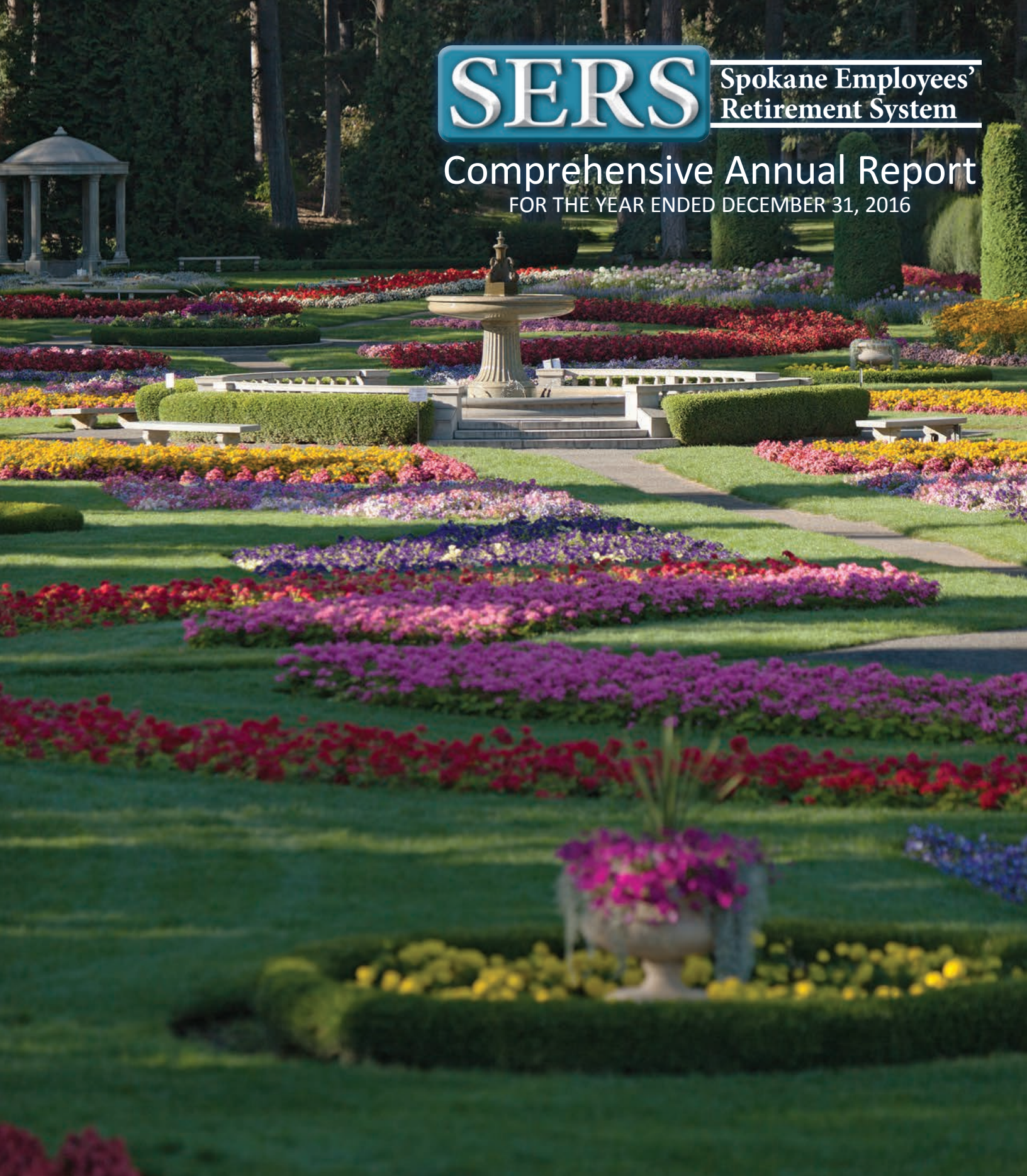




Spokane Employees'
Retirement System

Comprehensive Annual Report

FOR THE YEAR ENDED DECEMBER 31, 2016



This page intentionally left blank



Comprehensive Annual Report

FOR THE YEAR ENDED DECEMBER 31, 2016



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

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

This page intentionally left blank

Table of Contents

Introductory Section

Board, Staff, and Advisory Personnel.....	9
Organizational Chart.....	10
Description of Retirement System.....	11
Service Retirement Options.....	12
Letter of Transmittal.....	13

Financial Section

Independent Auditor's Report.....	19
Management's Discussion and Analysis.....	21
Statement of Fiduciary Net Position.....	29
Statement of Changes in Fiduciary Net Position.....	30
Notes to the Financial Statements.....	31
Schedule of Changes in the Employer's Net Pension Liability & Related Ratios.....	43
Schedule of Employer Contributions.....	44
Schedule of Investment Returns.....	46
Schedule of Administrative Expenses.....	48
Schedule of Investment Expenses.....	50

Actuarial Section

Certification Letter.....	54
Summary of Valuation Results.....	57
Demographics.....	68
Asset Information.....	69
Accrued Liability.....	71
Actuarial (Gain)/Loss.....	72
Amortization Schedule.....	73
Normal Cost.....	74
Contribution Summary.....	75
Asset Information.....	76
Net Pension Liability.....	78
Schedule of Employer Contributions.....	79
Other Schedules.....	80
Description of Actuarial Assumptions and Methods.....	89
Summary of Benefit and Contribution Provisions.....	91
Appendix – Data Tables.....	94

Statistical Section

Schedule of Revenues by Source.....	109
Schedule of Expenses by Type.....	109
Schedule of Benefit Expenses by Type.....	110
List of Service Retirements.....	111
Retirements by Year.....	112
List of Retiree Deaths.....	113
List of Active Member Deaths.....	113

Investment Section

Graph of Total Retirement Assets.....	117
Schedule of Investment Results.....	117
Investment Allocation History.....	118
Investments Listed by Type.....	119

This page intentionally left blank

Introductory Section

This page intentionally left blank

Spokane Employees' Retirement System Administrative Organization

BOARD OF ADMINISTRATION

Michael F. Coster (Chair)	Elected Employee	WWTP Operations Superintendent, Advanced Waste Water Treatment Plant
Michael Cavanaugh	Elected Employee	Water Service Foreperson, Water Division
James Tieken	Elected Employee	Refuse District Supervisor, Solid Waste Management
Breean Beggs	Council Appointee	City of Spokane Council Member
Brian Brill	Council Appointee	Portfolio Manager, Washington Trust Bank
Dean Kiefer	Council Appointee	Chair, Management Department Eastern Washington University
Vacant	Board Appointee	

INVESTMENT ADVISORY COMMITTEE

Dennis Clinton	President, Spokane City Credit Union
Brian Brill	Portfolio Manager, Washington Trust Bank
Dean Kiefer	Chair, Management Department, Eastern Washington University
Gavin Cooley	Chief Financial Officer, City of Spokane

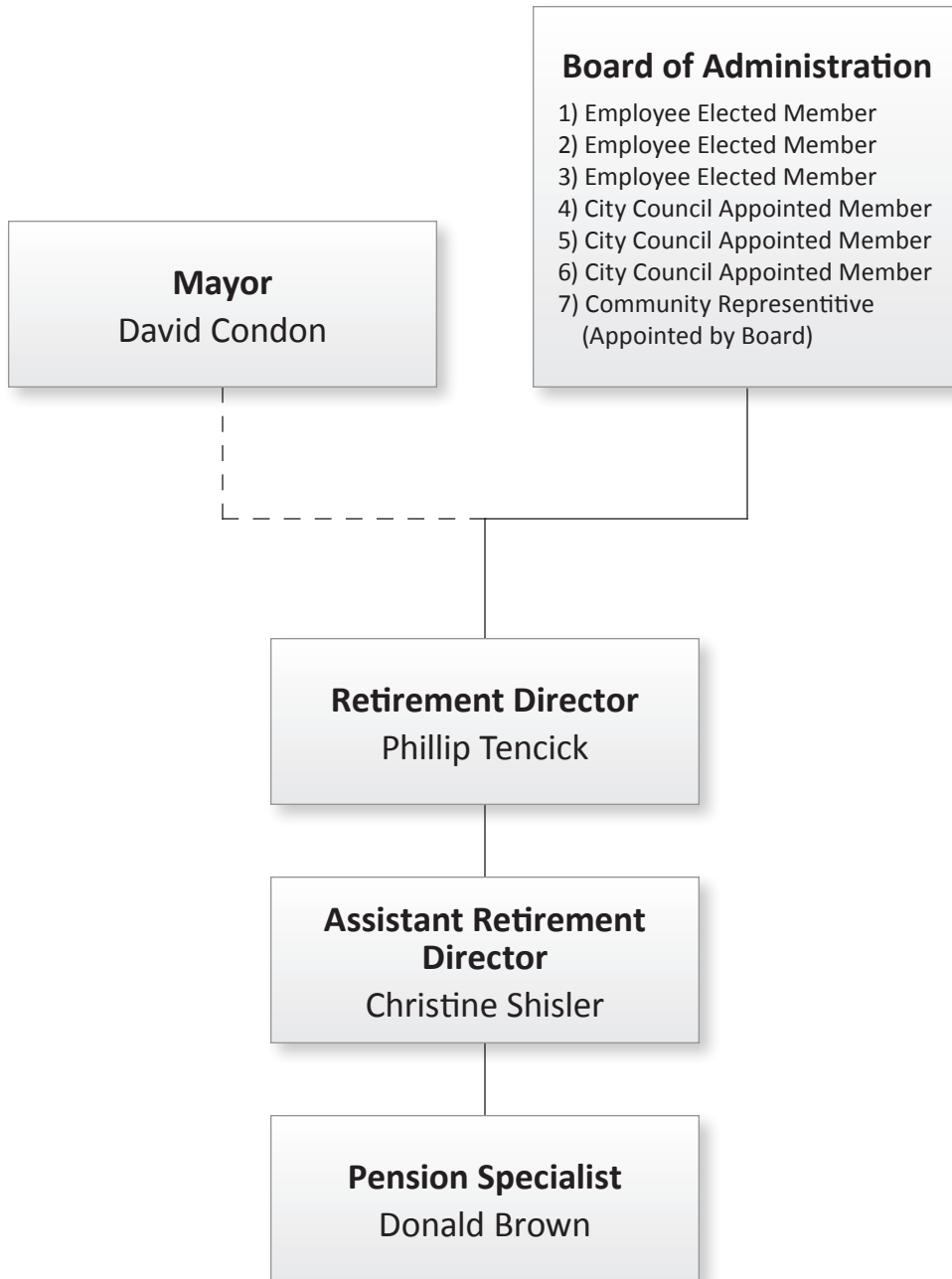
STAFF

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

ADVISORY

Certified Public Accountants	Moss Adams
Actuarial Services	SageView Consulting Group
Investment Performance Analysis	Hyas Group
Custodial Services	US Bank
Legal Counsel	K & L Gates and Ogletree, Deakins, Nash, Smoak & Stewart, PC

Organization Chart



Description Of Retirement System

SERS, a defined benefit pension plan, was founded July 1, 1942. Membership in SERS is required for all permanent non-uniformed employees of the City of Spokane. 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 is not an elected official or an employee of the City. SERS provides retirement, death, and disability benefits after a member has vested. A pension can commence at age 50, but certain rules may apply. This page 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.

For those employees hired on or before December 31, 2008, the normal retirement benefit is calculated by multiplying 2.15% of the member's highest consecutive two-year monthly salary times the member's years of creditable service, with a five-year vesting period. At 2.15%, their pension calculation is limited to 30 years of creditable service. An alternative formula exists for a maximum pension up to 35 years; however, if this alternative is selected at retirement, a 2.0% multiplier is utilized resulting in a maximum pension of 70.0%.

For those employees hired on or after January 1, 2009, their age plus years of service must equal 75 before they are eligible to receive a pension, with a five-year vesting period. Their normal retirement benefit is calculated by multiplying 2.0% of the member's highest consecutive two-year monthly salary times the member's years of creditable service to a maximum of 70.0%.

For those employees hired on or after January 1, 2015, their age plus years of service must equal 80 before they are eligible to receive a pension, with a seven-year vesting period. Their normal retirement benefit is calculated by multiplying 2.0% of the member's highest consecutive three-year monthly salary by the member's years of creditable service to a maximum of 70.0%.

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 (see Service Retirement Options).

Member contributions, currently 8.25% of total salary-based compensation, are deducted from the member's salary and paid into the retirement fund and is credited to the specific member. The City also contributes 8.25%. The City's contribution is used for funding the overall plan.

If a member has vested and becomes totally and permanently disabled, he or she 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.

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 begin receiving a pension when they meet the eligibility requirements. A number of service retirement options exist and these options are briefly explained on the following page.

Additional information can be obtained at www.spokanesers.org

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:

1. **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.
2. **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.
3. **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.
4. **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.
5. **Option "D"** Upon the retiree's death, 50% of the pension is continued to the retiree's spouse for life.
6. **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 giving up all rights to any further benefits from the Spokane Employees' Retirement System.



**SPOKANE EMPLOYEES'
RETIREMENT SYSTEM**
808 W. SPOKANE FALLS BLVD.
SPOKANE, WASHINGTON 99201-3324
509.625.6330
FAX 509.625.6861
www.spokanesers.org

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

This 75th 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, 2016

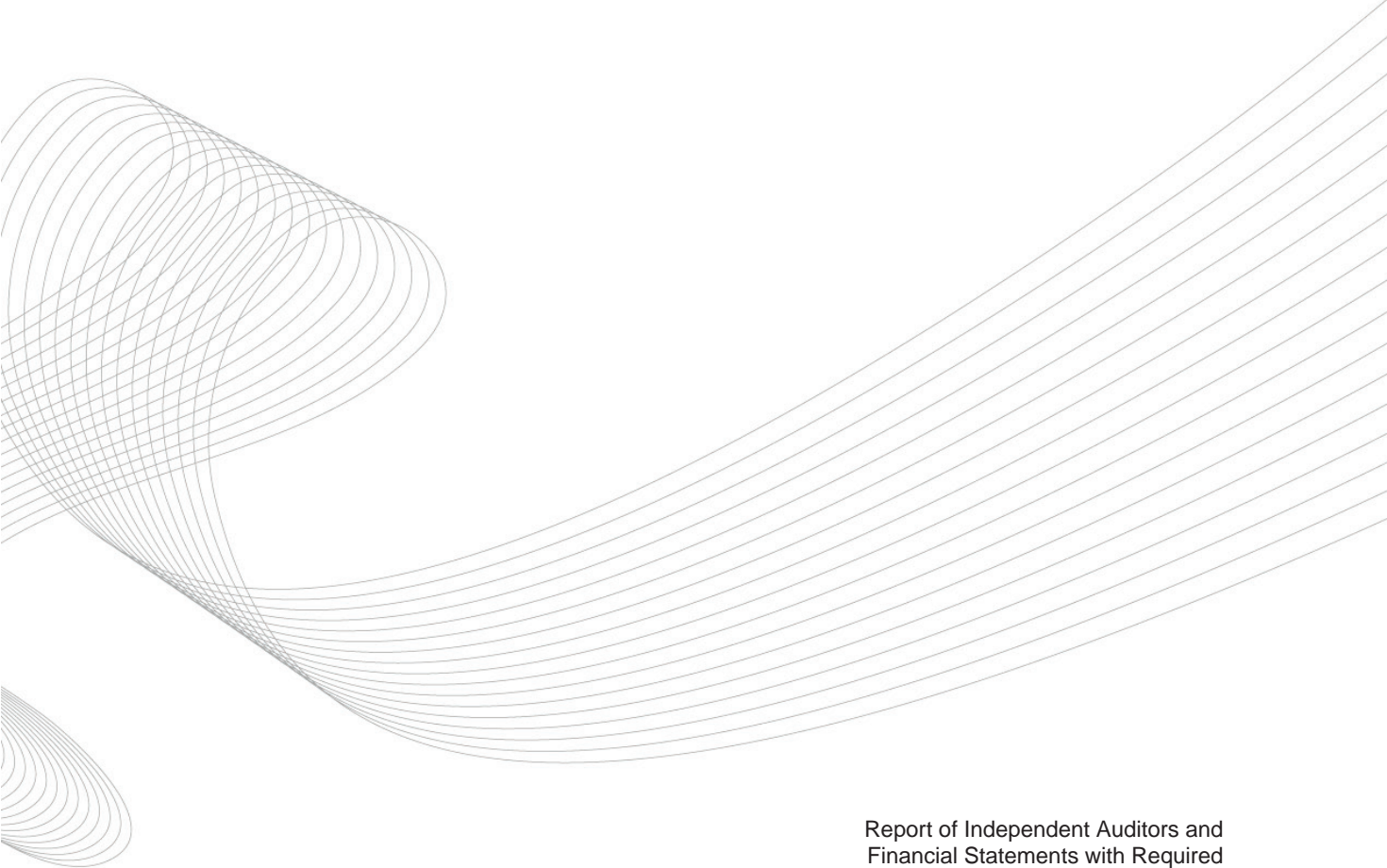
Phillip Tencick
Retirement Director

This page intentionally left blank

Financial Section

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

This page intentionally left blank



Report of Independent Auditors and
Financial Statements with Required
Supplementary Information for

**Spokane Employees'
Retirement System**
(Pension Trust Fund of the City
of Spokane, Washington)

December 31, 2016 and 2015

MOSS ADAMS LLP

Certified Public Accountants | Business Consultants

This page intentionally left blank

REPORT OF INDEPENDENT AUDITORS

To the Trustees
Spokane Employees' Retirement Plan
Spokane, Washington

Report on Financial Statements

We have audited the accompanying financial statements of the Spokane Employees' Retirement System (SERS, System, or Plan), a pension trust fund of the city of Spokane, Washington, which comprise the statements of fiduciary net position as of December 31, 2016 and 2015, 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. 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.

