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Comprehensive Annual Report

FOR THE YEAR ENDED DECEMBER 31, 2015



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Introductory Section

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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

Jon B. Snyder 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

Jerry K. McFarlane Board Appointee Former President,

Pension Consultants of the Northwest

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

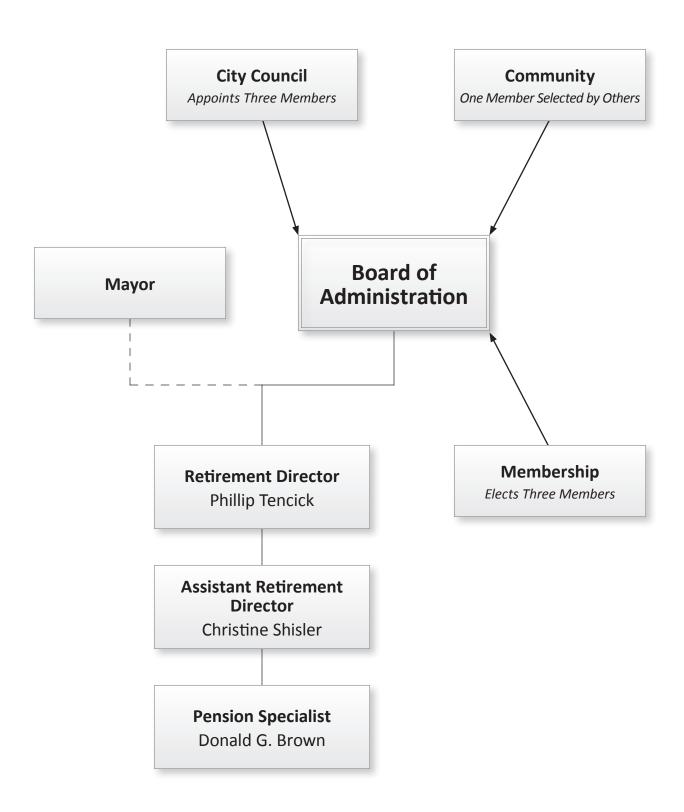
Investment Performance Analysis Hyas Group

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, a straight 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 can draw a pension, with a five-year vesting period. Their straight 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 can draw a pension, with a seven-year vesting period. Their straight 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%.

A number of optional forms of retirement benefits (see Service Retirement Options) are available which allow a retiree to provide benefits to his or her beneficiary with a reduction in pension benefits.

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 death 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.



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

This 74th Annual Report consists of five sections: The <u>Introductory Section</u> contains the letter of transmittal and an explanation of the administrative organization of the System; the <u>Financial Section</u> contains the audited financial statements of the System as well as an opinion letter from the System's independent certified public accountants; the <u>Actuarial Section</u> contains the consulting actuary's report along with related actuarial data and statements; the <u>Statistical Section</u> contains tables of significant data pertaining to the operation of the System; and the last section is the <u>Investment Section</u>, 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.

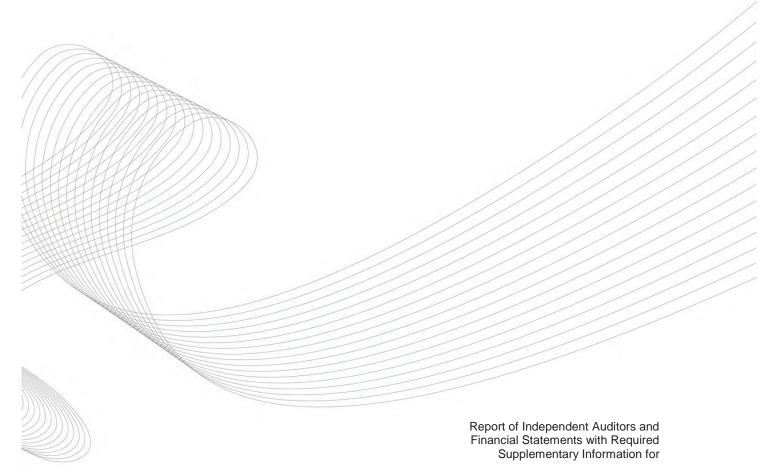
Respectfully submitted,

Board of Administration, Spokane Employees' Retirement System As of December 31, 2015

Phillip Tencick Retirement Director

Financial Section

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



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

December 31, 2015 and 2014



Certified Public Accountants | Business Consultants

Acumen. Agility. Answers.





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, 2015 and 2014, 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 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, 2015 and 2014, 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 21 through 24 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 management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other 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 25 through 27, are presented for purposes of additional analysis and are not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates to the underlying accounting and other records used to prepare the financial statements. The schedules of administrative 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.

Spokane, Washington

Moss adams UP

June 14, 2016

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, 2015. 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 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
- 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

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 decreased by \$13.5 million (4.7%) during 2015 and increased by \$4.9 million (1.7%) during 2014. A 0.9% loss on investments and benefit payments in excess of contributions caused the decrease in net position for 2015. In 2014, moderate investment gains and combined contributions were sufficient to more than fully fund the benefit payments.
- Revenues and additions to net position totaled \$11.6 million in 2015, compared to \$28.1 million in the prior year. For 2015, revenue includes member and employer contributions of \$14.8 million and net investment losses totaling \$3.2 million. Member and employer contributions increased by \$1.2 million in 2015 compared to an increase of \$0.2 million in 2014. Net investment income, which fluctuates year-to-year depending on market conditions, was \$17.7 million less in 2015 compared to 2014. The investments' loss of 0.9% in 2015 was led by losses in fixed income and commodities compared to investment gains in 2014 from strong U.S. equity returns.

Financial Highlights (continued)

• Total plan expenses and payments for 2015 were \$25.0 million, a 7.6% increase from 2014. Total expense amounts and fluctuations are primarily driven by pension benefit payments. Retiree benefits increased by \$1.7 million during 2015 and by \$1.9 million during 2014.

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,		
	2015 2014		2013
Additions Employer contributions Plan member contributions Net investment income (loss)	\$ 7,398,945 7,402,905 (3,228,439)	\$ 6,822,279 6,822,279 14,497,901	\$ 6,715,376 6,715,376 45,323,533
Total additions	11,573,411	28,142,459	58,754,285
Deductions Benefits Refunds of contributions Net administrative expenses Total deductions Net increase (decrease) in net position	23,959,198 637,822 447,921 25,044,941 (13,471,530)	22,258,842 625,184 386,713 23,270,739 4,871,720	20,346,281 393,954 385,675 21,125,910 37,628,375
Net Position restricted for pensions			
Beginning of year	285,772,821	280,901,101	243,272,726
End of year	\$ 272,301,291	\$ 285,772,821	\$ 280,901,101