**REPORT OF INDEPENDENT AUDITORS
(continued)**

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, 2016 and 2015, 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 Matters*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 10 and schedules of changes in the employer's net pension liability and related ratios, employer's contribution, and investment returns on pages 24 through 27 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with managements responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other 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 and investment expenses, on pages 28 through 30, 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 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 and investment expenses are fairly stated in all material respects in relation to the financial statements as a whole.

Moss Adams LLP

Spokane, Washington
June 12, 2017

SPOKANE EMPLOYEES' RETIREMENT PLAN MANAGEMENT DISCUSSION AND ANALYSIS

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, 2016. 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 this narrative 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 employers' 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 PLAN MANAGEMENT DISCUSSION AND ANALYSIS

Management Discussion and Analysis (continued)

The basic financial statements are described as follows:

- The statements of fiduciary net position shows 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 employers' 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-employee 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 \$5.0 million (1.8%) during 2016 and decreased by \$13.5 million (4.7%) during 2015. Investments returned 6.7% for the year. This more than offsets outflows for net benefit payments (benefit payments less total contributions) of \$11.3 million. In 2015, investments lost 0.9% and outflows for net benefit payments totaled \$9.8 million.
- Total additions to net position were \$32.0 million in 2016, compared to \$11.6 million in the prior year. For 2016, revenue includes member and employer contributions of \$15.2 million and net investment returns of \$16.8 million. Member and employer contributions increased by \$0.4 million in 2016 compared to an increase of \$1.2 million in 2015. Net investment income, which fluctuates year-to-year depending on market conditions, was \$20.0 million more in 2016 compared to 2015. The investment returns of 6.7% in 2016 were thanks to broad market gains. The domestic equity and capital preservation assets classes were the largest contributors to the investment returns.

SPOKANE EMPLOYEES' RETIREMENT PLAN MANAGEMENT DISCUSSION AND ANALYSIS

Financial Highlights (continued)

- Total Plan expenses and payments for 2016 were \$26.9 million, a 7.6% increase from 2015. Total expense amounts and fluctuations are primarily driven by pension benefit payments, which make nearly 96% of total expenses. Retiree benefits increased by \$1.8 million during 2016 and by \$1.7 million during 2015.

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:

	Years Ended December 31,		
	2016	2015	2014
Additions			
Employer contributions	\$ 7,586,362	\$ 7,398,945	\$ 6,822,279
Plan member contributions	7,586,362	7,402,905	6,822,279
Net investment income (loss)	16,802,274	(3,228,439)	14,497,901
Total additions	31,974,998	11,573,411	28,142,459
Deductions			
Benefits	25,737,515	23,959,198	22,258,842
Refunds of contributions	729,741	637,822	625,184
Net administrative expenses	477,252	447,921	386,713
Total deductions	26,944,508	25,044,941	23,270,739
Net increase (decrease) in net position	5,030,490	(13,471,530)	4,871,720
Net Position restricted for pensions			
Beginning of year	272,301,291	285,772,821	280,901,101
End of year	\$ 277,331,781	\$ 272,301,291	\$ 285,772,821

SPOKANE EMPLOYEES' RETIREMENT PLAN MANAGEMENT DISCUSSION AND ANALYSIS

Revenues - Additions to Net Plan Position

- Both employer and Plan participant contributions increased by 2.5% (\$187 thousand and \$183 thousand, respectively) in 2016. In 2015, employer contributions and participant contributions each increased by 8.5% (\$577 thousand and \$580 thousand, respectively). Participant contributions may vary from employer contributions if rehired employees optionally buy-back their creditable service time from a prior withdrawal upon being rehired. Employer and participant contributions are driven by employees' salaries/wages and the contribution rate, currently 8.25% of salary for both parties. The contribution rate increased from 7.75% starting on September 1, 2014.
- Net investment return was a \$16.8 million gain in 2016 compared to a \$3.2 million loss in 2015. In 2016, the portfolio's annual return was 6.7% compared to a negative 0.9% in 2015. Markets were generally up for the year. Opportunistic credit was the top performing asset class with domestic equity and capital preservation strategies contributing the largest amount to the overall returns. The investments losses for 2015 were a result of losses in international and high yield fixed income combined with declining oil prices that hurt commodity returns.

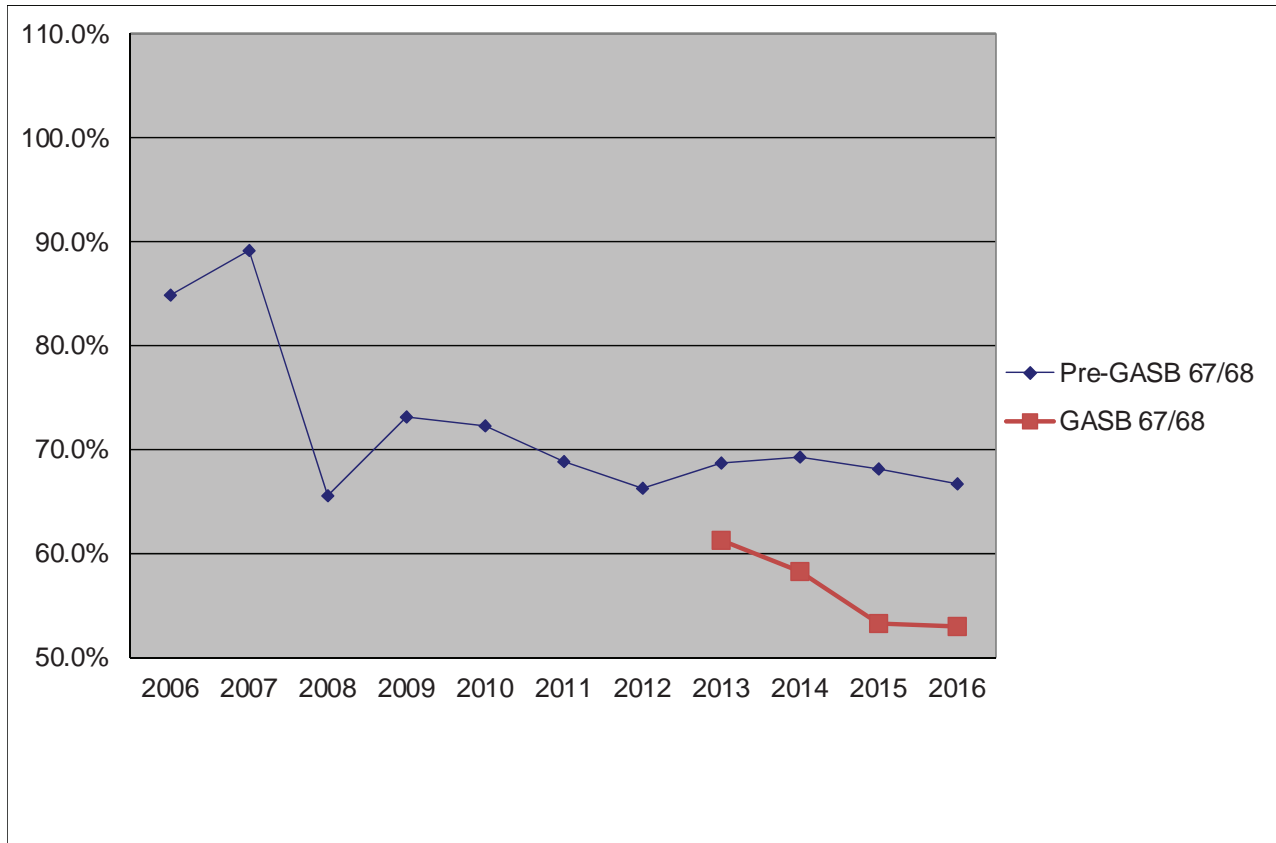
Expenses – Deductions from Net Plan Assets

- Retiree benefits paid increased by \$1.8 million (7.4%) in 2016 and \$1.7 million (7.6%) in 2015. The number of retirees and beneficiaries increased by 42 in 2016 and 57 in 2015. SERS' active member age is an average of 47.8 years old, which is down from 48.3 as compared to 2015. Average active participant service has decreased from 12.0 years in 2015 to 11.4 years in 2016.
- Refunds of contributions increased by \$92 thousand (14.4%) in 2016 compared to an increase of \$13 thousand (2.0%) in 2015. Lump sum withdrawals from the Plan 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 the SERS staff, along with other costs associated with administering the Plan and are shown on the Schedule of Administrative Expenses. Staff and the Board continue to be diligent about Plan operating expenses, which continue to remain at 0.17% of net Plan assets and less than 2.0% of total deductions.

SPOKANE EMPLOYEES' RETIREMENT PLAN MANAGEMENT DISCUSSION AND ANALYSIS

Funding Status

The actuarial accrued liability (AAL) is the actuarial present value of benefits accrued to date, adjusted to reflect future salary increases in accordance with the actuarial assumptions. The AAL funded ratio compares the AAL to Plan assets.



The 2008 drop in funding status was caused by the global financial crisis. Following the initial rebound from the financial crisis in 2009, funding ratios fell through 2012, as asset gains could not keep pace with increases in the value of future liabilities. Strong market returns in 2013 were more than sufficient to offset further liability growth.

Beginning in 2014, the implementation of 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 unfunded liability. 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. The funding ratio for 2015 fell to 53.2% due to investment returns not meeting the assumed rate of return for the year.

SPOKANE EMPLOYEES' RETIREMENT PLAN MANAGEMENT DISCUSSION AND ANALYSIS

Funding Status (continued)

Funds are accumulated from employer and employee contributions and investment earnings, and are used to pay present and future benefit obligations and administrative expenses. Starting September 1, 2014, active members contribute 8.25% of their salaries to the Plan and the City contributes 8.25% for a total of 16.50%. Prior to that, both parties contributed 7.75% of salary for a total contribution of 15.50%. An 8.25% employer and employee contribution rate is expected to allow the Plan to meet its benefit needs for the foreseeable future.

Retiree Benefit Adjustment

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 AAL funded ratio is 90% or greater and remains above 90% after the ad hoc adjustment is granted. The AAL funded ratio was less than 90% as of December 31, 2016. The last ad hoc retiree adjustment occurred in 2001. Based on the current AAL funded ratio, the Plan does not anticipate making ad hoc adjustments. It will take continued significant 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 PLAN MANAGEMENT DISCUSSION AND ANALYSIS

Investment Activities

One-year returns on asset classes and comparative benchmarks are presented in the table below. Negative returns are displayed in brackets and the policy index and benchmarks are in italics.

	Investment Return	
	2016	2015
Total portfolio	6.71%	-0.94%
<i>Policy Index</i>	9.87%	-2.00%
Capital Preservation	8.12%	-1.74%
<i>Capital Preservation Policy Index</i>	5.43%	-0.58%
Total Return Bonds ¹	-2.47%	N/A
<i>Barclays US Aggregate Bond Index</i>	2.65%	0.55%
High Yield Bonds	16.67%	-7.05%
<i>Barclays US Corporate High Yield Index</i>	17.13%	-4.47%
Absolute Return	7.75%	0.29%
<i>HFRI FOF Conservative Index</i>	1.90%	0.37%
Domestic Equity	10.91%	-0.32%
<i>Domestic Equity Policy Index</i>	13.92%	-0.06%
US Large Cap Equities	8.24%	-0.32%
<i>S&P 500 Index</i>	11.96%	1.38%
US Small/Mid Cap Equities	15.37%	-0.39%
<i>Russell 2500 Index</i>	17.59%	-2.90%
International Equity	3.91%	-1.32%
<i>International Equity Policy Index</i>	5.34%	-5.49%
International Large Cap Equities	4.02%	-1.13%
<i>MSCI ACWI Ex-US Index</i>	4.50%	-5.66%
International Small/Mid Cap Equities	-0.68%	7.56%
<i>MSCI ACWI Ex-US Small Cap Index</i>	3.91%	2.60%
Emerging Market Equities	7.03%	-8.73%
<i>MSCI EM Free Index</i>	11.19%	-14.92%
Long Biased Hedge Funds	-2.99%	4.04%
<i>HFRI FOF Composite Index</i>	0.52%	-0.27%
Opportunistic Credit	14.52%	2.35%
<i>HFRI Distressed Restructuring Index</i>	15.18%	-8.06%
Real Estate	8.09%	6.66%
<i>NCREIF ODCE Index</i>	8.76%	15.02%
Special Opportunities	-21.90%	2.13%
<i>Russell 3000 Index</i>	12.73%	0.48%

¹Total Return Bonds is a new mandate as of September 1, 2016. Returns for 2016 are since inception.

SPOKANE EMPLOYEES' RETIREMENT PLAN 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.

Total investments, valued at fair market value, increased \$6.3 million in 2016, which is composed of investment returns of \$16.8 million (6.7%) and offsetting sales of \$10.5 million to fund expenditures. In 2015, total investments decreased \$13.5 million, which is composed of a negative investment return of \$3.2 million (-0.9%) and sales of \$10.3 million to fund expenditures. The overall return for 2016 was attributable to broad appreciation across most asset classes. The domestic equity and capital preservation asset classes were the largest contributors to the overall performance and were aided by increasing oil prices and earnings growth in the first half of the year and favorable views of the potential for pro-business policies following the election. The special opportunities allocation was the largest detractor due to its exposure to the prescription drug industry, which was down significantly following outrage around several large price increases for life-saving drugs. SERS continued to utilize alternative investments to provide diversification and reduce short-term volatility. These strategies provided modest returns in 2016, but were unable to keep pace with the public markets for the year. 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 Board believes the use of alternative investments is a prudent approach to managing risk.

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 PLAN STATEMENTS OF FIDUCIARY NET POSITION

	2016	2015
Assets		
Cash	\$ 247,764	\$ 230,773
Short-term investments	955,792	2,373,538
Total cash and short-term investments	1,203,556	2,604,311
Receivables		
Investment income	190,309	67,283
Other	748	-
Total receivables	191,057	67,283
Investments		
U.S. fixed income securities	42,647,067	29,941,022
International/global fixed income securities	826,120	11,374,469
U.S. equities	87,529,212	88,558,262
International/global equities	56,796,776	45,490,549
Real estate	23,739,250	18,008,159
Alternatives	64,250,771	76,069,796
Total investments	275,789,196	269,442,257
Capitalized software, net	264,735	282,384
Total assets	277,448,544	272,396,235
Liabilities		
Payables		
Accounts payable	71,226	51,409
Current portion employees salaries and benefits	16,320	13,659
Employee leave benefits	17,017	17,171
Other liabilities	12,200	12,705
Total liabilities	116,763	94,944
Net position restricted for pensions	\$ 277,331,781	\$ 272,301,291

**SPOKANE EMPLOYEES' RETIREMENT PLAN
STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION**

	Years Ended December 31,	
	2016	2015
Additions		
Contributions		
Employer	\$ 7,586,362	\$ 7,398,945
Member	7,586,362	7,402,905
Total contributions	<u>15,172,724</u>	<u>14,801,850</u>
Investment income		
Net appreciation (depreciation) in fair value of investments	11,110,583	(8,167,829)
Interest and dividends	6,072,656	5,369,569
Less investment expense	<u>(380,965)</u>	<u>(430,179)</u>
Net investment income (loss)	<u>16,802,274</u>	<u>(3,228,439)</u>
Total additions	<u>31,974,998</u>	<u>11,573,411</u>
Deductions		
Benefit payments	25,737,515	23,959,198
Refunds of member contributions	729,741	637,822
Administrative expenses, net of administrative income	<u>477,252</u>	<u>447,921</u>
Total deductions	<u>26,944,508</u>	<u>25,044,941</u>
Net increase (decrease) in net position	<u>5,030,490</u>	<u>(13,471,530)</u>
Net position restricted for pensions		
Beginning of year	<u>272,301,291</u>	<u>285,772,821</u>
End of year	<u>\$ 277,331,781</u>	<u>\$ 272,301,291</u>

SPOKANE EMPLOYEES' RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 1 – Plan Description

Plan administration – The Spokane Employees' Retirement System (SERS, System, or Plan) is a single employer defined benefit pension plan covering employees of the City of Spokane, 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 of Spokane 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 police and firefighters who are members of the State Law Enforcement Officers and Firefighters' Retirement System.

Management of SERS is vested in 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, 2016, pension Plan membership consisted of the following:

Retirees or beneficiaries currently receiving benefits	1,342
Inactive Plan members entitled to but not yet receiving benefits	109
Active Plan members	<u>1,460</u>
	<u><u>2,911</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 64.50%. Employees hired prior to January 1, 2009, have a choice at retirement of choosing a 2.15% multiplier with a service cap of 30 years or a 2.00% multiplier with a service cap of 35 years.

All employees hired on or after January 1, 2009, who participate in SERS, are eligible for service retirement after completing five years of service and are age 50 or older; however, this group of employees must have their age, plus years of service, equal to 75 before they can draw a pension. Their 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 70.00%. In addition, the normal retirement age for these employees is 62.

SPOKANE EMPLOYEES' RETIREMENT PLAN NOTES TO FINANCIAL STATEMENTS

Note 1 – Plan Description (continued)

Benefits provided (continued) – All employees hired on or after January 1, 2015, who participate in SERS, are eligible for service retirement after completing seven years of service and are age 50 or older; however, this group of employees must have their age plus years of service equal to 80 before they can draw a pension. Their 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%. In addition, the normal retirement age for these employees is 65.

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 AAL funded ratio is 90% or greater and remains above 90% after the ad hoc adjustment is granted. The AAL funded ratio was less than 90% as of December 31, 2016. The last ad hoc retiree adjustment occurred in 2001. Based on the current AAL funded ratio, it will take continued significant 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

New accounting standard – Governmental Accounting Standards Board (GASB) Statement No. 72, *Fair Value Measurement and Application* (GASB 72), was implemented for the year ending December 31, 2016. GASB 72 establishes a hierarchy of inputs to valuation techniques used to measure fair value for financial reporting purposes. Additionally, GASB 72 provides guidance on applying fair value to certain investments and disclosures related to all fair value measurements. Implementation of GASB 72 did not have an impact on the beginning net position of any fund. Refer to Note 4 in the Notes to the Basic Financial Statements for additional disclosure of the requirements of this statement.

SPOKANE EMPLOYEES' RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 2 – Summary of Significant Accounting Policies (continued)

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

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

Methods used to value investments – All fixed income, common stock, and short-term investments are listed at fair market value. 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.

Certain investments, such as mutual funds and limited partnerships, net their management fees before the fund itself reports net investment income for the period. Investment fees detailed in the Schedule of Investment Expenses represent cash payments made to money managers and other investment professionals. Mutual fund and limited partnership fees are not reflected in this schedule; however, investment expenses are netted against investment income in the statement of changes of Plan 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 Plan net position.

Note 3 – Deposits and Investments

Deposits – The Federal Deposit Insurance Corporation (FDIC) insures the cash deposits up to \$250,000 per member of the System. 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 PLAN 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 updated during the reporting period to reflect the new target allocations resulting from an asset allocation study.

The following was the Board's target asset allocation as of December 31, 2016:

<u>Asset Class</u>	<u>Target Allocation</u>
Domestic Equities	32%
Capital Preservation	23%
International Equities	22%
Real Estate	9%
Long Biased	7%
Opportunistic Credit	7%
Special Opportunities ¹	0%
Total	<u>100%</u>

¹ By policy, Special Opportunities may be up to 10%

Rate of return – For the year ended December 31, 2016, the annual money-weighted rate of return on pension Plan investments, net of pension Plan investment expense, was 6.7%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

SPOKANE EMPLOYEES' RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 3 – Deposits and Investments (continued)

Rate of return (continued) – 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, 2016, are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return
Domestic Equities	6.5%
Capital Preservation	1.9%
International Equities	5.9%
Long Biased	4.0%
Opportunistic Credit	7.0%
Real Estate	2.2%

Discount rate – The blended discount rate used to measure the total pension liability was 5.75%. The projection of cash flows used to determine the discount rate assumed that Plan member contributions will be made at the current 8.25% contribution rate and that City contributions will be made at the same rate. GASB No. 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. If that is the case, the expected long-term rate of return on Plan assets (7.50%) is used for the period where assets are projected to be sufficient and the current yield on the 20-year AA municipal bonds (3.75% as of December 31, 2016; 3.50% as of December 31, 2015) 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 5.75%, 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 (4.75%) or 1-percentage-point higher (6.75%) than the current rate:

	1% Decrease (4.75%)	Current Discount Rate (5.75%)	1% Increase (6.75%)
Plan's net pension liability	<u>\$308,477,570</u>	<u>\$246,403,198</u>	<u>\$193,927,544</u>

SPOKANE EMPLOYEES' RETIREMENT PLAN NOTES TO FINANCIAL STATEMENTS

Note 3 – Deposits and Investments (continued)

Investments – The Spokane Employees' Retirement System's 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. Each alternative investment that SERS enters into has been studied carefully by the System's independent investment consultant, reviewed by staff, and approved by the Board. The asset allocation study that was modeled by the independent consultant demonstrated the alternative assets' can add value to the portfolio over time through diversification and higher expected returns. The Chief Investment Officer (CIO) and Board believes the use of alternative investments increases the expected return of the Plan compared to investing only in traditional asset classes.

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 PLAN

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. SERS' holdings in organizations that manage five percent or more of the Plan's fiduciary net position at December 31, 2016, were:

Organization	% of Net Position
Hotchkis & Wiley	14.1%
Sterling Capital Management	9.9%
Artisan Partners	7.0%
Vanguard Funds	6.7%
MFS Investment Management	6.4%
American Funds	6.4%
Evanston Capital Management	5.3%
Jackson Square	5.2%

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. Under Governmental Accounting Statement No. 40, *Deposit and Investment Risk Disclosures Guidelines*, 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 address 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.

SPOKANE EMPLOYEES' RETIREMENT PLAN NOTES TO FINANCIAL STATEMENTS

Note 3 – Deposits and Investments (continued)

Interest rate risk (continued) – The table below shows the System's fixed income assets by investment type, average effective maturity, and market value as of December 31, 2016:

Asset	Fair Value	Less than 1 Year	1-5 Years	6-10 Years	More than 10 Years
Fixed Income Mutual Funds	\$ 22,783,633	\$ -	\$ 22,783,633	\$ -	\$ -
Corporate notes and bonds	8,200,454	233,116	2,526,540	2,761,156	2,679,642
Asset backed securities	6,228,604	-	2,233,124	456,844	3,538,635
Governmental CMOs	2,925,414	-	-	-	2,925,414
Municipal bonds	1,630,888	193,218	883,341	444,995	109,335
Mortgage backed governmental passthrough	1,177,289	-	-	591,579	585,710
U.S. government treasuries	526,905	-	433,687	-	93,218
	<u>\$ 43,473,187</u>	<u>\$ 426,334</u>	<u>\$ 28,860,325</u>	<u>\$ 4,254,574</u>	<u>\$ 9,931,954</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, 2016, 26.0% 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, 2016, is as follows:

	<u>Total Investments</u>	<u>US Issues</u>	<u>Foreign Issues</u>	<u>% Foreign</u>
Cash	\$ 955,792	\$ 955,793	\$ -	0.0%
Fixed Income	43,473,187	38,299,949	5,173,237	11.9%
Equities	144,325,988	87,020,589	57,305,399	39.7%
Real Estate	23,739,250	23,568,003	171,247	0.7%
Alternatives	64,250,771	54,858,421	9,392,350	14.6%
Total	<u>\$ 276,744,988</u>	<u>\$ 204,702,755</u>	<u>\$ 72,042,233</u>	<u>26.0%</u>

SPOKANE EMPLOYEES' RETIREMENT PLAN

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 – Market value 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 and the investee is an investment company within the scope of Accounting Standards Codification (ASC) Topic 946, *Financial Services – Investment Companies*

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.

Fixed income and equity investments classified as Level 1 in the fair value hierarchy are valued directly from a predetermined primary external pricing vendor.

Investments classified as Level 2 represent proportional ownership in a Collective Investment Trust (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.

SPOKANE EMPLOYEES' RETIREMENT PLAN NOTES TO FINANCIAL STATEMENTS

Note 4 – Fair Value Measurement (continued)

The following table presents fair value measurements as of December 31, 2016:

	<u>Fair Value</u>	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>NAV</u>
Cash Equivalents	\$ 955,792	\$ 955,792	\$ -	\$ -	\$ -
US Government	4,629,608	4,629,608	-	-	-
US Corporate Fixed Income	7,374,334	7,374,334	-	-	-
International Fixed Income	826,120	826,120	-	-	-
Asset Backed Securities	6,228,604	6,228,604	-	-	-
Municipal Bonds	1,630,888	1,630,888	-	-	-
Fixed Income Mutual Funds	22,783,633	22,783,633	-	-	-
Total Fixed Income	43,473,187	43,473,187	-	-	-
US Common Stock	23,085,045	23,085,045	-	-	-
International Common Stock	1,179,781	1,179,782	-	-	-
Equity Mutual Funds	117,459,273	99,626,094	17,833,179	-	-
Total Equities	141,724,100	123,890,921	17,833,179	-	-
Real Estate	11,228,994	-	-	-	11,228,994
Alternatives	79,362,915	-	-	-	79,362,915
Total Investments	\$ 276,744,988	\$ 168,319,900	\$ 17,833,179	\$ -	\$ 90,591,909

The valuation method for investments measured at the net asset value (NAV) per share, or equivalent, is presented in the table below:

	<u>Net Asset Value (NAV)</u>	<u>Unfunded Commitments</u>	<u>Redemption Frequency</u>	<u>Redemption Notice</u>
Equity Fund	\$ 15,112,144	\$ -	Monthly, Annually	15-90 Days
Long/Short Hedge Fund	29,263,011	-	Quarterly	60-65 Days
Real Estate Fund	11,228,994	2,953,592	N/A	N/A
Absolute Return Hedge Fund	22,177,939	-	Monthly, Quarterly, Semi-Annual	30-45 Days
Closed-End Hedge Fund	4,063,926	3,457,500	N/A	N/A
Fixed Income Fund	8,745,895	-	Quarterly	90 Days
Total Investments Valued at NAV	\$ 90,591,909	\$ 6,411,092		

Equity Fund – One international fund and one US fund that invest long-only in less liquid markets seeking to capture an illiquidity premium. The international fund is a fund of funds and is valued based on the NAV provided for each of the underlying units. The US fund unit net asset value is based on the value of the underlying holdings.

SPOKANE EMPLOYEES' RETIREMENT PLAN

NOTES TO FINANCIAL STATEMENTS

Note 4 – Fair Value Measurement (continued)

Long/Short Hedge Fund – Three funds that invest long and short to generate outsize risk-adjusted returns. Two funds are 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 asset value based on the appraised value of the holdings. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of 5 to 10 years.

Absolute Return Hedge Fund – Four 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 – One fund that invests 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 – One fund that invests less liquid or distressed debt securities. The US fund 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 September 1, 2014, member contributions are 8.25% of eligible compensation and are deducted from the member's salary and paid into the retirement fund; the City contributes 8.25% of eligible compensation for a combined total of 16.50%.

Contribution rates are reviewed periodically by the Board of Administration and recommendations are made for adjustments. It is contemplated that over the long term, the contribution by the City will, when added to the members' contribution, plus other revenues, be enough to properly fund the retirement benefits set forth.

REQUIRED SUPPLEMENTARY INFORMATION

**SPOKANE EMPLOYEES' RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF CHANGES IN THE EMPLOYER'S NET PENSION LIABILITY AND RELATED
RATIOS**

	2016	2015	2014
Total pension liability			
Service cost	\$ 12,896,547	\$ 12,384,960	\$ 11,405,611
Interest	27,443,176	26,359,257	25,718,424
Changes of benefit terms	-	-	86,298
Differences between expected and actual experience	12,381,445	6,483,011	18,507,784
Changes of assumptions	(14,542,266)	-	-
Benefit payments, including refunds of member contributions	<u>(26,467,256)</u>	<u>(24,597,020)</u>	<u>(22,884,026)</u>
Net change in total pension liability	11,711,646	20,630,208	32,834,091
Total pension liability—beginning	<u>512,023,333</u>	<u>491,393,125</u>	<u>458,559,034</u>
Total pension liability—ending (a)	<u>\$ 523,734,979</u>	<u>\$ 512,023,333</u>	<u>\$ 491,393,125</u>
Plan fiduciary net position			
Contributions—employer	\$ 7,586,362	\$ 7,398,945	\$ 6,822,279
Contributions—member	7,586,362	7,402,905	6,822,279
Net investment income	16,802,274	(3,228,439)	14,497,901
Benefit payments, including refunds of member contributions	(26,467,256)	(24,597,020)	(22,884,026)
Administrative expense	<u>(477,252)</u>	<u>(447,921)</u>	<u>(386,713)</u>
Net change in plan fiduciary net position	5,030,490	(13,471,530)	4,871,720
Plan fiduciary net position—beginning	<u>272,301,291</u>	<u>285,772,821</u>	<u>280,901,101</u>
Plan fiduciary net position—ending (b)	<u>\$ 277,331,781</u>	<u>\$ 272,301,291</u>	<u>\$ 285,772,821</u>
Plan's net pension liability—ending (a) - (b)	<u>\$ 246,403,198</u>	<u>\$ 239,722,042</u>	<u>\$ 205,620,304</u>
Plan fiduciary net position as a percentage of the total pension liability	53.0%	53.2%	58.2%
Covered-employee salaries, as of December 31	\$ 102,378,550	\$ 93,899,096	\$ 89,034,522
Plan's net pension liability as a percentage of covered-employee payroll	240.7%	255.3%	230.9%

Notes to Schedule:

Legislative and administrative changes. There were no legislative or administrative changes.