Revenues - Additions to Net Plan Position

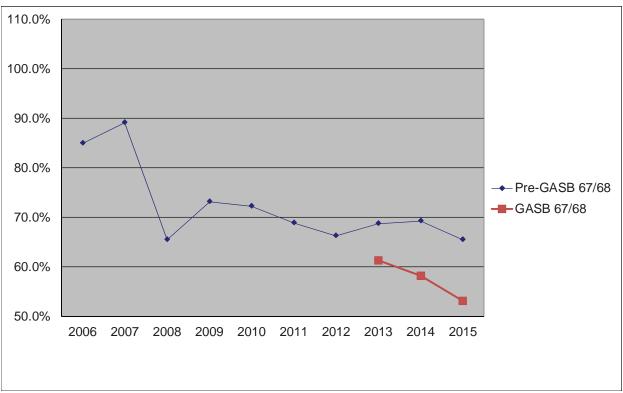
- Both employer and plan participant contributions increased by 8.5% (\$577 thousand and \$580 thousand, respectively) in 2015. In 2014, employer contributions and participant contributions each increased by 1.6% (\$107 thousand). Employee contributions may vary from employer contributions if rehired employees optionally buy-back their creditable service time from a prior withdrawal upon being rehired. Both the employer and the employee contributions are driven by the contribution rate, currently 8.25% of salary for each, and by salaries/wages. The contribution rate increased from 7.75% starting on September 1, 2014.
- Net investment return was a \$3.2 million loss in 2015 compared to a \$14.5 million gain in 2014. In 2015, the portfolio's annual return was negative 0.9% compared to 5.3% in 2014. The investments losses for 2015 were a result of losses in international and high yield fixed income, and declining oil prices hurt commodity returns. In 2014, strong domestic equity and real estate performance led to an investments gain for the year.

Expenses - Deductions from Net Plan Assets

- Retiree benefits paid increased by \$1.7 million (7.6%) in 2015 and 1.9 million (9.4%) in 2014, respectively. The number of beneficiaries increased by 57 in 2015 compared to an increase of 63 in 2014. SERS' active member age is an average of 48.3 years old, which is down from 48.8 as compared to 2014. Average active participant service has decreased from 12.3 years in 2014 to 12.0 years in 2015.
- Refunds of contributions increased by \$13 thousand (2.0%) in 2015 after an increase of \$231 thousand (58.7%) in 2014. 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. In April 2015, the Retirement Director position was filled and was the main driver to the administrative expense increase. Staff and the Board continue to be diligent about Plan operating expenses, which continue to remain at less than 2.0% of total deductions and at 0.16% of net Plan assets.

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 that was triggered by market disruptions related to sub-prime mortgages. 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 rate of return to the borrowing rate for all points in time when a funding shortfall is expected. This change reduced the discount rate to 5.50% from 7.50% when the prior methodology was used. 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.

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, 2015. 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 a future increase in contribution levels to raise the funded ratio above the ad hoc threshold.

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	
	2015	2014
Total portfolio Policy Index	(0.9%) (2.0%)	5.3% 5.8%
Fixed income	(3.9%)	0.3%
Benchmarks: Barclays Capital US Aggregate Bond Index US T-Bills 90 day Index	0.6% 0.03%	6.0% 0.04%
Large cap equities Benchmark: S&P 500 Index	(0.3%) 1.4%	12.9% <i>13.7%</i>
Mid cap equities Benchmark: Russell Mid Cap Index	(1.0%) (2.4%)	10.2% <i>13.2%</i>
Small cap equities Benchmark: Russell 2000 Index	0.02% (4.4%)	6.3% 4.9%
Real estate Benchmark: FTSE NAREIT Composite Index	6.7% 8.0%	25.0% 19.6%
International equities Benchmark: MSCI ACWI Ex USA Index	(1.3%) (5.7%)	(3.6%) (3.9%)
Commodities Benchmark: S&P GSCI Total Return Index	(28.0%) (32.9%)	(24.8%) (33.1%)
Alternatives Absolute return Benchmark: Barclays Capital US Aggregate Bond Index Benchmark: HFRI FOF Conservative	0.4% 0.6% 0.4%	3.2% 6.0% 3.1%
Long/short growth Benchmark: S&P 500 Index Benchmark: HFRI FOF Composite Index	3.1% 1.4% (0.3%)	8.3% 13.7% 3.4%

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, decreased \$13.5 million in 2015, which is composed of a negative investment return of \$3.2 million (-0.9%) and sales to fund expenditures of \$10.3 million. In 2014, total investments increased \$4.1 million, due to an investment return of \$14.5 million (5.3%) and sales of \$9.6 million. The overall return for 2015 was hurt by weak international markets and falling oil prices. International fixed income and equities suffered losses as weaker growth expectations hurt international markets. Falling oil prices generated losses in commodity investments and high yield fixed income. SERS continued to utilize alternative investments to provide diversification and reduce short-term volatility. These strategies provided modest returns in 2015. 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 invests funds for the long-term, anticipating both good and bad 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 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

	2015	2014
Assets		
Cash	\$ 230,773	\$ 139,376
Short-term investments	2,373,538	2,382,582
Total cash and short-term investments	2,604,311	2,521,958
Receivables		
Investment income	67,283	71,493
Other		672
Total receivables	67,283	72,165
Investments		
U.S. fixed income securities	29,941,022	33,044,477
International/global fixed income securities	11,374,469	13,082,318
U.S. equities	88,558,262	98,334,595
International/global equities	45,490,549	48,383,308
Real estate	18,008,159	19,373,567
Alternatives	76,069,796	70,755,289
Total investments	269,442,257	282,973,554
Capitalized software, net	282,384	300,033
Total assets	272,396,235	285,867,710
Liabilities		
Payables		
Accounts payable	51,409	62,047
Current portion employees salaries and benefits	13,659	10,567
Employee leave benefits	17,171	3,922
Other current liabilities	12,705	18,353
Total liabilities	94,944	94,889
Net position restricted for pensions	\$ 272,301,291	\$ 285,772,821

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

	Years Ended December 31,		
	2015	2014	
Additions			
Contributions			
Employer	\$ 7,398,945	\$ 6,822,279	
Member	7,402,905	6,822,279	
Total contributions	14,801,850	13,644,558	
Investment income			
Net appreciation (depreciation) in fair value of			
investments	(8,167,829)	8,125,868	
Interest and dividends	5,369,569	6,745,143	
Less investment expense	(430,179)	(373,110)	
Net investment income (loss)	(3,228,439)	14,497,901	
Total additions	11,573,411	28,142,459	
Deductions			
Benefit payments	23,959,198	22,258,842	
Refunds of member contributions	637,822	625,184	
Administrative expenses, net of administrative income	447,921	386,713	
Total deductions	25,044,941	23,270,739	
Net increase (decrease) in net position	(13,471,530)	4,871,720	
Net position restricted for pensions			
Beginning of year	285,772,821	280,901,101	
End of year	\$ 272,301,291	\$ 285,772,821	

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, 2015, pension Plan membership consisted of the following:

Retirees or beneficiaries currently receiving benefits	1,300
Inactive Plan members entitled to but not yet receiving benefits	97
Active Plan members	1,424
	2,821

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.

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, 2015. 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 a future increase in contribution levels to raise the funded ratio above the ad hoc threshold.