**SPOKANE EMPLOYEES' RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER'S CONTRIBUTIONS**

	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Actuarially determined contribution	\$ 9,853,762	\$ 9,069,276	\$ 8,292,066	\$ 8,237,317	\$ 8,325,936	\$ 10,010,885	\$ 8,955,055	\$ 8,267,280	\$ 8,826,967	\$ 5,742,761
Contributions in relation to the actuarially determined contribution	7,586,362	7,398,945	6,822,279	6,715,376	6,937,750	6,799,258	6,580,795	6,474,432	4,875,443	4,518,363
Contribution deficiency	\$ 2,267,400	\$ 1,670,331	\$ 1,469,787	\$ 1,521,941	\$ 1,388,186	\$ 3,211,627	\$ 2,374,260	\$ 1,792,848	\$ 3,951,524	\$ 1,224,398
Covered-employee payroll	\$ 91,955,903	\$ 89,684,182	\$ 86,139,886	\$ 86,650,013	\$ 89,519,355	\$ 90,264,062	\$ 88,093,679	\$ 83,455,429	\$ 74,183,014	\$ 69,261,673
Contributions as a percentage of covered-employee payroll	8.25%	8.25%	7.92%	7.75%	7.75%	7.75%	7.75%	7.75%	6.72%	6.72%

**SPOKANE EMPLOYEES' RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION
SCHEDULE OF EMPLOYER'S CONTRIBUTIONS**

Valuation date: December 31, 2016

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	21 years
Asset valuation method	5-year smoothed market
Inflation	3.0%
Salary increases	0% for member with more than 5 years of service in years 2013, 2014, and 2015

Otherwise in accordance with the following table based on service:

<u>Years of Service</u>	<u>Annual Increase</u>
<3	10.0%
3-4	8.0%
5-15	3.5%
16+	3.0%

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%
50-57	4.5%
58-61	7.0%
62	25.0%
63-64	15.0%
65	25.0%
66-68	20.0%
69-74	15.0%
75+	100.0%

Mortality 1994 Group Annuity Mortality Static Tables

**SPOKANE EMPLOYEES' RETIREMENT PLAN
 REQUIRED SUPPLEMENTARY INFORMATION
 SCHEDULE OF INVESTMENT RETURNS**

	2016	2015	2014	2013	2012	2011	2010	2009	2008
Annual money-weighted rate of return, net of investment	6.71%	(0.94)%	5.34%	18.89%	11.70%	(2.8)%	13.47%	21.99%	24.68%

ADDITIONAL SUPPLEMENTARY INFORMATION

SPOKANE EMPLOYEES' RETIREMENT PLAN
ADDITIONAL SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES

	<u>2016 Budget</u>	<u>2016 Actual</u>	<u>2015 Actual</u>
Personnel services			
Salaries and wages	\$ 273,580	\$ 261,985	\$ 220,406
Personnel benefits	78,190	76,532	66,088
Administrative income	<u>(10,000)</u>	<u>(19,375)</u>	<u>(22,061)</u>
Total personnel services	<u>341,770</u>	<u>319,142</u>	<u>264,433</u>
Supplies			
Office supplies	4,000	1,545	4,965
Publications	-	204	-
Postage	10,000	8,716	9,215
Software (noncapitalized)	-	182	-
Minor equipment	500	-	-
Other	<u>1,000</u>	<u>604</u>	<u>1,286</u>
Total supplies	<u>15,500</u>	<u>11,251</u>	<u>15,466</u>
Other services and charges			
State audit charges	10,000	11,172	11,688
Professional services	150,000	80,222	90,588
Travel	15,000	7,972	2,517
Registration and schooling	15,000	805	10,789
Other dues, subscriptions, and memberships	2,500	1,993	1,970
Printing	500	181	287
Depreciation/amortization	-	1,278	17,649
Other miscellaneous charges	<u>2,220</u>	<u>17,649</u>	<u>4,462</u>
Total other services and charges	<u>195,220</u>	<u>121,272</u>	<u>139,950</u>

**SPOKANE EMPLOYEES' RETIREMENT PLAN
ADDITIONAL SUPPLEMENTARY INFORMATION
SCHEDULE OF ADMINISTRATIVE EXPENSES**

	<u>2016 Budget</u>	<u>2016 Actual</u>	<u>2015 Actual</u>
Interfund (IF) payments for services			
IF centralized account	\$ 2,407	\$ 2,304	\$ 2,782
IF IT phones	1,463	1,506	1,555
IF IT communications replacement	-	-	241
IF risk management	991	991	1,121
IF unemployment	-	-	500
IF workers' compensation	198	198	58
IF IT	13,729	12,980	13,892
IF reprographics	2,500	4,930	4,339
IF IT replacement	1,927	1,927	3,584
IF My Spokane	-	751	-
	<u>23,215</u>	<u>25,587</u>	<u>28,072</u>
TOTAL ADMINISTRATIVE EXPENSES, NET OF ADMINISTRATIVE INCOME	<u>\$ 575,705</u>	<u>\$ 477,252</u>	<u>\$ 447,921</u>

SPOKANE EMPLOYEES' RETIREMENT PLAN
ADDITIONAL SUPPLEMENTARY INFORMATION
SCHEDULE OF INVESTMENT EXPENSES

	Year Ended December 31, 2016
Investment Services	
Bridge City Capital LLC	\$ 19,734
Champlain Small Cap Fund LLC	47,473
Principal Real Estate Investors LLC	83,086
Sterling Capital Management LLC	68,793
	<hr/> 219,086
Performance Measurement	
Hyas Group, LLC	<hr/> 115,000
Custodial Services	
U.S. Bank	<hr/> 46,879
 TOTAL INVESTMENT EXPENSES	 <hr/> <hr/> \$ 380,965

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.

Actuarial Section

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

This page intentionally left blank

**SPOKANE EMPLOYEES'
RETIREMENT SYSTEM**

**ACTUARIAL VALUATION
AS OF DECEMBER 31, 2016**



Sageview Consulting Group
4510 Cox Road, Suite 200, Glen Allen, VA 23060
804.270.1508 www.sageviewadvisory.com

April 26, 2017

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, 2016, 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 8.25% of pay) and Employer Contributions (currently 8.25% of pay).

The December 31, 2016 valuation develops an Actuarially Determined Employer Contribution Rate (ADC), exclusive of employee contributions, of 9.62% of total payroll. The ADC rate compares with an actual Employer Contribution rate of 8.25% of total payroll. The Employer Contribution for the 2016 fiscal year of \$7,586,362 was less than the ADC of \$9,853,762 by \$2,267,400.

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, 2016 and December 31, 2015 is as follows:

	December 31 2016	December 31 2015
Total Pension Liability:	\$523,734,979	\$512,023,333
Fiduciary Net Position:	\$277,331,781	\$272,301,291
Net Pension Liability:	\$246,403,198	\$239,722,042
Fiduciary Net Position as a Percentage of Total Pension Liability:	53.0%	53.2%
GASB 67 Blended Discount Rate:	5.75%	5.50%

Spokane Employees' Retirement System
April 26, 2017
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, 2011. This study resulted in the Board adopting several changes in assumptions as of December 31, 2012, 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

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

Spokane Employees' Retirement System
April 26, 2017
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, as well as certain schedules included in the other sections of the comprehensive annual financial report for the fiscal year ended December 31, 2016.

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.

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
Managing 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, 2016 for the Spokane Employees' Retirement System.

The principal results include:

- The Actuarially Determined Employer Contribution Rate (ADC) is 9.62% of total payroll. This compares to an actual Employer Contribution rate of 8.25% of total payroll.

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

Net Pension Liability

Under GASB 67, the Net Pension Liability is the excess, if any, of the Total Pension Liability over the Fiduciary Net Position. The Total Pension Liability is determined under the Entry Age actuarial cost method. The Net Pension Liability as of December 31, 2016 and December 31, 2015 is as follows:

	December 31 2016	December 31 2015
Total Pension Liability:	\$523,734,979	\$512,023,333
Fiduciary Net Position:	\$277,331,781	\$272,301,291
Net Pension Liability:	\$246,403,198	\$239,722,042
Fiduciary Net Position as a Percentage of Total Pension Liability:	53.0%	53.2%
 GASB 67 Blended Discount Rate:	 5.75%	 5.50%

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, 2011. This study resulted in the Board adopting several changes in assumptions as of December 31, 2012, at the recommendation of the actuary, in order to better anticipate emerging experience under the System. There have been no changes in assumptions or methods since the last valuation.

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. If that is the case, the expected long term rate of return on plan assets (7.50%) is used for the period where assets are projected to be sufficient and the current yield on 20 year AA municipal bonds (3.75% as of 12/31/16; 3.50% as of 12/31/15) is used thereafter.

Summary of Valuation Results (continued)

- **Legislative and Administrative Changes**

There were no 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>2016</u>	<u>2015</u>
<u>Active</u>		
Number	1,460	1,424
Average Pay for Coming Year	\$ 70,122	\$ 65,940
<u>Retired and Beneficiaries</u>		
Number	1,342	1,300
Average Annual Allowance	19,521	18,991
<u>Terminated Vested and Portables</u>		
Number	109	97
<u>Total Membership</u>	2,911	2,821
<u>Net Pension Liability</u>		
Total Pension Liability	\$523,734,979	\$512,023,333
Fiduciary Net Position	\$277,331,781	\$272,301,291
Net Pension Liability	\$246,403,198	\$239,722,042
Fiduciary Net Position as a Percentage of the Total Pension Liability	53.0%	53.2%
<u>Contribution Rates</u>		
Actuarially Determined Employer Contribution Rate (ADC) Rate*	9.62%	9.65%
Actual Employer Contribution Rate	8.25%	8.25%

* Exclusive of Employee Contributions (8.25% of pay after September 1, 2014
7.75% of pay prior to September 1, 2014)

Summary of Valuation Results (continued)

Contribution Rates (ADC)

The results of the valuation as of December 31, 2016 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, 2016 the actual Employer Contribution rate of 8.25% is less than the ADC rate of 9.62%.

Reasons for Change in the ADC

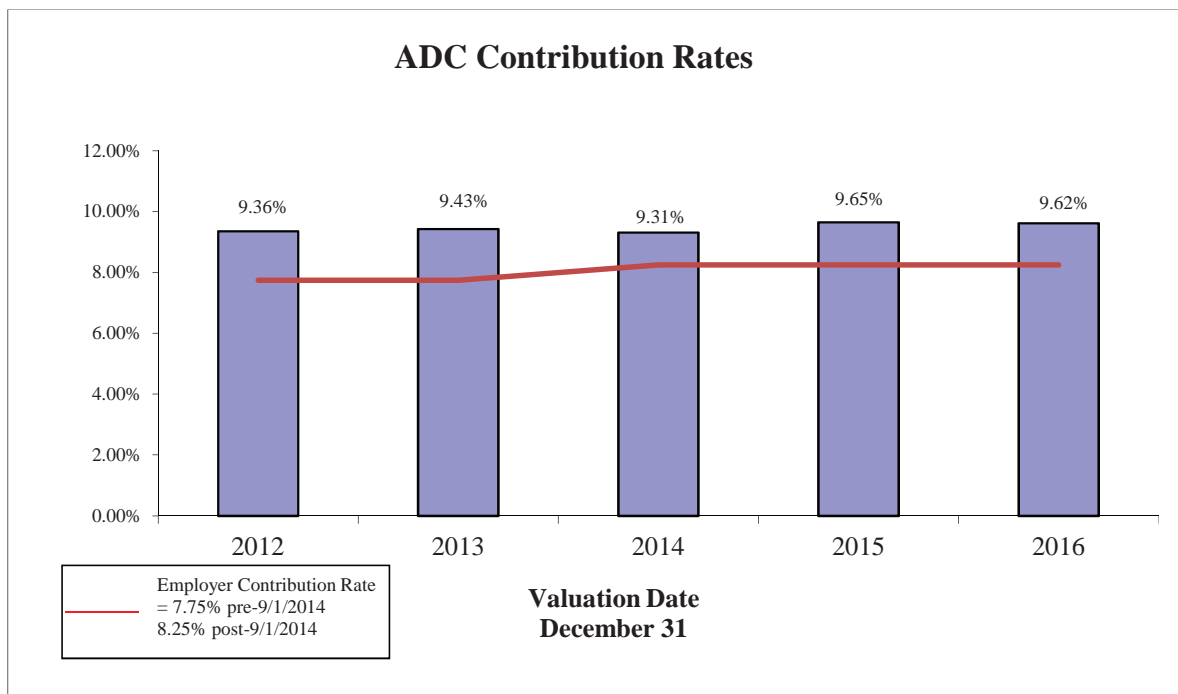
The recommended employer contribution rate as determined by the ADC decreased from 9.65% as of December 31, 2015 to 9.62% as of December 31, 2016. The decrease of 0.03% is due to the following reasons:

● Increase due to return on actuarial assets	0.05%
● Decrease due to change in normal cost rate	(0.25%)
● Decrease due to change in benefit provisions	0.00%
● Decrease due to legislative changes	0.00%
● Decrease due to change in assumptions	0.00%
● Decrease due to change in funding method	0.00%
● Increase due to other factors	0.17%
● Total	<u>(0.03%)</u>

Summary of Valuation Results (continued)

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

Valuation Date	ADC	Employer Rate
2012	9.36%	7.75%
2013	9.43%	7.75%
2014	9.31%	8.25%
2015	9.65%	8.25%
2016	9.62%	8.25%



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 8.25% of pay) and Employer Contributions (currently 8.25% of pay).

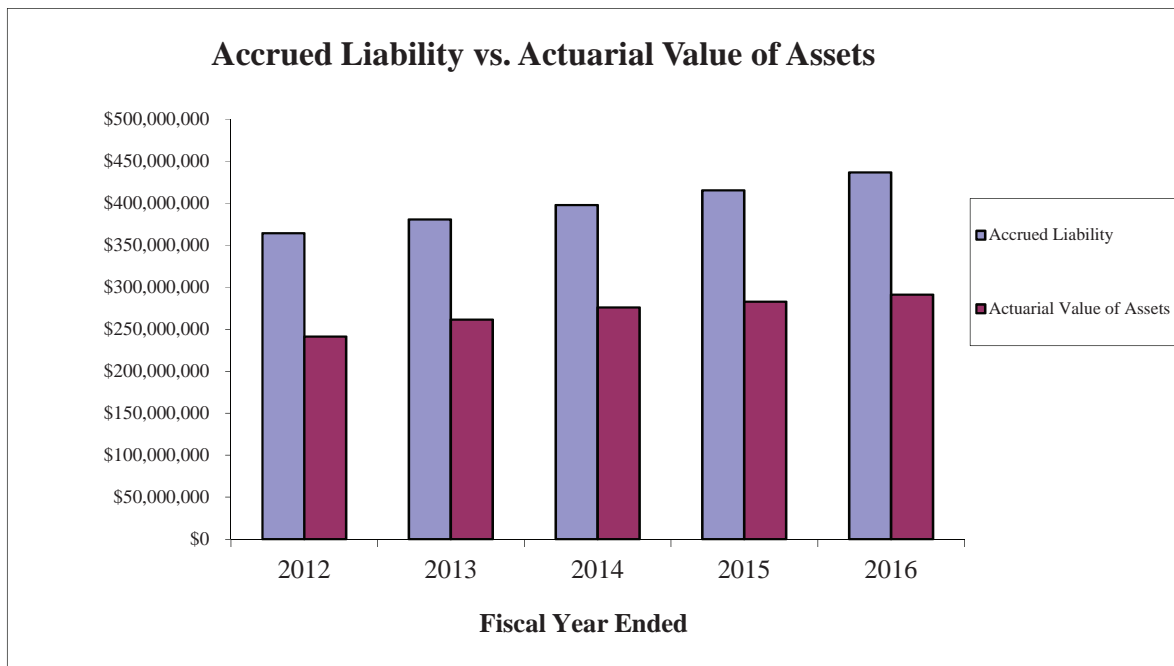
For purposes of determining contribution rates, the System's unfunded actuarial liability is measured by comparing the actuarial value of assets with the actuarial liability. The actuarial liability is determined under the entry age normal cost method. On this basis, the System's unfunded actuarial liability is \$145,599,674 as of December 31, 2016. The unfunded actuarial liability is based on an actuarial value of assets of \$291,545,586 and an actuarial liability of \$437,145,260.

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 using a blended discount rate. On this basis, the Fund's net pension liability is \$246,403,198 as of December 31, 2016. The net pension liability is based on an fiduciary net position of \$277,331,781 and a total pension liability of \$523,734,979.