Note 2 – Summary of Significant Accounting Policies

Basis of accounting – With the December 31, 2014, reporting, SERS adopted new accounting guidance, GASB Statement No. 67, *Financial Reporting for Pension Plans*, which is an amendment of GASB Statement No. 25 and No. 50. GASB No. 67 requires changing the presentation of the financial statements, notes to the financial statements, and required supplementary information. Significant changes include a change in the actuarial calculation of total and net pension liability. It also includes comprehensive footnote disclosure regarding the pension liability, the sensitivity of the net pension liability to the discount rate, and increased investment activity disclosures. The total pension liability, determined in accordance with GASB No. 67, is presented in Note 3 and in the required supplementary information.

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.

Note 2 - Summary of Significant Accounting Policies (continued)

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 the last reported sales price. 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.

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.

Note 3 - Deposits and Investments (continued)

Investment policy (continued) – The following was the Board's target asset allocation as of December 31, 2015:

Asset Class	Target Allocation
Global equity	50%
Global fixed income	15%
Long/short and special opportunites	14%
Absolute return	10%
Real estate	6%
Commodities	4%
Cash	1%
Total	100%

Concentrations – SERS holdings in organizations that represent five percent or more of the pension Plan's fiduciary net position at December 31, 2015:

	% of Net
Organization	Position
Vanguard Funds	12.2%
Hotchkis & Wiley	8.9%
Pacific Investment Management Company	7.3%
MFS Investment Management	6.0%
Delaware Investments	5.5%
OrbiMed Advisors	5.4%
Evanston Capital Management	5.3%
Artisan Partners	5.3%

Rate of return – For the year ended December 31, 2015, the annual money-weighted rate of return on pension Plan investments, net of pension Plan investment expense, was negative 0.9%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

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, 2015, are summarized in the following table:

	Long-Term Expected Real Rate of
Asset Class	Return
Global equity	7.0%
Global fixed income	3.5%
Long/short and special opportunites	7.1%
Absolute return	4.0%
Real estate	6.6%
Commodities	6.5%
Cash	0.5%

Discount rate – The blended discount rate used to measure the total pension liability was 5.50%. 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 (3.50% as of 12/31/15; 3.50% as of 12/31/14) 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 5.50%, 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 (4.50%) or 1-percentage-point higher (6.50%) than the current rate:

		Current	
	1% Decrease	Discount Rate	1% Increase
	(4.5%)	(5.5%)	(6.5%)
Plan's net pension liability	\$301,595,957	\$239,722,042	\$187,522,372

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. Funding of these limited partnerships began in 2007 and continues on an ongoing basis. The term "alternative investments" encompasses a broad category of nontraditional investments. 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' low correlations to traditional asset classes reduce the expected risk required to meet return targets and add value to the portfolio. The Board believes the use of alternative investments is a prudent approach to managing risk by diversifying beyond 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 four institutional class mutual funds targeting different levels of credit risk. The fair market value of the mutual funds is \$41.3 million as of December 31, 2015.

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.

Note 3 - Deposits and Investments (continued)

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.

The table below shows the System's fixed income assets by investment type, average effective maturity and market value as of December 31, 2015:

Mutual Funds	Average Effective Maturity (in years)	Market Value
	0.06	ф. 11.274.4CO
PIMCO Global Advantage Strategy Bond Instl	8.36	\$ 11,374,469
Vanguard Short-term Investment Grade I	3.20	10,226,632
Hotchkis & Wiley High Yield Fund Class 1	6.28	10,035,719
American Beacon Flexible Bond Instl	3.10	9,678,671
Total fixed income		\$ 41,315,491
Fixed income as a percentage of SERS total investments	15.3%	

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, 2015, \$59.4 million, or 22.1%, of the System's portfolio is invested in equities or issuers domiciled outside of the United States. The fair market value of the foreign equities is \$47.7 million as of December 31, 2015, which includes \$43.5 million managed under international or global equity mandates and \$4.2 million managed under US equity mandates. Additionally, SERS has \$11.7 million invested in international fixed income issuers, which includes \$7.2 million invested in a global fixed income mandate and \$4.5 million invested in a US fixed income mandate. 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 the fund managers and all managers were within their mandated exposure limits as of December 31, 2015.

SPOKANE EMPLOYEES' RETIREMENT PLAN NOTES TO FINANCIAL STATEMENTS

Note 4 - 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%. Previously, the contribution rate was 15.50% of payroll (7.75% of pay paid by the employee, 7.75% of pay paid by the City).

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 member's contribution, plus other revenues, be enough to properly fund the retirement benefits set forth.

Note 5 - Commitments

As of December 31, 2015, the System had unfunded commitments of \$7.3 million to five limited partnership real estate funds and a medical royalties investment fund.

Spokane Employees' Retire	ement System
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REQUIRED SUPPLEMENTARY INFORMATION

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

	2015	15		2014
Total pension liability				
Service cost	\$ 12,	12,384,960	∨	11,405,611
Interest	26,	26,359,257		25,718,424
Changes of benefit terms		•		86,298
Differences between expected and actual experience	6,	6,483,011		18,507,784
Benefit payments, including refunds of member contributions	(24,5	(24,597,020)		(22,884,026)
Net change in total pension liability	20,	20,630,208		32,834,091
Total pension liability—beginning	491,	491,393,125	7	458,559,034
Total pension liability—ending (a)	\$ 512,	512,023,333	∨	491,393,125
Plan fiduciary net position				
Contributions—employer	\$ 7,	7,398,945	\$	6,822,279
Contributions—member	7,	7,402,905		6,822,279
Net investment income	(3,2	(3,228,439)		14,497,901
Benefit payments, including refunds of member contributions	(24,5	(24,597,020)	<u> </u>	(22,884,026)
Administrative expense	7)	(447,921)		(386,713)
Net change in plan fiduciary net position Plan fiduciary net position—beginning	(13,4	(13,471,530) 285,772,821		4,871,720 280,901,101

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

2006	6,231,299	4,287,457	\$ 1,943,842	\$ 67,750,706	6.72%
2007	\$ 5,742,761 \$	4,518,363	\$ 1,224,398 \$	\$ 69,261,673 \$	6.72%
2008	\$ 8,826,967	4,875,443	\$ 3,951,524	\$ 74,183,014	6.72%
2009	\$ 8,267,280	6,474,432	\$ 1,792,848	\$ 83,455,429	7.75%
2010	\$ 8,955,055	6,580,795	\$ 2,374,260	\$ 88,093,679	7.75%
2011	\$ 10,010,885	6,799,258	\$ 3,211,627	\$ 90,264,062	7.75%
2012	\$ 8,325,936	6,937,750	\$ 1,388,186	\$ 89,519,355	7.75%
2013	\$ 8,237,317	6,715,376	\$ 1,521,941	\$ 86,650,013	7.75%
2014	\$ 8,292,066	6,822,279	\$ 1,469,787	\$ 86,139,886	7.92%
2015	\$ 9,069,276	7,398,945	\$ 1,670,331 \$ 1,469,787	\$ 89,684,182	8.25%
	Actuarially determined contribution	Contributions in relation to the actuarially determined contribution	Contribution deficiency	Covered-employee payroll	Contributions as a percentage of covered-employee payroll

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

Valuation date: December 31, 2015

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 contributions rates

Actuarial cost method Entry age normal

Amortization method Level percentage of payroll, closed

Remaining amortization period 22 years

Asset valuation method 5-year smoothed market

Inflation 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:

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

Investment rate of return Retirement age

7.5%, net of pension plan investment expense In accordance with the following table based on age

	Retirement				
Age	Probability				
<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

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

Spokane Employees' R	etirement System
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Financial Section

ADDITIONAL SUPPLEMENTARY INFORMATION

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

	2015 Budge	<u>2015 Actual</u>	2014 Actual
Personnel services			
Salaries and wages	\$ 241,31	\$ 220,406	\$ 126,544
Personnel benefits	79,60	8 66,088	45,557
Administrative income	(15,00	<u>(22,061)</u>	(6,696)
Total personnel services	305,92	1 264,433	165,405
Supplies			
Office supplies	2,50	0 4,965	2,591
Postage	10,00	•	8,321
Minor equipment	2,50		-
Other	1,20	<u> </u>	672
Total supplies	16,20	0 15,466	11,584
Other services and charges			
State audit charges	10,00	11,688	10,375
Professional services	155,00	90,588	142,938
Travel	15,00	2,517	2,559
Registration and schooling	11,00	10,789	400
Other dues, subscriptions, and memberships	2,50	1,970	1,013
Printing	30	287	189
Depreciation		- -	877
Amortization		- 17,649	17,649
Other miscellaneous charges	4,37	0 4,462	2,837
Total other services and charges	198,17	0 139,950	178,837

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

	20	15 Budget	20	15 Actual	20	14 Actual
Interfund (IF) payments for services						
IF accounting central services	\$	3,052	\$	2,782	\$	3,150
IF IT phones		1,512		1,555		1,935
IF IT communications replacement		241		241		289
IF motor pool		-		-		-
IF risk management		1,121		1,121		962
IF unemployment		500		500		500
IF workers' compensation		78		58		86
IF IT		13,892		13,892		16,423
IF reprographics		4,000		4,339		2,347
IF warrant service		-		-		986
IF IT replacement		3,584		3,584		4,209
		27,980		28,072		30,887
TOTAL ADMINISTRATIVE EXPENSES,						
NET OF ADMINISTRATIVE INCOME	\$	548,271	\$	447,921	\$	386,713

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

	ear Ended cember 31, 2015
Investment Services	
Bridge City Capital LLC	\$ 23,348
Champlain Small Cap Fund LLC	49,233
Principal Real Estate Investors LLC	74,642
Sterling Capital Management LLC	67,888
Troob	 58,238
	 273,349
Performance Measurement	
Hyas Group, LLC	 108,000
Custodial Services	
U.S. Bank	 48,830
TOTAL INVESTMENT EXPENSES	\$ 430,179

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

SPOKANE EMPLOYEES' RETIREMENT SYSTEM

ACTUARIAL VALUATION AS OF DECEMBER 31, 2015



Sageview Consulting Group 4421 Cox Road, Glen Allen, VA 23060 804.270.1508 www.sageviewadvisory.com April 27, 2016

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, 2015, 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, 2015 valuation develops an Actuarially Determined Employer Contribution Rate (ADC), exclusive of employee contributions, of 9.65% of total payroll. The ADC rate compares with an actual Employer Contribution rate of 8.25% of total payroll. The Employer Contribution for the 2015 fiscal year of \$7,398,945 was less than the ADC of \$9,069,276 by \$1,670,331.

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, 2015 and December 31, 2014 is as follows:

	December 31	December 31
	2015	2014
Total Pension Liability:	\$512,023,333	\$491,393,125
Fiduciary Net Position:	\$272,301,291	\$285,772,821
Net Pension Liability:	\$239,722,042	\$205,620,304
Fiduciary Net Position as a Percentage of Total Pension Liability:	53.2%	58.2%
GASB 67 Blended Discount Rate:	5.50%	5.50%

Spokane Employees' Retirement System April 27, 2016 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 27, 2016 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, 2015.

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

Wille a la

William J. Kail

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, 2015 for the Spokane Employees' Retirement System.

The principal results include:

• The Actuarially Determined Employer Contribution Rate (ADC) is 9.65% 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, 2015 and December 31, 2014 is as follows:

	December 31	December 31
	2015	2014
Total Pension Liability:	\$512,023,333	\$491,393,125
Fiduciary Net Position:	\$272,301,291	\$285,772,821
Net Pension Liability:	\$239,722,042	\$205,620,304
Fiduciary Net Position as a Percentage of Total Pension Liability:	53.2%	58.2%
GASB 67 Blended Discount Rate:	5.50%	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 (3.50% as of 12/31/15; 3.50% as of 12/31/14) is used thereafter.

• Legislative and Administrative Changes

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

<u>Demographics</u>	2015	2014
Active		
Number	1,424	1,407
Average Pay for Coming Year	\$ 65,940	\$ 63,280
Retired and Beneficiaries		
Number	1,300	1,243
Average Annual Allowance	18,991	18,484
Terminated Vested and Portables		
Number	97	105
Total Membership	2,821	2,755
Net Pension Liability		
Total Pension Liability	\$512,023,333	\$491,393,125
Fiduciary Net Position	\$272,301,291	\$285,772,821
Net Pension Liability	\$239,722,042	\$205,620,304
Fiduciary Net Position as a Percentage of the Total Pension Liability	53.2%	58.2%
Contribution Rates		
Actuarially Determined Employer Contribution Rate (ADC) Rate* Actual Employer Contribution Rate	9.65% 8.25%	9.31% 8.25%

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

Contribution Rates (ADC)

The results of the valuation as of December 31, 2015 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, 2015 the actual Employer Contribution rate of 8.25% is less than the ADC rate of 9.65%.

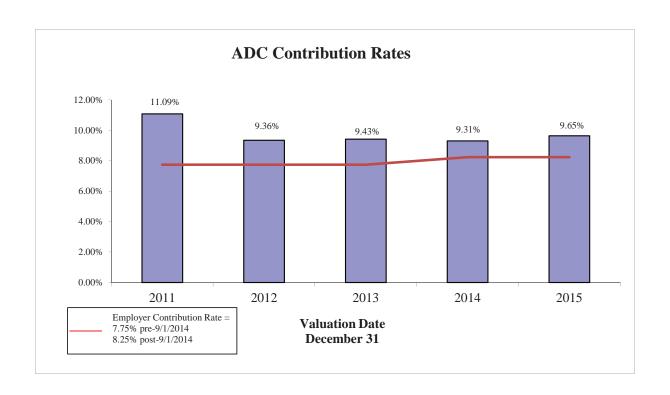
Reasons for Change in the ADC

The recommended employer contribution rate as determined by the ADC increased from 9.31% as of December 31, 2014 to 9.65% as of December 31, 2015. The increase of 0.34% is due to the following reasons:

 Increase due to return on actuarial assets 	0.19%
 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 	0.15%
• Total	0.34%