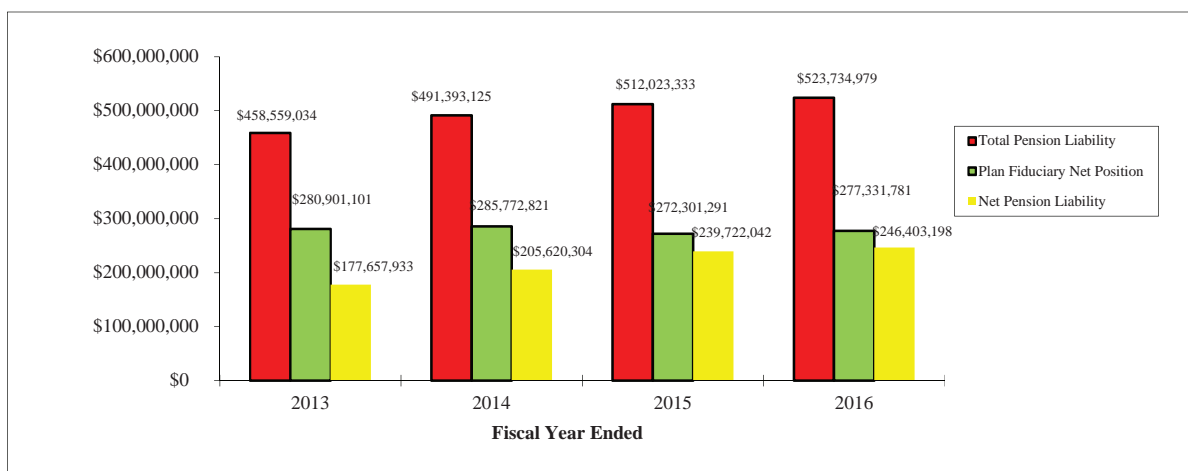
Summary of Valuation Results (continued)

Five-Year History of Accrued Liability and Actuarial Value of Assets

Fiscal Year Ending	Accrued Liability	Actuarial Value of Assets
2012	\$364,715,900	\$241,424,862
2013	\$381,039,248	\$261,605,154
2014	\$398,057,936	\$276,002,759
2015	\$415,534,531	\$282,955,179
2016	\$437,145,260	\$291,545,586



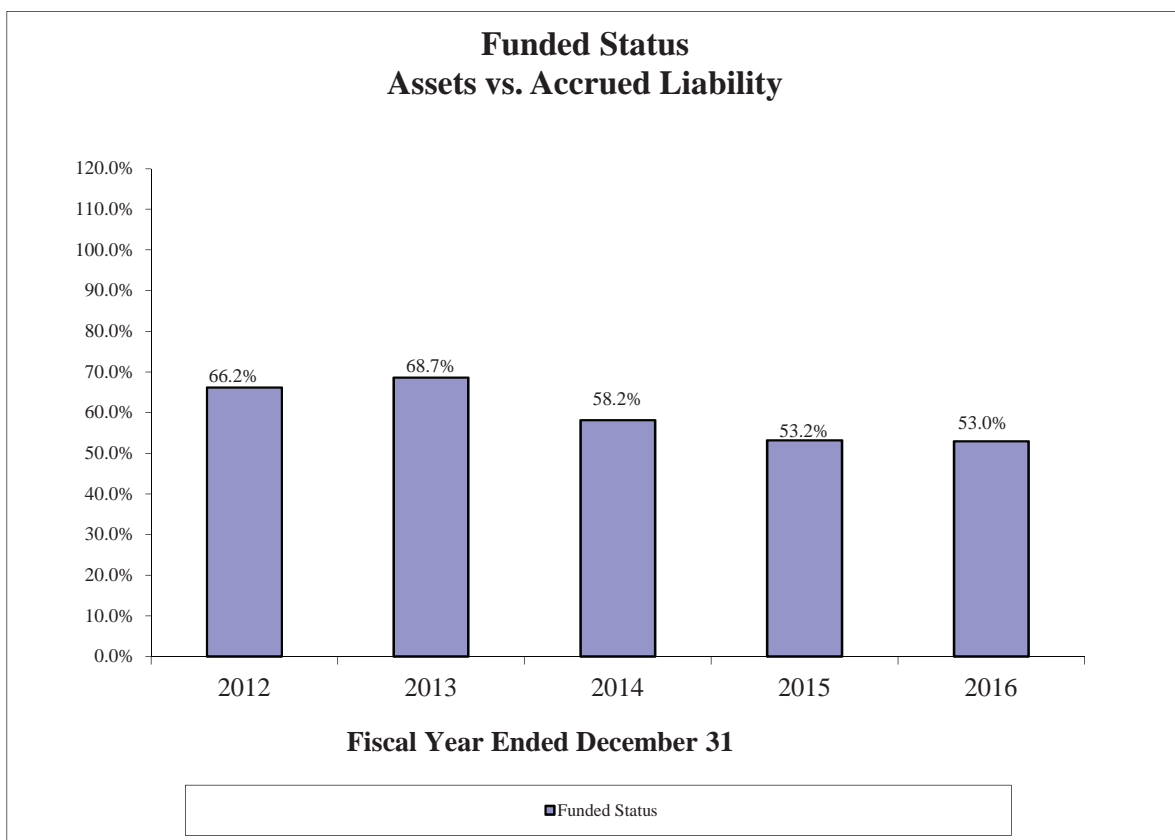
History of Net Pension Liability



Summary of Valuation Results (continued)

**Five-Year History of Funded Status*
(Assets vs. Accrued Liability)**

Fiscal Year Ending	Funded Status	
2012	66.2%	Pre-GASB 67
2013	68.7%	Pre-GASB 67
2014	58.2%	Post-GASB 67
2015	53.2%	Post-GASB 67
2016	53.0%	Post-GASB 67



* Funded Status based on entry age normal liability and actuarial value of assets prior to 12/31/2014. Funded status based on total pension liability and fiduciary net position after 12/31/2013.

Summary of Valuation Results (continued)

Rate of Return

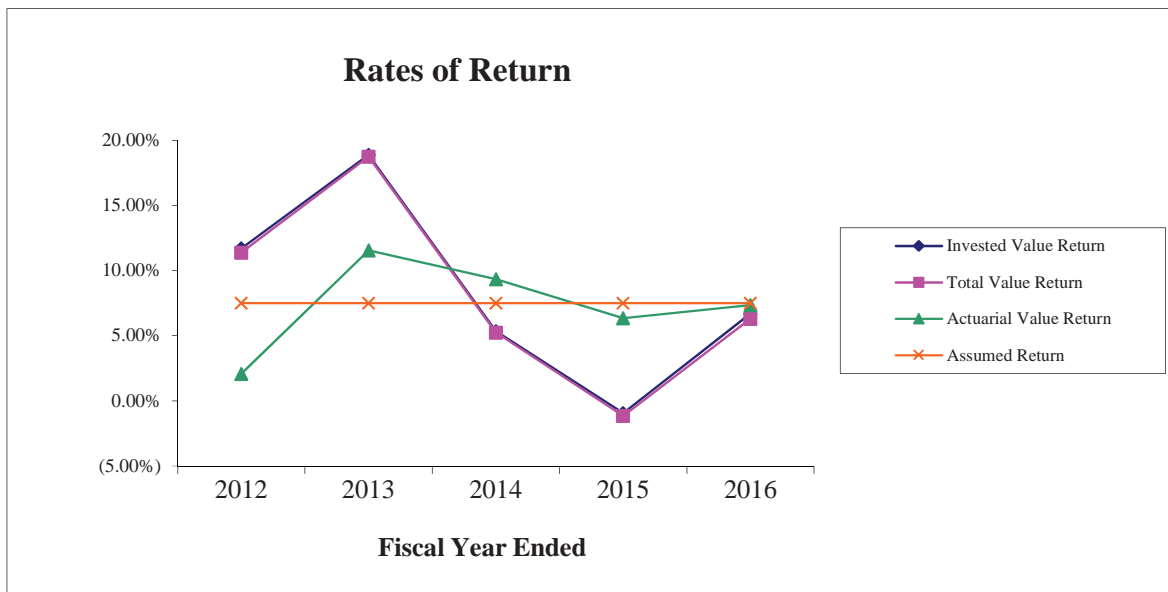
The investment return of the trust fund (i.e. total return including both realized and unrealized gains and losses) based on the market value of invested assets for the fiscal year ended December 31, 2016 was 6.70%. However, since some contributions go directly to paying benefits and are never invested in the trust, the net investment return on total assets of the System was 6.31%. The investment return on the smoothed fair value of assets was 7.35%. 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
2012	11.70%	11.39%	2.08%	7.50%
2013	18.89%	18.75%	11.56%	7.50%
2014	5.34%	5.25%	9.36%	7.50%
2015	(0.94%)	(1.15%)	6.35%	7.50%
2016	6.70%	6.31%	7.35%	7.50%



Supporting Information

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

Table 1	Demographics
Table 2	Market Value Reconciliation
Table 3	Smoothed Fair Value of Net Assets Determination
Table 4	Accrued Liability
Table 5	Actuarial (Gain)/Loss
Table 6	Amortization Schedule
Table 7	Normal Cost
Table 8	Contribution Summary
Table 9	Statement of Fiduciary Net Position
Table 10	Statement of Changes in Fiduciary Net Position
Table 11	Net Pension Liability
Table 12	Schedule of Employer Contributions
Table 13	GASB 68 Summary for 2016
Table 14	GASB 68 Summary for 2017
Table 15	Deferred Outflows/(Inflows) Amortization Schedule
Table 16	Historical Summary of Fund Additions and Deductions
Table 17	Schedule of Membership
Table 18	Schedule of Active Members Valuation Data
Table 19	Schedule of Retirees Added to and Removed from Rolls
Table 20	Schedule of Retired Members by Type of Benefit; Schedule of Benefit Payments by Type
Table 21	Schedule of Average Annual Benefit Payments
Table 22	Description of Actuarial Assumptions and Methods
Table 23	Summary of Benefit and Contribution Provisions
Appendix	Data Tables

Table 1**DEMOGRAPHICS**

	<u>2016</u>	<u>2015</u>	<u>Increase/ (Decrease)</u>
Number of Members:			
Retirees	1,187	1,155	32
Beneficiaries	146	136	10
Disabled	9	9	0
Terminated Vested	65	59	6
Portables	44	38	6
Active	1,460	1,424	36
Total Members	2,911	2,821	90
Projected Compensation for Coming Year	102,378,550	93,899,096	8,479,454
Average Compensation for Coming Year	70,122	65,940	4,182
Average Age (Active Members)	47.76	48.33	(0.57)
Average Service (Active Members)	11.54	12.04	(0.50)
Annual Retirement Allowance	26,197,453	24,687,895	1,509,558
Average Annual Retirement Allowance	19,521	18,991	530
Average Monthly Retirement Allowance	1,627	1,583	44

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

1. Total Market Value of Net Assets, 12/31/2015		272,301,291
2. Audit Adjustment		0
3. Contributions		
a. Employer	7,586,362	
b. Employee	7,586,362	
c. Total Contributions		15,172,724
4. Investment Earnings		
a. Interest & Dividends & Other Income	6,072,656	
b. Realized & Unrealized Gain/(Loss)	11,110,583	
c. Investment Expenses	(380,965)	
d. Total Investment Earnings		16,802,274
5. Benefit Payments		
a. Benefits	(25,737,515)	
b. Refund of Contributions	(729,741)	
c. Total Benefit Payments		(26,467,256)
6. Administrative Expenses		(477,252)
7. Total Market Value of Net Assets, 12/31/2016		277,331,781
8. Approximate Rate of Return on Total Assets		6.31%
9. Approximate Rate of Return on Invested Assets		6.70%

Table 3**ASSET INFORMATION****Smoothed Fair Value of Net Assets Determination**

1. Total Market Value of Net Assets, 12/31/2015					272,301,291
2. Expected Return for Plan Year					19,989,135
3. Actual Return for Plan Year					16,802,274
4. Total Market Value of Net Assets, 12/31/2016					277,331,781
5. Determination of Deferred Gain (Loss)					
		Actual vs. Expected Return	Amount Recognized This Year	Portion Deferred	Deferred Amount
2016		(3,186,861)	(637,372)	4/5	(2,549,489)
2015		(24,284,229)	(4,856,846)	3/5	(14,570,537)
2014		(6,215,226)	(1,243,045)	2/5	(2,486,090)
2013		26,961,554	5,392,311	1/5	5,392,311
2012		8,590,047	1,718,009	0/5	0
Total		1,865,285	373,057		(14,213,805)
6. Preliminary Smoothed Fair Value of Net Assets (4. - 5.)					291,545,586
7. Ratio of Preliminary Smoothed Fair Value to Market Value					105.13%
8. Smoothed Fair Value of Net Assets (6., but not less than 90% nor more than 110% of 4.)					291,545,586
9. Ratio of Smoothed Fair Value to Market Value					105.13%
10. Approximate Rate of Return on Smoothed Fair Value of Net Assets					7.35%

Table 4**ACCRUED LIABILITY**

1. Accrued Liability prior to Changes in Benefit Provisions and Assumptions		
a. Active	177,021,384	
b. Terminated Vested & Portables	7,744,903	
c. Retirees	234,994,619	
d. Beneficiaries	16,089,433	
e. Disableds	1,294,921	
f. Total Accrued Liability prior to Changes		437,145,260
2. Actuarial Value of Assets		291,545,586
3. Unfunded Accrued Liability prior to Changes (1.f. - 2.)		145,599,674
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.)		145,599,674

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

1. Increase (decrease) in Unfunded Accrued Liability	
a. Unfunded Accrued Liability, prior year	132,579,352
b. Entry Age Normal Cost (excluding expenses)	8,264,529
c. Contributions	15,172,724
d. Interest	10,004,600
e. Expected Unfunded Accrued Liability, current year (a. + b. - c. + d.)	135,675,757
f. Actual Unfunded Accrued Liability, current year before benefit, assumption, and method changes	145,599,674
g. (Gain)/Loss (f. -e.)	9,923,917
2. Reasons for (Gain)/Loss	
a. Investment Return on Smoothed Fair Value of Assets	920,811
b. Other	9,003,106
c. Total	9,923,917

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>
12/31/2016	Actuarial Loss	9,923,917	9,923,917	30	513,243
12/31/2015	Actuarial Loss	8,157,476	8,410,508	29	443,761
12/31/2014	Actuarial Gain	(524,345)	(554,592)	28	(29,886)
	Plan				
12/31/2014	Amendment	81,313	86,004	28	4,635
12/31/2013	Actuarial Gain	(7,447,517)	(8,106,123)	27	(446,670)
12/31/2012	Actuarial Loss	15,542,910	17,421,923	26	982,907
	Method				
12/31/2012	Change	15,452,413	17,320,486	26	977,184
	Assumption				
12/31/2012	Change	(22,132,963)	(24,808,660)	26	(1,399,650)
	Plan				
12/31/2012	Amendment	(265,117)	(297,168)	26	(16,766)
12/31/2011	Actuarial Loss	12,884,920	15,066,607	25	871,517
12/31/2010	Actuarial Loss	4,665,041	5,655,283	24	335,906
	Plan				
12/31/2010	Amendment	(159,269)	(193,078)	24	(11,468)
12/31/2009	Actuarial Gain	(19,699,834)	(24,608,177)	23	(1,503,349)
	Plan				
12/31/2009	Amendment	9,584	11,974	23	732
	Plan				
12/31/2008	Amendment	940,216	1,204,998	22	75,852
12/31/2008	Actuarial Loss	71,000,670	90,995,826	22	5,728,015
	Unfunded				
12/31/2007	Liability	<u>29,586,848</u>	<u>38,069,946</u>	21	<u>2,474,147</u>
Total		118,016,263	145,599,674		9,000,110

* Effective December 31, 2007, a fresh start amortization base was established equal to the excess of the actuarial liability over the smoothed fair value of assets.