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

Valuation Date	ADC	Employer Rate
2011	11.09%	7.75%
2012	9.36%	7.75%
2013	9.43%	7.75%
2014	9.31%	8.25%
2015	9.65%	8.25%



Unfunded Accrued Liability

The financing objective of the System is to:

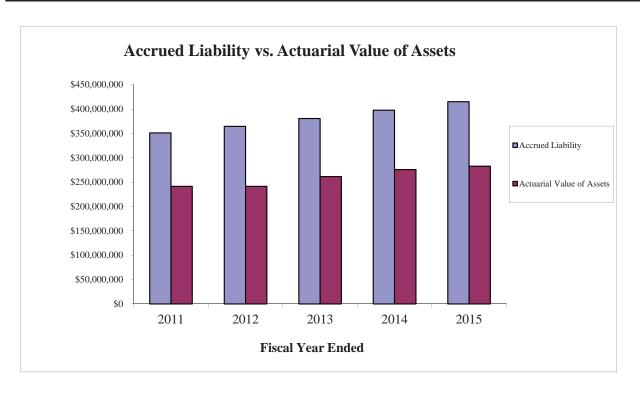
- fully fund all current costs based on the normal contribution rate payable by the System determined under the funding method; and
- liquidate the unfunded accrued liability based on accrued liability contributions payable by the System over an amortization period of no more than 30 years; and
- accomplish 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 \$132,579,352 as of December 31, 2015. The unfunded actuarial liability is based on an actuarial value of assets of \$282,955,179 and an actuarial liability of \$415,534,531.

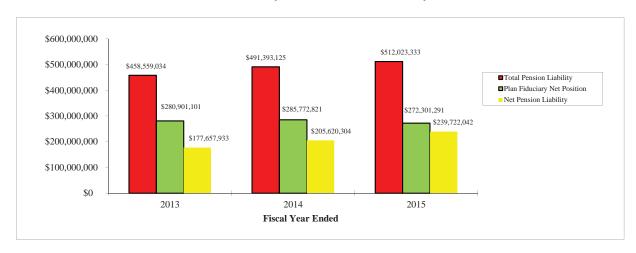
For purposes of financial reporting, the Fund's unfunded liability (net pension liability) is measured by comparing the market value of assets (fiduciary net position) with the actuarial liability (total pension liability). The total pension liability is determined under the entry age cost method using a blended discount rate. On this basis, the Fund's net pension liability is \$239,722,042 as of December 31, 2015. The net pension liability is based on an fiduciary net position of \$272,301,291 and a total pension liability of \$512,023,333.

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

Fiscal Yea	r Ending Accrued	Liability Actuarial Valu	ue of Assets I
2011	\$351,31	8,317 \$241,610	0,862
2012	\$364,71	5,900 \$241,424	4,862
2013	\$381,03	39,248 \$261,605	5,154
2014	\$398,05	57,936 \$276,002	2,759
2015	\$415,53	\$4,531 \$282,955	5,179

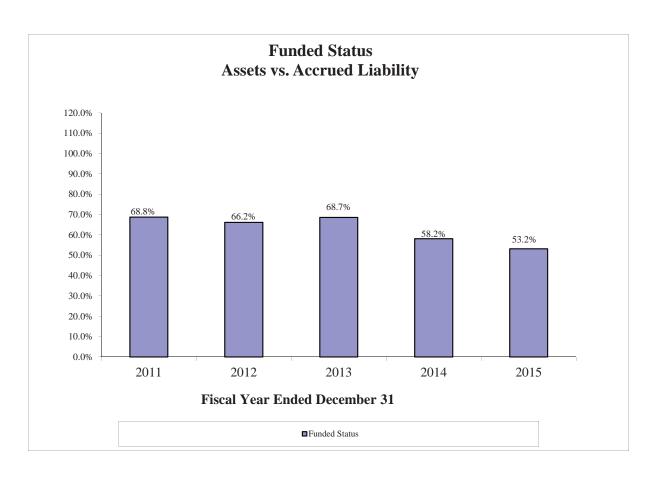


History of Net Pension Liability



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

Fiscal		
Year Ending	Funded Statu	S
2011	68.8%	Pre-GASB 67
2012	66.2%	Pre-GASB 67
2013	68.7%	Pre-GASB 67
2014	58.2%	Post-GASB 67
2015	53.2%	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.

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, 2015 was -0.94%. 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 -1.15%. The investment return on the smoothed fair value of assets was 6.35%. 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.

Five-Year History of Rates of Return

Fiscal Year	Rate of Return on Assets			
Ending	Invested	Total	Actuarial	Assumed
2011	(2.80%)	(2.98%)	1.65%	7.50%
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%



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 2015
Table 14	GASB 68 Summary for 2016
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

N. I. CM. I	<u>2015</u>	<u>2014</u>	Increase/ (Decrease)
Number of Members: Retirees	1,155	1,107	48
Beneficiaries	136	127	9
Disabled	9	9	0
Terminated Vested	59	67	(8)
Portables	38	38	0
Active	1,424	1,407	17
Total Members	2,821	2,755	66
Projected Compensation for Coming Year	93,899,096	89,034,522	4,864,574
Average Compensation for Coming Year	65,940	63,280	2,660
Average Age (Active Members)	48.33	48.76	(0.43)
Average Service (Active Members)	12.04	12.32	(0.28)
Annual Retirement Allowance	24,687,895	22,975,997	1,711,898
Average Annual Retirement Allowance	18,991	18,484	507
Average Monthly Retirement Allowance	1,583	1,540	43

ASSET INFORMATION

Market Value Reconciliation

1. Total Market Value of Net Assets, 12/31/2014		285,772,821
2. Audit Adjustment		0
3. Contributionsa. Employerb. Employeec. Total Contributions	7,398,945 7,402,905	14,801,850
 4. Investment Earnings a. Interest & Dividends & Other Income b. Realized & Unrealized Gain/(Loss) c. Investment Expenses d. Total Investment Earnings 	5,369,569 (8,167,829) (430,179)	(3,228,439)
5. Benefit Paymentsa. Benefitsb. Refund of Contributionsc. Total Benefit Payments	(23,959,198) (637,822)	(24,597,020)
6. Administrative Expenses		(447,921)
7. Total Market Value of Net Assets, 12/31/2015		272,301,291
8. Approximate Rate of Return on Total Assets		-1.15%
9. Approximate Rate of Return on Invested Assets		-0.94%

Table 3

ASSET INFORMATION

Smoothed Fair Value of Net Assets Determination

285,772,821
21,055,790
(3,228,439)
272,301,291

5. Determination of Deferred Gain (Loss)

	Actual vs.	Amount		
Fiscal	Expected	Recognized	Portion	Deferred
Year	Return	This Year	Deferred	Amount
<u> </u>			20101100	
2015	(24,284,229)	(4,856,846)	4/5	(19,427,383)
2014	(6,215,226)	(1,243,045)	3/5	(3,729,136)
2012	26.061.554	5 202 211	2/5	10.704.622
2013	26,961,554	5,392,311	2/5	10,784,622
2012	8,590,047	1,718,009	1/5	1,718,009
	-,,	-,,,	-,-	-,,
2011	(24,353,538)	(4,870,708)	0/5	0
	(10.001.000)	(2.0.40.250)		40 450 000
Total	(19,301,392)	(3,860,279)		(10,653,888)
6. Preliminary Smoothed Fair Value	e of Net Assets (4	5)		282,955,179
o. Tremmary Smoothed Fair Varia	of free fissets (. 3.)		202,733,177
7. Ratio of Preliminary Smoothed Fair Value to Market Value				103.91%
8. Smoothed Fair Value of Net Assets				282,955,179
(6., but not less than 90% nor mo	re than 110% of	4.)		
9. Ratio of Smoothed Fair Value to Market Value				103.91%
10. Approximate Rate of Return on S	Smoothed Fair Va	lue of Net Assets		6.35%

ACCRUED LIABILITY

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

 a. Active b. Terminated Vested & Portables c. Retirees d. Beneficiaries e. Disableds f. Total Accrued Liability prior to Changes 	169,564,254 6,972,103 223,069,308 14,612,473 1,316,393	415,534,531
2. Actuarial Value of Assets		282,955,179
3. Unfunded Accrued Liability prior to Changes (1.f 2.)		132,579,352
4. Change in Unfunded Accrued Liability		
 a. Due to Changes in Plan Provisions b. Due to Changes in Assumptions c. Due to Change in Funding Method d. Due to Change in Asset Method e. Total Change in Unfunded Accrued Liability 	0 0 0 0	0
5. Actual Unfunded Accrued Liability (3. + 4.e.)		132,579,352

ACTUARIAL (GAIN)/LOSS

1. Increase (decrease) in Unfunded Accrued Liability

a. Unfunded Accrued Liability, prior year	122,055,177
b. Entry Age Normal Cost (excluding expenses)	7,962,275
c. Contributions	14,801,850
d. Interest	9,206,274
e. Expected Unfunded Accrued Liability, current year	124,421,876
(a. + b c. + d.)	
f. Actual Unfunded Accrued Liability, current year before	132,579,352
benefit, assumption, and method changes	
g. (Gain)/Loss	8,157,476
(fe.)	
. Reasons for (Gain)/Loss	

2.

a. Investment Return on Smoothed Fair Value of Assets	3,591,939
b. Other	4,565,537
c. Total	8,157,476

<u>Table 6</u>

AMORTIZATION SCHEDULE*

Date Established	Source	Initial <u>Amount</u>	Remaining Balance	Years to Amortize	Required Payment
12/31/2015	Actuarial Loss	8,157,476	8,157,476	30	421,887
12/31/2014	Actuarial Gain	(524,345)	(538,371)	29	(28,406)
12/31/2014	Plan Amendment	81,313	83,488	29	4,405
12/31/2013	Actuarial Gain	(7,447,517)	(7,876,348)	28	(424,441)
12/31/2012	Actuarial Loss	15,542,910	16,945,092	27	933,722
12/31/2012	Method Change	15,452,413	16,846,431	27	928,285
12/31/2012	Assumption Change	(22,132,963)	(24,129,656)	27	(1,329,611)
12/31/2012	Plan Amendment	(265,117)	(289,035)	27	(15,927)
12/31/2011	Actuarial Loss	12,884,920	14,670,196	26	827,660
12/31/2010	Actuarial Loss	4,665,041	5,513,001	25	318,895
12/31/2010	Plan Amendment	(159,269)	(188,220)	25	(10,887)
12/31/2009	Actuarial Gain	(19,699,834)	(24,019,975)	24	(1,426,712)
12/31/2009	Plan Amendment	9,584	11,688	24	694
12/31/2008	Plan Amendment	940,216	1,177,852	23	71,957
12/31/2008	Actuarial Loss	71,000,670	88,945,896	23	5,433,835
12/31/2007	Unfunded Liability	29,586,848	37,269,837	22	2,346,066
Total		108,092,346	132,579,352		8,051,422

^{*} 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.

NORMAL COST

1. Normal Cost for All Benefits	8,264,529
2. Offset for Employee Contributions	(7,746,675)
3. Estimated Expenses	500,000
4. Total	1,017,854

CONTRIBUTION SUMMARY

1. Actuarially Determined Employer Contribution Amount

a. Normal Cost	1,017,854	
b. Amortization Charges	8,051,422	
c. Total		9,069,276
2. Actuarially Determined Employer Contribution Rate		
a. Normal Cost	1.08%	
b. Amortization Charges	8.57%	
c. Total		9.65%
3. Projected Pay for the Upcoming Year		93,899,096

1. Total Fiduciary Net Position

272,301,291

Table 9

ASSET INFORMATION

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

ASSETS		
1. Cash		230,773
2. Short-term investments		2,373,538
3. Receivables		, ,
a. Interest and Dividends	67,283	
b. Taxes	0	
c. Other	0	
d. Total Receivables		67,283
4. Investments, at fair value		
a. U. S. Fixed Income	29,941,022	
b. International/Global Fixed Income	11,374,469	
c. U. S. Equities	97,162,551	
d. Real Estate	18,008,159	
e. International Equities	36,886,260	
f. Alternatives	76,069,796	
g. Total Investments	•	269,442,257
5. Leasehold improvements, net of accumulated depreciation		0
6. Capitalized software, net of accumulated amortization		282,384
7. Total Assets		272,396,235
LIABILITIES		
1. Accounts Payable	51,409	
2. Current portion employee salary & benefits	13,659	
3. Other current liabilities	12,705	
4. Employee leave benefits	17,171	
5. Total Liabilities		94,944
NET POSITION		
1 /D / 1 D' 1 ' N / D ' / '		070 001 001

ASSET INFORMATION

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

ADD

ADDITIONS		
1. Contributions		
a. Employer	7,398,945	
b. Employee	7,402,905	
c. Total Contributions		14,801,850
2. Investment Earnings:		
a. Net increase (decrease) in fair value of investments	(8,167,829)	
b. Interest, dividends and other investment income	5,369,569	
c. Total Investment Earnings	_	(2,798,260)
d. Less: investment expense	_	430,179
e. Net investment earnings (loss)	-	(3,228,439)
Total additions	-	11,573,411
DEDUCTIONS		
1. Pension benefits	23,959,198	
2. Refund of contributions	637,822	
3. Administrative expenses	447,921	
Total deductions	-	25,044,941
Change in net assets:		(13,471,530)
Prior period adjustment		0
Plan Fiduciary Net Position, 12/31/2014	-	285,772,821
Plan Fiduciary Net Position, 12/31/2015	_	272,301,291