Table 7

NORMAL COST

1. Normal Cost for All Benefits	8,799,882
2. Offset for Employee Contributions	(8,446,230)
3. Estimated Expenses	500,000
4. Total	853,652

Table 8**CONTRIBUTION SUMMARY**

1. Actuarially Determined Employer Contribution Amount		
a. Normal Cost	853,652	
b. Amortization Charges	9,000,110	
c. Total		9,853,762
2. Actuarially Determined Employer Contribution Rate		
a. Normal Cost	0.83%	
b. Amortization Charges	8.79%	
c. Total		9.62%
3. Projected Pay for the Upcoming Year		102,378,550

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

1. Cash		247,764
2. Short-term investments		955,792
3. Receivables		
a. Interest and Dividends	190,309	
b. Taxes	748	
c. Other	0	
d. Total Receivables		<u>191,057</u>
4. Investments, at fair value		
a. U. S. Fixed Income	42,647,067	
b. International/Global Fixed Income	826,120	
c. U. S. Equities	87,529,212	
d. Real Estate	23,739,250	
e. International Equities	56,796,776	
f. Alternatives	64,250,771	
g. Total Investments		<u>275,789,196</u>
5. Leasehold improvements, net of accumulated depreciation		0
6. Capitalized software, net of accumulated amortization		264,735
7. Total Assets		<u>277,448,544</u>

LIABILITIES

1. Accounts Payable	71,226	
2. Current portion employee salary & benefits	16,320	
3. Other current liabilities	12,200	
4. Employee leave benefits	17,017	
5. Total Liabilities		<u>116,763</u>

NET POSITION

1. Total Fiduciary Net Position		<u><u>277,331,781</u></u>
---------------------------------	--	---------------------------

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

1. Contributions		
a. Employer	7,586,362	
b. Employee	7,586,362	
c. Total Contributions		15,172,724
2. Investment Earnings:		
a. Net increase (decrease) in fair value of investments	11,110,583	
b. Interest, dividends and other investment income	6,072,656	
c. Total Investment Earnings		<u>17,183,239</u>
d. Less: investment expense		<u>380,965</u>
e. Net investment earnings (loss)		<u>16,802,274</u>
Total additions		<u>31,974,998</u>

DEDUCTIONS

1. Pension benefits	25,737,515	
2. Refund of contributions	729,741	
3. Administrative expenses	477,252	
Total deductions		<u>26,944,508</u>
Change in net assets:		5,030,490
Prior period adjustment		0
Plan Fiduciary Net Position, 12/31/2015		<u>272,301,291</u>
Plan Fiduciary Net Position, 12/31/2016		<u><u>277,331,781</u></u>

Table 11**NET PENSION LIABILITY**

	<u>2016</u>	<u>2015</u>
Total Pension Liability		
Service Cost	12,896,547	12,384,960
Interest	27,443,176	26,359,257
Changes of benefit terms	0	0
Differences between expected and actual experience	12,381,445	6,483,011
Changes of assumptions	(14,542,266)	0
Benefit Payments, including refunds of member contributions	(26,467,256)	(24,597,020)
Net change in total pension liability	11,711,646	20,630,208
Total pension liability - beginning	512,023,333	491,393,125
Total pension liability - ending (a)	523,734,979	512,023,333
Plan Fiduciary Net Position		
Contributions - employer	7,586,362	7,398,945
Contributions - member	7,586,362	7,402,905
Net investment income	16,802,274	(3,228,439)
Benefit payments, including refunds of member contributions	(26,467,256)	(24,597,020)
Administrative expense	(477,252)	(447,921)
Other	0	0
Net change in plan fiduciary net position	5,030,490	(13,471,530)
Plan fiduciary net position - beginning	272,301,291	285,772,821
Plan fiduciary net position - ending (b)	277,331,781	272,301,291
Net pension liability - ending (a) - (b) *	246,403,198	239,722,042
Plan fiduciary net position as a percentage of the total pension liability	53.0%	53.2%
Covered-employee payroll	102,378,550	93,899,096
Net pension liability as a percentage of covered-employee payroll	240.7%	255.3%
GASB 67 Blended Discount Rate Beginning of Period:	5.50%	5.50%
GASB 67 Blended Discount Rate End of Period:	5.75%	5.50%

* A 1% decrease in the discount rate increases the net pension liability to \$308,477,570, an increase of \$62,074,372.

A 1% increase in the discount rate decreases the net pension liability to \$193,927,544, a decrease of \$52,475,654.

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%

Table 13

GASB 68 Summary for 2016									
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)	491,393,125	285,772,821	205,620,304	155,104,569	265,558,390	21,861,162	-	-	
Changes for the year									
Service Cost	12,384,960		12,384,960					12,384,960	
Interest Cost	26,359,257		26,359,257					26,359,257	
Benefit Changes									
Experience loss (gain)	6,483,011		6,483,011			5,402,509		1,080,502	6.00
Changes in assumptions	-		-			-		-	6.00
Contributions - Employer		7,398,945	(7,398,945)						
Contributions - Employee		7,402,905	(7,402,905)					(7,402,905)	
Net Investment Income		(3,228,439)	3,228,439						
Expected Return on Investments									
Investment (gain) loss expensed						19,421,828		4,855,457	5.00
Investment (gain) loss deferred									
Benefits paid including refunds	(24,597,020)	(24,597,020)	-					-	
Administrative Expense		(447,921)	447,921					447,921	
Other Changes		-	-					-	
Amortization						(4,620,580)		4,620,580	
Net Changes	20,630,208	(13,471,530)	34,101,738			20,203,757		-	
Balance, End of Year (2)	512,023,333	272,301,291	239,722,042	187,522,372	301,595,957	42,064,919		21,296,926	
(1) Measurement Date December 31, 2014									
(2) Measurement Date December 31, 2015									

Table 14
GASB 68 Summary for 2017
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)	512,023,333	272,301,291	239,722,042	187,522,372	301,595,957	42,064,919	-		
Changes for the year									
Service Cost	12,896,547		12,896,547					12,896,547	
Interest Cost	27,443,176		27,443,176					27,443,176	
Benefit Changes			-					-	
Experience loss (gain)	12,381,445		12,381,445			10,317,871		2,063,574	6.00
Changes in assumptions	(14,542,266)		(14,542,266)			-	12,118,555	(2,423,711)	6.00
Contributions - Employer		7,586,362	(7,586,362)						
Contributions - Employee		7,586,362	(7,586,362)					(7,586,362)	
Net Investment Income		16,802,274	(16,802,274)						
Expected Return on Investments									
Investment (gain) loss expensed						2,543,105		635,776	5.00
Investment (gain) loss deferred									
Benefits paid including refunds	(26,467,256)	(26,467,256)	-					-	
Administrative Expense		(477,252)	477,252					477,252	
Other Changes									
Amortization						(10,556,539)		-	
Net Changes	11,711,646	5,030,490	6,681,156			2,304,437	12,118,555	10,556,539	
Balance, End of Year (2)	523,734,979	277,331,781	246,403,198	193,927,544	308,477,570	44,369,356	12,118,555	24,081,636	
(1) Measurement Date December 31, 2015									
(2) Measurement Date December 31, 2016									

Table 15**Deferred Outflows/(Inflows) Amortization Schedule as of December 31, 2017
(Measurement Date: December 31, 2016)**

Date Established	Source	Initial Amount	Deferred Amount	Remaining Years	Amortization Payment
12/31/2017	Experience Loss	12,381,445	10,317,871	5.00	2,063,574
12/31/2017	Assumption Change	(14,542,266)	(12,118,555)	5.00	(2,423,711)
12/31/2017	Investment Loss	3,178,881	2,543,105	4.00	635,776
12/31/2016	Experience Loss	6,483,011	4,322,007	4.00	1,080,502
12/31/2016	Investment Loss	24,277,285	14,566,371	3.00	4,855,457
12/31/2015	Experience Loss	18,507,784	10,136,522	3.00	3,378,840
12/31/2015	Investment Loss	6,208,700	2,483,480	2.00	1,241,740
Total			32,250,801		10,832,178

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>
12/31/07	6.72%	4,518,363	4,518,363	16,715,588	25,752,314
12/31/08	6.72%	4,875,443	4,882,622	(59,972,361)	(50,214,296)
12/31/09	7.75%	6,474,432	6,637,872	38,442,846	51,555,150
12/31/10	7.75%	6,580,795	6,618,558	27,752,165	40,951,518
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	8.25%	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

DEDUCTIONS BY TYPE

<u>Fiscal Year Ended</u>	<u>Benefit Payments</u>	<u>Refunds</u>	<u>Admin Expenses</u>	<u>Total</u>
12/31/07	14,253,955	717,005	448,654	15,419,614
12/31/08	15,002,061	370,947	581,294	15,954,302
12/31/09	15,509,868	315,919	563,408	16,389,195
12/31/10	16,547,561	493,911	505,222	17,546,694
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

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>
12/31/07	1,425	99	995	13	1,008	2,532
12/31/08	1,492	94	1,008	11	1,019	2,605
12/31/09	1,501	89	1,041	10	1,051	2,641
12/31/10	1,516	90	1,050	10	1,060	2,666
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

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>
12/31/2007	1,425	69,261,673	48,605	1.44%
12/31/2008	1,492	74,183,014	49,721	2.30%
12/31/2009	1,501	83,455,429	55,600	11.82%
12/31/2010	1,516	88,093,679	58,109	4.51%
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%

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

Fiscal Year Ended	Added	Annual Allowances		Total	Annual Allowances	Percent Change	Average Annual Allowances	Retirees as Percent of Active Members		
		Added	Removed					Removed	Number	Pay
12/31/2007	75	1,389,758	35	353,060	1,008	14,682,156	7.6%	14,566	70.7%	21.2%
12/31/2008	50	830,767	39	357,857	1,019	15,155,066	3.2%	14,872	68.3%	20.4%
12/31/2009	70	1,586,201	38	414,388	1,051	16,326,879	7.7%	15,535	70.0%	19.6%
12/31/2010	52	1,103,228	43	554,985	1,060	16,875,122	3.4%	15,920	69.9%	19.2%
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%

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	2	2	0	0	2	0	0	0	0	0	0
101 - 200	12	5	0	7	1	0	0	0	0	3	8
201 - 300	24	22	0	2	16	2	0	0	0	1	5
301 - 400	56	43	0	13	28	1	0	0	1	6	20
401 - 500	67	52	0	15	32	0	0	1	1	7	26
501 - 600	64	56	0	8	36	0	1	1	0	4	22
601 - 700	62	52	1	9	30	1	0	0	0	9	22
701 - 800	57	47	1	9	28	0	0	0	1	11	17
801 - 900	54	47	1	6	32	0	1	0	0	6	15
901 - 1,000	63	57	0	6	25	3	1	0	0	9	25
1,001 - 1,500	247	214	4	29	124	1	0	1	0	31	90
1,501 - 2,000	215	191	2	22	96	0	0	0	1	32	86
Over 2,000	<u>419</u>	<u>399</u>	<u>0</u>	<u>20</u>	<u>188</u>	<u>9</u>	<u>0</u>	<u>2</u>	<u>1</u>	<u>74</u>	<u>145</u>
Total	1,342	1,187	9	146	638	17	3	5	5	193	481

*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
12/31/2007	13,115,104	143,990	994,861	717,005	14,970,960
12/31/2008	13,835,194	136,093	1,030,774	370,947	15,373,008
12/31/2009	14,341,682	130,868	1,037,317	315,919	15,825,786
12/31/2010	15,302,791	120,261	1,124,509	493,911	17,041,472
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

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>
12/31/2007	14,181	11,076	14,141	2.75%
12/31/2008	14,748	12,372	14,722	4.11%
12/31/2009	14,773	13,087	14,757	0.24%
12/31/2010	15,645	12,026	15,611	5.79%
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%

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, 2012.

Actuarial Assumptions

Mortality: Healthy Lives 1994 Group Annuity Mortality Static Table
 Disabled Lives 1994 Group Annuity Mortality Static Table

Interest: 7.5% per annum, compounded annually

GASB 67 Blended Beginning of Period: 5.50%
Discount Rate: End of Period: 5.75%

Amortization of Unfunded

Liability: Closed 30 year amortization as a level percent of payroll.

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

<u>Years of Service</u>	<u>Turnover Probability</u>
<1	10.0%
1	8.0%
2-3	5.0%
4-5	4.0%
6-9	3.0%
10+	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%
50-57	4.5%
58-61	7.0%
62	25.0%
63-64	15.0%
65	25.0%
66-68	20.0%
69-74	15.0%
75+	100.0%

Disability: None assumed

Salary Increases: 0% for members with more than 5 years of service in years 2013, 2014 and 2015.
Otherwise in accordance with the following table based on service:

<u>Years of Service</u>	<u>Annual Increase</u>
<3	10.0%
3-4	8.0%
5-15	3.5%
16+	3.0%

Inflation Rate: 3.00% 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 2016 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 35 years. 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.

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 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 Contributions

8.25% of Compensation is required to be paid by the members. Prior to September 1, 2014, 7.75% of Compensation was required to be paid by the members. These contributions are credited with 2.5% interest annually, compounded quarterly.

Table 23**SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS**

Service Retirement Eligibility:	<p>A member is eligible for normal retirement on his Normal Retirement Date. For members hired after January 1, 2015, 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.</p>
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 under Alternate Benefit Formula</u> Applies to all employees hired after January 1, 2009. 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.</p>
Disability Retirement Eligibility:	<p>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.</p>
Disability Retirement Allowance:	<p>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.</p>

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 - Data Tables

Exhibit A	Summary of Membership Data as of December 31, 2016
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, 2016

Active Members

Item	Male	Female	Total
Number of Members	986	474	1,460
Annual Salaries	\$67,734,584	\$29,581,217	\$97,315,801
Average Age	47.8	47.7	47.8
Average Service	11.9	10.8	11.5

EXHIBIT A
(continued)

Summary of Membership Data as of December 31, 2016

Retirees and Beneficiaries

Item	Number	Annual Annuities	Average Annuities
Retired Members	1,187	\$24,123,828	\$20,323
Survivor Annuitants	146	\$1,948,297	\$13,345
Disabled Annuitants	9	\$125,328	\$13,925
Total Annuitants	1,342	\$26,197,453	\$19,521

EXHIBIT A
(continued)

Summary of Membership Data as of December 31, 2016

Vested Terminations and Portables

Item	Number	Annual Annuities	Average Annuities
Vested Terminations	65	\$677,548	\$10,424
Portables*	44	\$217,965	\$4,954

* 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
2017	\$28,788,881	\$26,014,177
2018	30,041,401	25,601,364
2019	31,350,724	25,161,572
2020	32,670,637	24,694,471
2021	34,051,736	24,197,249
2022	35,359,051	23,676,241
2023	36,613,827	23,128,361
2024	37,781,806	22,553,283
2025	38,934,663	21,950,557
2026	40,029,122	21,319,773
2027	41,067,073	20,660,744
2028	42,086,745	19,973,655
2029	43,015,062	19,259,068
2030	43,872,362	18,517,225
2031	44,621,720	17,748,359
2032	45,418,059	16,958,212
2033	45,985,035	16,147,127
2034	46,527,235	15,317,995
2035	46,966,346	14,474,039
2036	47,258,479	13,604,447

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	11	4	0	0	0	0	0	0	0	0	0	15
25 to 29	25	34	6	0	0	0	0	0	0	0	0	65
30 to 34	36	64	36	8	0	0	0	0	0	0	0	144
35 to 39	23	49	51	37	8	0	0	0	0	0	0	168
40 to 44	17	40	50	32	22	1	0	0	0	0	0	162
45 to 49	17	40	45	36	53	21	4	0	0	0	0	216
50 to 54	11	35	36	42	44	36	28	1	0	0	0	233
55 to 59	10	25	30	34	29	33	35	8	6	0	0	210
60 to 64	3	16	31	21	32	31	20	9	9	1	1	173
65 to 69	1	2	8	8	16	6	5	2	5	3	3	56
70 & Up	0	0	1	6	5	1	1	1	1	2	2	18
Total	154	309	294	224	209	129	93	21	21	6	6	1,460
Freq. Pct.	10.6%	21.2%	20.2%	15.3%	14.3%	8.8%	6.4%	1.4%	1.4%	0.4%	0.4%	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	420,345	229,344	0	0	0	0	0	0	0	0	0	649,688
25 to 29	989,987	1,837,434	376,413	0	0	0	0	0	0	0	0	3,203,833
30 to 34	1,696,769	3,992,084	2,379,082	462,746	0	0	0	0	0	0	0	8,530,681
35 to 39	1,126,258	3,430,726	3,569,626	2,474,363	545,508	0	0	0	0	0	0	11,146,480
40 to 44	905,633	2,799,021	3,276,062	2,210,621	1,672,388	39,053	0	0	0	0	0	10,902,778
45 to 49	911,632	2,806,897	3,018,674	2,702,964	4,142,723	1,457,888	229,583	0	0	0	0	15,270,362
50 to 54	639,596	2,534,001	2,427,461	2,774,947	3,221,197	2,553,461	2,061,656	74,753	0	0	0	16,287,071
55 to 59	573,770	1,883,640	2,015,604	2,391,948	2,218,573	2,314,142	2,599,189	604,594	383,211	0	0	14,984,670
60 to 64	200,305	875,515	2,004,423	1,470,395	2,075,995	2,059,931	1,354,717	625,330	603,882	97,943	0	11,368,436
65 to 69	91,433	158,726	471,396	516,472	1,067,373	368,468	331,236	126,044	373,373	248,110	0	3,752,632
70 & Up	0	0	128,868	325,693	358,992	73,820	48,891	74,350	84,747	123,808	0	1,219,169
Total	7,555,727	20,547,387	19,667,609	15,330,150	15,302,749	8,866,762	6,625,272	1,505,072	1,445,213	469,861	97,315,801	
Freq. Pct.	7.8%	21.1%	20.2%	15.8%	15.7%	9.1%	6.8%	1.5%	1.5%	0.5%	100.0%	
Avg. Sal.	49,063	66,496	66,897	68,438	73,219	68,735	71,239	71,670	68,820	78,310	66,655	