Table 11

NET PENSION LIABILITY

	<u>2015</u>	<u>2014</u>
Total Pension Liability		
Service Cost	12,384,960	11,405,611
Interest	26,359,257	25,718,424
Changes of benefit terms	0	86,298
Differences between expected and actual experience	6,483,011	18,507,784
Changes of assumptions	0	0
Benefit Payments, including refunds of member contributions	(24,597,020)	(22,884,026)
Net change in total pension liability	20,630,208	32,834,091
Total pension liability - beginning	491,393,125	458,559,034
Total pension liability - ending (a)	512,023,333	491,393,125
Plan Fiduciary Net Position		
Contributions - employer	7,398,945	6,822,279
Contributions - member	7,402,905	6,822,279
Net investment income	(3,228,439)	14,497,901
Benefit payments, including refunds of member contributions	(24,597,020)	(22,884,026)
Administrative expense	(447,921)	(386,713)
Other	0	0
Net change in plan fiduciary net position	(13,471,530)	4,871,720
Plan fiduciary net position - beginning	285,772,821	280,901,101
Plan fiduciary net position - ending (b)	272,301,291	285,772,821
Net pension liability - ending (a) - (b) *	239,722,042	205,620,304
Plan fiduciary net position as a percentage of the total pension liability	53.2%	58.2%
Covered-employee payroll	93,899,096	89,034,522
Net pension liability as a percentage of covered-employee payroll	255.3%	230.9%
GASB 67 Blended Discount Rate Beginning of Period:	5.50%	5.75%
GASB 67 Blended Discount Rate End of Period:	5.50%	5.50%

^{*} A 1% decrease in the discount rate increases the net pension liability to \$301,595,957, an increase of \$61,873,915. A 1% increase in the discount rate decreases the net pension liability to \$187,522,372, a decrease of \$52,199,670.

Table 12

SCHEDULE OF EMPLOYER CONTRIBUTIONS
(Excludes Member Contributions)

Fiscal Year <u>Ended</u>	Actuarially Determined Contribution	Contributions in Relation to the Actuarially <u>Determined Contribution</u>	Contribution Deficiency (Excess)	Covered Employee <u>Payroll</u>	Percentage Contributed
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%

			Tak	Table 13					
			GASB 68 Sun	GASB 68 Summary for 2015					
			Tota	Total Plan					
						Deferred	Deferred		
	Total Pension		Net Pension	NPL Discount	NPL Discount	Outflows of	Jo swolJuI	Pension	Amortization
	Liability	Plan Net Position	Liability (NPL)	Rate +1%	Rate -1%	Resources	Resources	Expense	Period
Balance, Beginning of Year (1)	458,559,034	280,901,101	177,657,933	130,636,388	233,433,396	-	-	-	
Changes for the year									
Service Cost	11,405,611		11,405,611					11,405,611	
Interest Cost	25,718,424		25,718,424					25,718,424	
Benefit Changes	86,298		86,298					86,298	
Experience loss (gain)	18,507,784		18,507,784			16,894,202	1	1,613,582	11.47
Changes in assumptions	-		1			-	-	-	11.47
Contributions - Employer		6,822,279	(6,822,279)						
Contributions - Employee		6,822,279	(6,822,279)					(6,822,279)	
Net Investment Income		14,497,901	(14,497,901)						
Expected Return on Investments								(20,706,601)	
Investment (gain) loss expensed								1,241,740	5.00
Investment (gain) loss deferred						4,966,960	-		
Benefits paid including refunds	(22,884,026)	(22,884,026)	1					1	
Administrative Expense		(386,713)	386,713					386,713	
Other Changes		-	-					-	
Amortization						1	1		
Net Changes	32,834,091	4,871,720	27,962,371			21,861,162	-	12,923,488	
Balance, End of Year (2)	491,393,125	285,772,821	205,620,304	155,104,569	265,558,390	21,861,162	1	12,923,488	
(1) Measurement Date December 31, 2013									
(2) Measurement Date December 31, 2014									

				Table 14					
			GASB 68	GASB 68 Summary for 2016					
				Total Plan					
	Total Pension		Net Pension	NPL Discount	NPL Discount	Deferred Outflows of	Deferred Inflows		Amortization
	Liability	Plan Net Position	Liability (NPL)	Rate +1%	Rate -1%	Resources	of Resources	Pension Expense	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			5,921,225	-	561,786	11.54
Changes in assumptions			1			1			11.54
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								(21,048,846)	
Investment (gain) loss expensed								4,855,457	5.00
Investment (gain) loss deferred						19,421,828			
Benefits paid including refunds	(24,597,020)	(24,597,020)	ı					1	
Administrative Expense		(447,921)	447,921					447,921	
Other Changes		-	-					-	
Amortization			ı			(2,855,322)	1	2,855,322	
Net Changes	20,630,208	(13,471,530)	34,101,738			22,487,731			
Balance, End of Year (2)	512,023,333	272,301,291	239,722,042	187,522,372	301,595,957	44,348,893	-	19,012,952	
(1) Measurement Date December 31, 2014									
(2) Measurement Date December 31, 2015									

Table 15

Deferred Outflows/(Inflows) Amortization Schedule as of December 31, 2016
(Measurement Date: December 31, 2015)

Date Established	Source	Initial Amount	Deferred Amount	Remaining Years	Amortization Payment
12/31/2015	Experience Loss	6,483,011	5,921,225	10.54	561,786
12/31/2015	Investment Loss	24,277,285	19,421,828	4.00	4,855,457
12/31/2014	Experience Loss	18,507,784	15,280,620	9.47	1,613,582
12/31/2014	Investment Loss	6,208,700	3,725,220	3.00	1,241,740
Total			44,348,893		8,272,565

 $\underline{\textbf{Table 16}}$ HISTORICAL SUMMARY OF FUND ADDITIONS AND DEDUCTIONS

ADDITIONS BY SOURCE

	Employer				
Fiscal	Contributions			Net	
Year	as a Percent	Employer	Employee	Investment	
Ended	of Payroll	Contributions	Contributions	<u>Income</u>	<u>Total</u>
12/31/06	6.72%	4,287,457	4,336,560	21,140,066	29,764,083
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

DEDUCTIONS BY TYPE

Fiscal				
Year	Benefit		Admin	
Ended	<u>Payments</u>	<u>Refunds</u>	<u>Expenses</u>	<u>Total</u>
12/31/06	13,322,042	492,193	412,824	14,227,059
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

Table 17
SCHEDULE OF MEMBERSHIP

Fiscal Year	Active	Terminated Vested	Service Retirees and	Disabled	Total	Total
Ended	Members	<u>Members</u>	Beneficiaries	<u>Retirees</u>	Retirees	<u>Members</u>
12/31/06	1,414	95	955	13	968	2,477
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

 $\underline{\textbf{Table 18}}$ SCHEDULE OF ACTIVE MEMBERS VALUATION DATA

Fiscal Year	Active	Covered	Average Payroll	Annual Percentage Increase in Average
Ended	Members	<u>Payroll</u>	Rate	Payroll Rate
12/31/2006	1,414	67,750,706	47,914	3.74%
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%

 $\underline{ \mbox{Table 19}} \\ \mbox{SCHEDULE OF RETIREES ADDED TO AND REMOVED FROM ROLLS} \\$