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	31	20,082	24	24,968	55	22,214
55 to 59	53	21,842	49	23,343	102	22,563
60 to 64	137	25,895	95	19,262	232	23,179
65 to 69	200	25,209	124	18,592	324	22,677
70 to 74	127	21,069	81	14,007	208	18,319
75 to 79	77	20,288	59	13,256	136	17,237
80 to 84	39	14,727	24	12,083	63	13,720
85 to 89	24	14,501	16	12,837	40	13,836
90 to 94	12	14,781	10	8,529	22	11,939
95 & Up	4	8,346	1	7,614	5	8,200
Total	704	22,359	483	17,356	1187	20,323
Average Age	69.2		68.9		69.1	
Freq. Pct.	59.3%		40.7%		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	2	16,325	2	16,325
55 to 59	0	0	9	15,106	9	15,106
60 to 64	3	18,884	22	16,480	25	16,768
65 to 69	0	0	16	17,154	16	17,154
70 to 74	0	0	12	14,977	12	14,977
75 to 79	0	0	26	13,092	26	13,092
80 to 84	2	8,243	29	11,372	31	11,170
85 to 89	1	2,339	15	10,278	16	9,782
90 to 94	0	0	7	6,825	7	6,825
95 & Up	0	0	2	7,675	2	7,675
Total	6	12,580	140	13,377	146	13,345
Average Age	72.7		75.2		75.1	
Freq. Pct.	4.1%		95.9%		100.0%	

EXHIBIT G

**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	1	18,583	1	19,080	2	18,831
55 to 59	1	8,918	0	0	1	8,918
60 to 64	2	16,981	0	0	2	16,981
65 to 69	0	0	2	9,296	2	9,296
70 to 74	1	13,295	1	12,898	2	13,096
75 to 79	0	0	0	0	0	0
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	4	12,643	9	13,925
Average Age	60.6		63.4		61.8	
Freq. Pct.	55.6%		44.4%		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	3	8,999	3	8,713	6	8,856
35 to 39	3	7,997	6	9,105	9	8,736
40 to 44	9	12,041	9	10,920	18	11,480
45 to 49	7	7,149	10	12,813	17	10,480
50 to 54	4	13,237	4	10,979	8	12,108
55 to 59	3	7,017	1	20,645	4	10,424
60 to 64	0	0	2	8,939	2	8,939
65 & Up	1	4,547	0	0	1	4,547
Total	30	9,598	35	11,132	65	10,424
Average Age	45.7		45.0		45.3	
Freq. Pct.	46.2%		53.8%		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	1	760	1	760
30 to 34	2	3,869	2	4,974	4	4,422
35 to 39	2	1,530	3	3,975	5	2,997
40 to 44	3	6,106	1	1,754	4	5,018
45 to 49	5	3,662	5	9,284	10	6,473
50 to 54	6	4,285	2	8,019	8	5,218
55 to 59	0	0	4	8,388	4	8,388
60 to 64	3	3,506	2	2,761	5	3,208
65 & Up	3	2,797	0	0	3	2,797
Total	24	3,835	20	6,296	44	4,954
Average Age	50.7		47.2		49.1	
Freq. Pct.	54.5%		45.5%		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.

This page intentionally left blank

Statistical Section

This page intentionally left blank

Schedule of Revenues by Source

Fiscal Year	Employer Contribution	Employer Contributions	Member Contributions	Net Investment Income	Total Revenues
2007	6.72%	4,518,363	4,518,363	16,715,588	25,752,314
2008	6.72%	4,875,443	4,882,622	(59,972,361)	(50,214,296)
2009	7.75%	6,474,432	6,637,872	38,442,846	51,555,150
2010	7.75%	6,580,795	6,618,558	27,752,165	40,951,518
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*	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

* Effective September 1, 2014 the annual Contribution Rate changed to 8.25%. 7.92% is a blended rate of 7.75% of pay prior to September 1, 2014 and 8.25% after September 1, 2014.

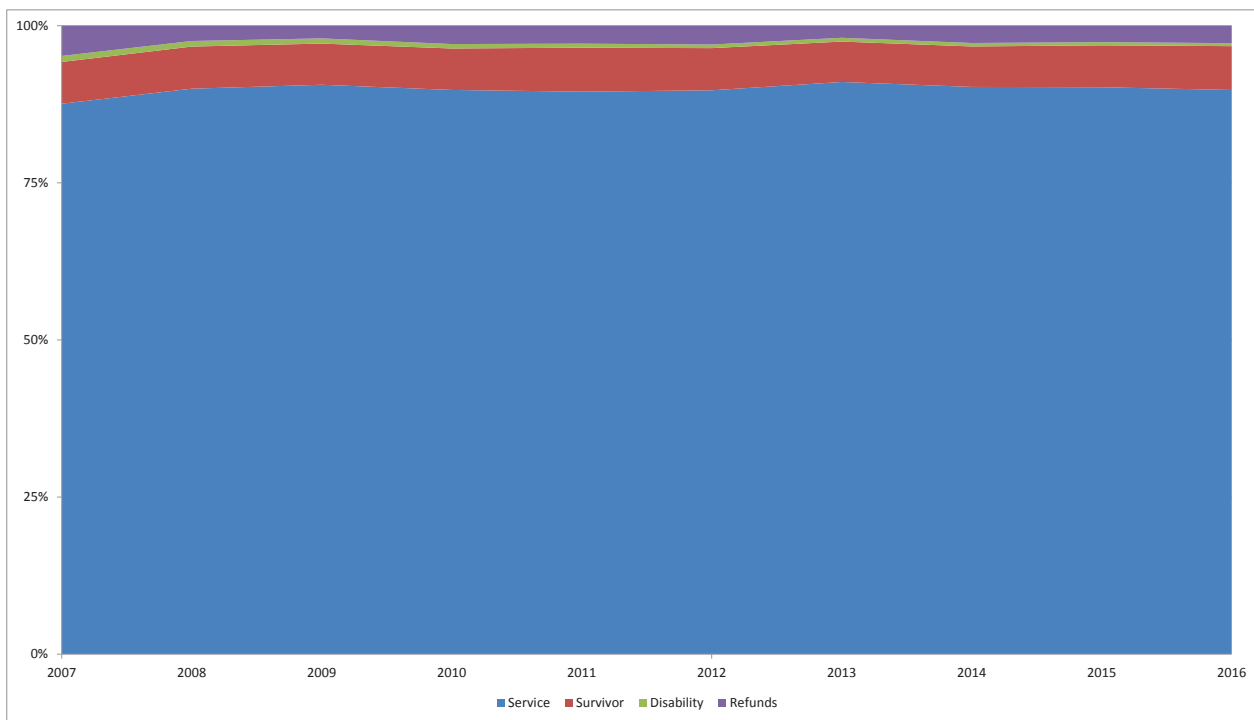
Schedule of Expenses by Type

Fiscal Year	Benefits	Refunds	Net Administrative	Total Expenses
2007	14,253,955	717,005	448,654	15,419,614
2008	15,002,061	370,947	581,294	15,954,302
2009	15,509,868	315,919	563,408	16,389,195
2010	16,547,561	493,911	505,222	17,546,694
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

Schedule of Benefit Expenses by Type

Year	Service Retiree Benefits	Survivor Benefits	Disability Retiree Benefits	Refunds	Total
2007	13,115,104	994,861	143,990	717,005	14,970,960
2008	13,835,194	1,030,774	136,093	370,947	15,373,008
2009	14,341,682	1,037,317	130,869	315,919	15,825,787
2010	15,302,791	1,124,509	120,261	493,911	17,041,472
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

Schedule of Benefit Expenses by Type



Retirements During 2016

	Name	Department	Position	Date Retired	Option	Yrs Serv	Age
1	Dale E. Arnold	Advanced Wastewater Treatment Plant	Director	1/1/2016	E	39.9	62
2	Dennis C. Fredrickson	Library	Public Services Manager	1/3/2016	D	30.0	63
3	Steffon P. Sobosky *	Solid Waste Management	Laborer I	1/5/2016	E	8.1	52
4	George M. Hoagland	Library	Circulation Services Manager	1/5/2016	E	42.0	66
5	Pamela J. Brenden *	Public Works & Utilities	Utilities Collector	1/6/2016	ST	24.0	55
6	Ole J. Lokken	Water	Certified Water Service Specialist	1/8/2016	E	27.5	65
7	Stephen D. Weathermon	Water	Laborer II	1/9/2016	A	35.2	65
8	Della P. Gaylord *	Refuse Collector I	Solid Waste Management	1/11/2016	E	24.2	61
9	Richard L. Deibel	Solid Waste Disposal	Laboratory Technician	1/15/2016	ST	22.8	66
10	Jerry A. Coulter	Public Works & Utilities	Utilities Collector	1/15/2016	ST	31.0	61
11	Catherine A. Caron	Police	Police Records Specialist	1/21/2016	ST	9.2	65
12	Donna R. McBride	Probation Services	Chief Probation Officer	2/2/2016	C-15	19.9	50
13	Thomas F. Leonard	Water	Water Service Foreperson	2/3/2016	E	37.6	70
14	Robert J. Morgan	Golf	Assistant Golf Course Superintendent	2/13/2016	E	22.3	62
15	Geoffrey D. Glenn	Solid Waste Disposal	WTE Disposal Operations Supervisor	2/13/2016	ST	23.7	52
16	Roy Cheney	Golf	Golf Course Superintendent	2/13/2016	D	25.3	62
17	Linda L. Hattenburg	Engineering Services	Clerk III	2/13/2016	ST	32.4	67
18	Steven R. Aschenbrenner	Fleet Services	Equipment Maintenance Foreperson	2/13/2016	D	38.1	59
19	Robert E. Wilson *	Library	Library Caretaker I	3/7/2016	ST	5.8	64
20	Janice M. Doherty	EMS	Public Fire Education Officer	3/19/2016	ST	25.3	66
21	Lloyd R. Brewer	Environmental Programs	Environmental Programs Manager	4/1/2016	ST	34.1	66
22	Linda M. Mill	Municipal Court	Clerk II	4/8/2016	ST	25.0	67
23	Stacy L. Hawley	Accounting	Accounting Clerk	4/9/2016	ST	23.7	50
24	Glenda M. Toptine	Police	Police Records Specialist	4/9/2016	C-5	37.2	65
25	Jacqueline J. Quaschnick	Combined Communications Center	Fire Communications Specialist	4/15/2016	ST	13.4	61
26	Scott N. Craig *	Street	Asphalt Raker	4/18/2016	ST	13.6	51
27	Debra D. Park #	Library	Librarian	5/1/2016	E	3.1	64
28	Ricardo L. Romero	Public Works & Utilities	Director	5/1/2016	ST	8.0	60
29	Darlene Ahrendt	Police	Clerk III	5/3/2016	ST	26.5	71
30	Kathy S. Parsons	Parks & Recreation	Parks Facilities and Grounds Foreperson	5/3/2016	ST	35.0	57
31	Gene A. Sanford	Fleet Services	Equipment Servicer	5/7/2016	ST	7.1	67
32	Ina L. Liedkie	Public Works & Utilities	Clerk II	5/7/2016	ST	27.3	78
33	Karolyn K. Moat	Accounting	Accounting Clerk	5/14/2016	E	27.8	50
34	Kevin L. Burrill	Street	Street Maintenance Operator I	5/20/2016	ST	22.2	51
35	Donald M. Hokenson	Fleet Services	Heavy Equipment Mechanic	5/28/2016	C-20	26.8	62
36	Linda L. Daniels	Water	Meter Reader	6/2/2016	D	26.0	58
37	David C. Stillman	Fleet Services	Equipment Maintenance Foreperson	6/4/2016	E	22.2	64
38	Roger M. Kaiser	Solid Waste Disposal	Hazardous Waste Technician	6/11/2016	E	11.7	57
39	Richard M. Coe	Solid Waste Management	Refuse Collector I	6/16/2016	C-5	41.6	62
40	Ronald W. Meredith	Street	Labor Foreperson	6/18/2016	ST	15.7	53
41	Alyce E. Millhorn	Parks & Recreation	Accounting Clerk	7/2/2016	ST	17.9	69
42	John W. Aiken, Jr.	Public Works	Public Works Lead Inspector	7/2/2016	ST	27.1	64
43	Anthony R. Madunich	Parks & Recreation	Parks & Recreation Division Manager	7/2/2016	E	39.3	64
44	Brenda J. Nelson	Solid Waste Disposal	Landfill/Transfer Station Foreperson	7/7/2016	ST	24.9	58
45	Margaret A. Phillips	Accounting	Accounting Clerk	7/7/2016	ST	30.0	62
46	Douglas K. Harvey	IT	Computer Operations Specialist	7/9/2016	ST	19.3	65
47	Janet L. Roys	Police	Clerk II	7/9/2016	D	25.0	60
48	Alan M. Kiefer	Library	Mobile Library Technician Assistant II	7/9/2016	ST	28.2	62
49	Chong C. Nelson ^	Solid Waste Management	Refuse Collector III	7/11/2016	E	23.1	61
50	Frank L. Gaylord Jr.	My Spokane	Customer Service Supervisor	8/2/2016	E	18.6	63
51	Laurie B. Burchell	Library	Library Assistant	8/2/2016	ST	21.8	54
52	Roger K. Burchell	Water	Water Superintendent	8/2/2016	ST	32.6	55
53	Teresa Hopkins	Probation Services	Clerk II	8/3/2016	ST	8.8	63
54	Alfred G. Heath	Sewer Maintenance	Waste Water Specialist	8/12/2016	ST	18.2	62
55	Douglas B. Edwards	Street	Laborer II	8/20/2016	D	24.9	50

Retirements During 2016 (continued)

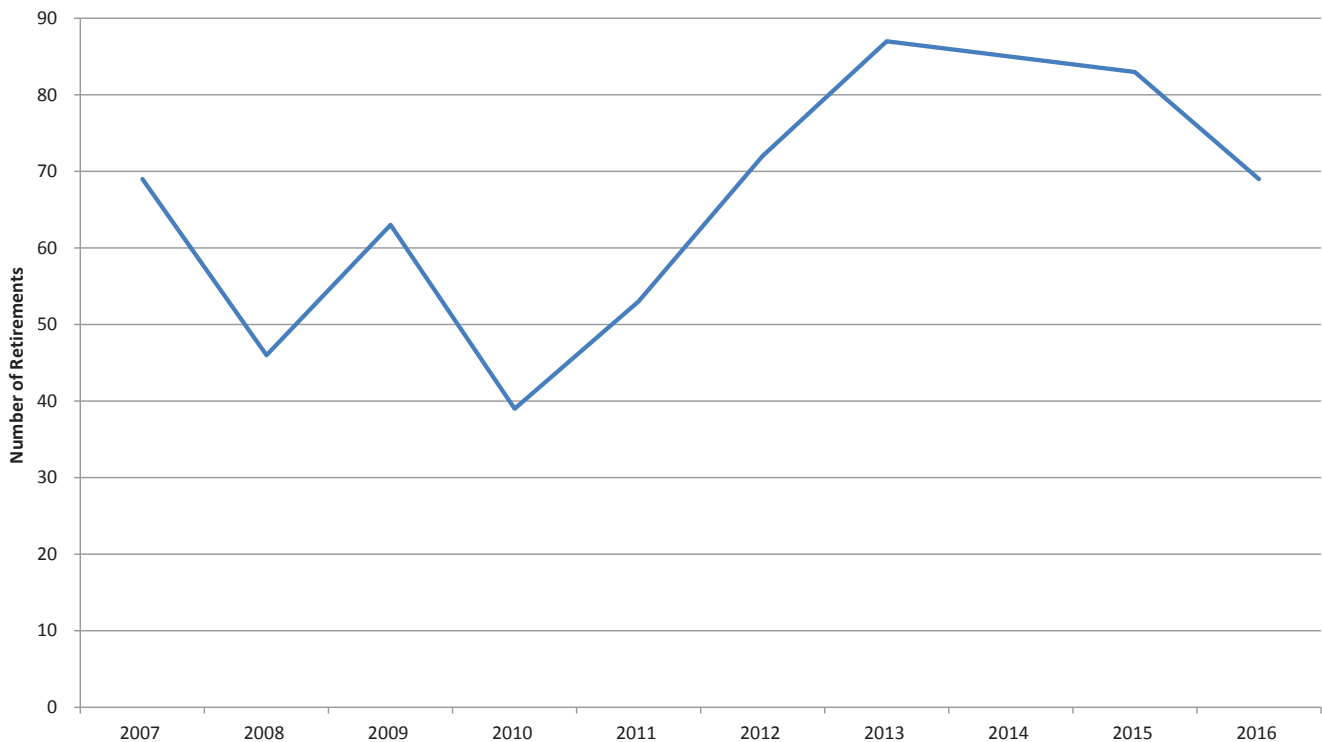
	Name	Department	Position	Date Retired	Option	Yrs Serv	Age
56	Daniel J. Daling	HR	HR Analyst II	9/6/2016	ST	8.3	62
57	Raymond G. Gaines	Water	Meter Reader	9/7/2016	E	18.2	60
58	Lars N. Morgan	Advanced Wastewater Treatment Plant	Waste Water Treatment Plant Operator II	9/15/2016	ST	18.4	52
59	Ricky D. Hayes	Police	Police Evidence Technician II	10/1/2016	ST	12.9	63
60	Roxanne L. Imus	Legal	Attorney Assistant	10/4/2016	ST	27.1	63
61	Eric P. Schaffer	Water	Water Hydroelectric Operations Foreperson	10/4/2016	D	20.6	53
62	Robert J. Zalewski	Water	Meter Reader Foreperson	10/4/2016	E	29.2	63
63	Susan L. Zalewski	IT	Desktop Computer Specialist	10/4/2016	E	17.1	62
64	Jeffrey S. Burke *	Street	Street Maintenance Operator I	10/17/2016	ST	8.9	50
65	DeAnn R. Gordon	Police	Police Radio Dispatcher III	11/2/2016	D	24.6	58
66	Harry A. McLean, Jr.	Water	Senior Engineer	11/4/2016	A	27.6	72
67	Damon MK Taam #	Solid Waste Disposal	RSWS Contract Manager	12/1/2016	E	3.1	59
68	Mark Teaford	Street	Laborer II	12/6/2016	E	8.7	59
69	Amy B. Brown *	Arena Management	Arena Marketing Manager/Asst GM	12/15/2016	E	9.5	50

* Retired as vested employee

Retired under membership through Portability

^ Retired as spouse of deceased active employee

Retirements by Year



Retiree Deaths During 2016

	Name	Date Retired	Date of Death	Age	Retirement Option
1	Allenton, Joyce C.	11/13/2003	9/22/2016	85	E
2	Amsberry, Jessie R.	10/15/1976	4/1/2016	99	E
3	Boesel, John L.	4/3/1993	12/29/2016	91	E
4	Bressler, Taylor K.	12/15/2012	12/4/2016	66	ST
5	Burford, Stanley, R	12/31/2004	1/24/2016	69	D
6	Cox, Earl W.	4/10/1993	10/17/2016	79	ST
7	Daniel, James C.	7/1/1985	12/23/2016	96	E
8	Dehn, David R.	2/2/1994	6/29/2016	78	E
9	Eckhart, Cheryl A.	5/3/2009	5/15/2016	57	ST
10	Esperas, Kenneth A.	7/2/2011	7/12/2016	64	E
11	Giesey, Lucille F.	7/6/1996	4/8/2016	74	ST
12	Hanna, Gilbert D.	3/30/1985	5/2/2016	90	ST
13	Haves, Donald C.	3/6/1983	5/6/2016	93	A
14	Holland, Donald	11/2/1999	3/9/2016	90	E
15	Holland, Nadine	11/2/1999	2/13/2016	91	E
16	Honda, Kazuko J.	5/4/1985	6/3/2016	101	A
17	Horsman, Gary	10/30/1998	10/15/2016	75	E
18	Johnson, Margret E.	1/20/2014	11/20/2016	80	E
19	King, Joaquin R.	9/13/2005	6/7/2016	71	ST
20	King, Raymond D.	12/5/1992	10/6/2016	85	ST
21	Kramer, Clyde H.	4/9/2005	9/15/2016	72	E
22	Latham, Vivian I.	1/13/1996	11/13/2016	78	A
23	Lengyel, Joseph L.	1/15/2002	5/12/2016	75	E
24	Lengyel, Marilyn	5/13/2016	10/31/2016	74	E
25	McNerney, Auldon L.	12/15/1993	11/12/2016	79	E
26	Murphy, Joseph	11/3/1987	2/3/2016	90	ST
27	Nierstheimer, Marlin D.	3/7/2009	7/22/2016	61	D
28	Oka, Nobuko	2/1/1986	12/31/2016	97	A
29	O'Neill, Mary J.	3/29/1988	8/3/2016	93	ST
30	Piggott, Mary L.	4/2/2013	7/11/2016	72	E
31	Quorn-Peters, Eileen	3/31/1983	10/12/2016	94	A
32	Reed, Irving B.	6/29/1996	1/28/2016	86	E
33	Rickard, Shirley J.	2/5/1994	10/10/2016	84	A
34	Roan, Harold W.	9/7/1996	10/5/2016	88	ST
35	Sciuchetti, Dale F.	7/2/2002	12/7/2016	76	E
36	Shagina, Steven F.	2/22/2014	11/16/2016	54	ST
37	Simpson II, Wilfred	7/10/2010	1/18/2016	70	D
38	Stich, Charles J.	4/4/2000	5/6/2016	67	E
39	Sturdevant, Randee L.	4/23/2005	4/5/2016	61	ST
40	Wagner, David A.	2/24/2001	6/8/2016	65	ST
41	West, James D.	5/5/1984	12/16/2016	95	ST
42	Yokum, Billy J.	3/2/1999	12/14/2016	78	ST

Active Member Deaths During 2016

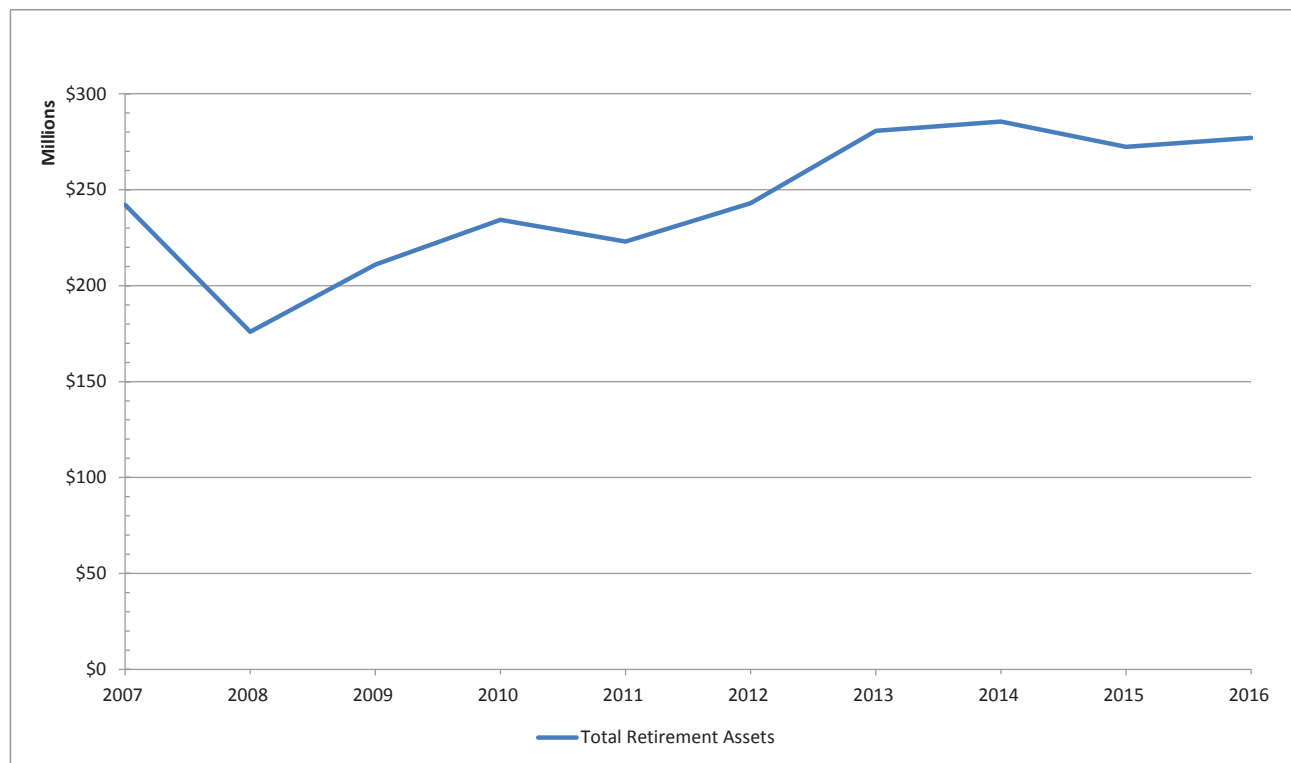
	Name	Department	Date of Death	Age	Years of Service
1	Nelson, John R.	Solid Waste Management	7/10/2016	60	23.1
2	Taylor, Karen A.	Municipal Court	9/30/2016	51	12.3
3	Wright, Bruce A.	Parks & Recreation	5/11/2016	58	10.0

This page intentionally left blank

Investment Section

This page intentionally left blank

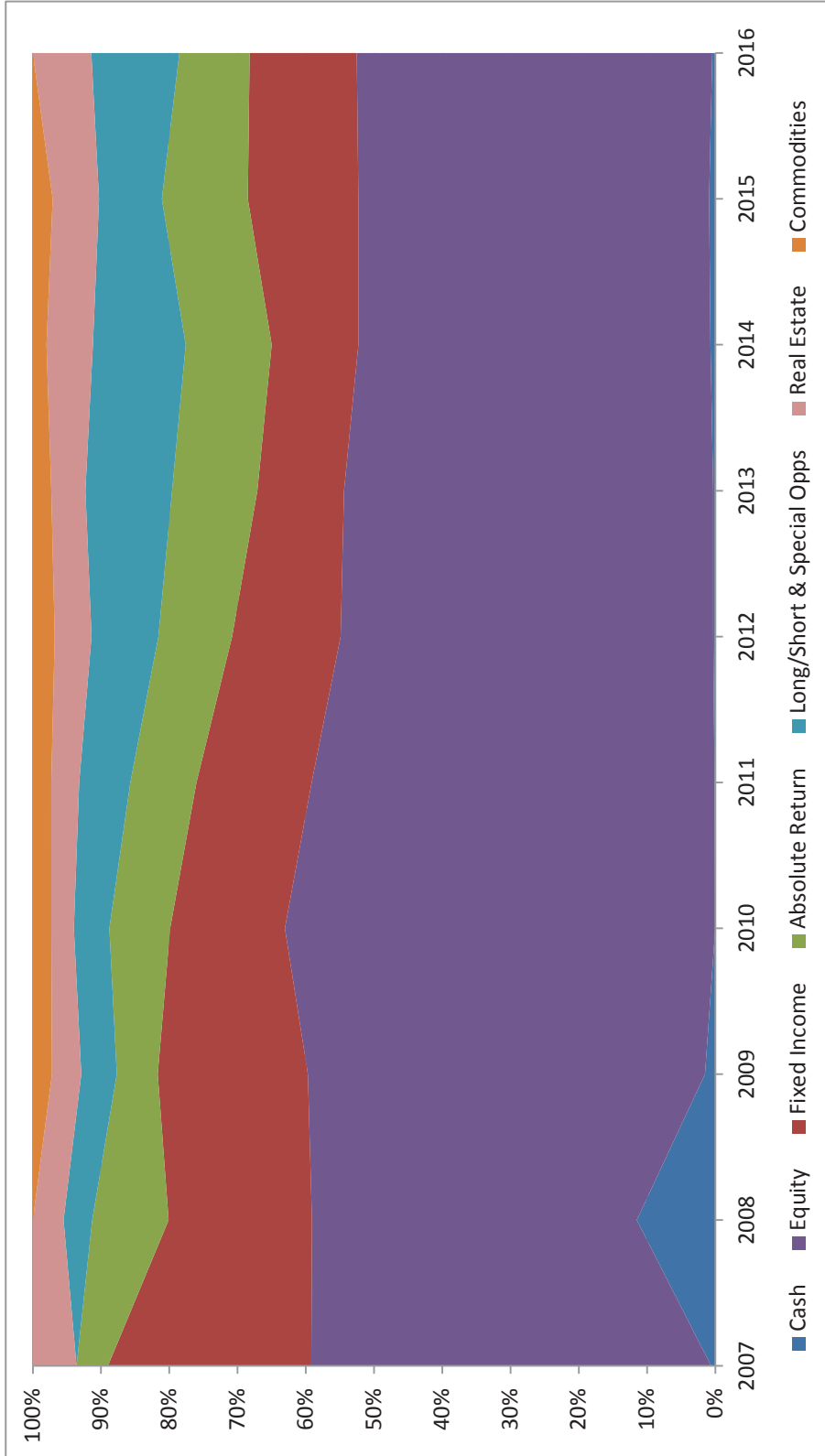
Total Retirement Assets



Schedule of Investment Results

	Market Value of Investments	Net Investment Income	Investment Rate of Return (net of fees)
2007	242,213,605	16,715,588	7.77%
2008	175,878,430	(59,972,361)	-24.68%
2009	211,055,762	38,442,846	21.99%
2010	234,404,883	27,752,165	13.47%
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%

Investment Allocation History



Investment Listed by Type

as of December 31, 2016

	Market Value
Cash and Cash Equivalents:	
Cash Held by Treasurer	\$247,764
Union Bank	955,792
Fixed Income Investments:	
Sterling Capital	20,689,554
Hotchkis & Wiley	22,783,633
US Equity Investments:	
Hotchkis & Wiley	16,184,501
Jackson Square (Delaware)	14,278,714
MFS Heritage	17,833,179
Vanguard S&P 500 Index	8,940,855
Sterling	6,611,774
Vanguard MC Growth	4,998,782
Vanguard MC Index	3,580,729
Champlain	5,107,626
Phocas	4,951,627
Bridge City	5,142,797
Vanguard SC Index	907,163
International Equity Investments:	
Artisan	19,471,218
Euro Pacific	17,640,242
Vanguard International	-
Trivalent	8,672,263
Berens	10,004,518
Real Estate Investments:	
Legacy Partners Realty Fund III	27,518
Metropolitan Real Estate Partners	356,500
Morrison Street Fund IV	2,397,177
Morrison Street Fund V	5,429,971
Morrison Street Debt Opportunities	3,017,828
Principal (REITs)	12,510,256
Alternative Investments:	
Weatherlow Offshore	14,617,970
Royalty Opportunities I	2,703,883
Royalty Opportunities II	1,360,043
Troob	285,467
Polar	6,346,783
Castine Capital I	7,084,129
Post Limited Term High Yield	5,826,198
Rimrock Low Volatility	9,267,612
Beach Point	8,745,895
Caduceus (OrbiMed II)	8,012,791
Total Cash and Investments	\$276,992,752