Fiscal		Annual		Annual				Average	Retirees as F	
Year		Allowances		Allowances		Annual	Percent	Annual	of Active M	embers
Ended	Added	Added	Removed	Removed	<u>Total</u>	Allowances	Change	Allowances	Number	Pay
12/31/2006	71	1,252,138	34	339,133	968	13,645,458	N/A	14,097	68.5%	20.1%
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%

 $\underline{\textbf{Table 20}}$ SCHEDULE OF RETIRED MEMBERS BY TYPE OF BENEFIT

Amount of	Number										
Monthly	of	Typ	e of Retireme	ent*	Option Selected**	•					
<u>Benefit</u>	Retirees	<u>1</u>	<u>2</u>	<u>3</u>	LIFE	<u>C1</u>	<u>C2</u>	<u>C3</u>	<u>C4</u>	D	E
1 - 100	2	2	0	0	2	0	0	0	0	0	0
101 - 200	14	7	0	7	1	0	0	0	0	3	10
201 - 300	24	22	0	2	16	2	0	0	0	1	5
301 - 400	55	43	0	12	27	1	0	0	1	6	20
401 - 500	68	53	0	15	33	0	0	1	1	7	26
501 - 600	64	56	0	8	37	0	1	1	0	4	21
601 - 700	61	51	1	9	29	1	0	0	0	9	22
701 - 800	56	46	1	9	28	0	0	0	1	11	16
801 - 900	56	49	1	6	35	0	1	0	0	6	14
901 - 1,000	63	57	0	6	25	3	1	0	0	9	25
1,001 - 1,500	246	215	4	27	124	1	0	1	0	30	90
1,501 - 2,000	209	189	2	18	95	0	0	0	1	29	84
Over 2,000	382	<u>365</u>	0	<u>17</u>	<u>169</u>	<u>7</u>	0	1	0	70	135
Total	1,300	1,155	9	136	621	15	3	4	4	185	468

*Type of Retirement:

1 Service Retirement

2 Disability Retirement

3 Beneficiary

**Option Selected:

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

SCHEDULE OF BENEFIT PAYMENTS BY TYPE

Fiscal					
Year	Service	Disability			Total
<u>Ended</u>	Retirement	Retirement	Beneficiaries	Refunds	Benefits
12/31/2006	12,189,473	143,990	988,579	492,193	13,814,235
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

Table 21
SCHEDULE OF AVERAGE ANNUAL BENEFIT PAYMENTS

Fiscal Year <u>Ended</u>	Service Retirement and Beneficiaries	Disability Retirement	Total	Annual Percentage Increase in Average Benefits
12/31/2006	13,799	11,076	13,762	3.18%
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%

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: 5.50%

Amortization of Unfunded

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

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

Years of	Turnover
<u>Service</u>	Probability
<1	10.0%
1	8.0%
2-3	5.0%
4-5	4.0%
6-9	3.0%
10+	2.0%

DESCRIPTION OF ACTUARIAL ASSUMPTIONS AND METHODS

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

	Retirement
<u>Age</u>	Probability
< 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:

Years of	Annual
<u>Service</u>	<u>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.

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Outlined on the following pages are the principal features of the Plan reflected in the 2015 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.

SUMMARY OF BENEFIT AND CONTRIBUTION PROVISIONS

Service Retirement Eligibility:

A member is eligible for normal retirement on his Normal Retirement Date. For members hired after January 1, 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.

Service Retirement Allowance:

Upon service retirement, a member becomes eligible to receive an annual allowance, payable in equal monthly installments. The annual allowance is computed as follows:

Normal Retirement Allowance under Alternate Benefit Formula

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.

An amount equal to 2.00% of the member's Final Compensation, multiplied by the number of years of Creditable Service up to 35 years. The maximum annual benefit is 70.0% of Final Compensation.

Normal Retirement Allowance under Benefit Formula in SMC 3.05.160

Employees hired before January 1, 2009 who terminate after January 1, 2009 may elect this formula at retirement.

An amount equal to 2.15% of the member's Final Compensation, multiplied by the number of years of Creditable Service up to 30 years. The maximum annual benefit is 64.5% of Final Compensation.

Early Retirement Allowance

The Normal Retirement Allowance calculated using Creditable Service and Final Compensation as of the member's Early Retirement Date.

Disability Retirement Eligibility:

Permanent and total disability, as determined by the Board, prior to Normal Retirement Age provided the member has at least 7 years (5 years for employees hired prior to January 1, 2015) of City service in the ten-year period prior to disability. The 7 (or 5) year service requirement does not apply if the disability is due to accidental causes while engaged in City service.

Disability Retirement Allowance:

An amount equal to 1.25% of the member's Final Compensation, multiplied by the number of years of Creditable Service projected to Normal Retirement Age. The minimum annual benefit is \$2,400 per year for "Duty Related" disability and \$1,200 per year for "Non-duty Related" disability.

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, 2015

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, 2015

Active Members

Item	Male	Female	Total
Number of Members	\$96	459	1,424
Annual Salaries	\$62,433,169	\$27,049,336	\$89,482,505
Average Age	48.3	48.4	48.3
Average Service	12.3	11.6	12.0

EXHIBIT A (continued)

(continued)

Summary of Membership Data as of December 31, 2015

Retirees and Beneficiaries

Item	Number	Annual Annuities	Average Annuities
Retired Members	1,155	\$22,816,409	\$19,754
Survivor Annuitants	136	\$1,746,158	\$12,839
Disabled Annuitants	6	\$125,328	\$13,925
Total Annuitants	1,300	\$24,687,895	\$18,991

EXHIBIT A (continued)

Summary of Membership Data as of December 31, 2015

Vested Terminations and Portables

Item	Number	Annual Annuities	Average Annuities
Vested Terminations	65	\$603,365	\$10,227
Portables*	38	\$185,979	\$4,894

^{*} 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

	Future Retirees	Current Retirees Only
2016	179 741 763	\$24 513 401
2017	28.417.606	24,120,630
2018	29,656,131	23,703,789
2019	30,994,901	23,264,037
2020	32,304,381	22,800,634
2021	33,552,612	22,314,868
2022	34,804,736	21,806,027
2023	36,007,442	21,273,807
2024	37,091,612	20,717,740
2025	38,140,207	20,137,261
2026	39,173,655	19,531,863
2027	40,155,016	18,901,256
2028	41,069,092	18,245,524
2029	41,906,946	17,565,189
2030	42,645,418	16,860,523
2031	43,273,112	16,134,305
2032	43,917,814	15,387,888
2033	44,370,598	14,623,719
2034	44,796,361	13,844,661
2035	45,048,485	13,053,885

THIBIT C

Age and Service Distribution

	7					_								,0
	Total	7	57	126	156	160	217	221	227	181	26	16	1,424	100.0%
	40 & Up	0	0	0	0	0	0	0	0	1	2	2	3	0.300%
	35 to 39	0	0	0	0	0	0	0	9	14	9	1	27	1.9%
	30 to 34	0	0	0	0	0	0	1	14	∞	5	0	28	2.0%
	25 to 29	0	0	0	0	0	5	23	24	25	4	4	85	6.0%
able Service	20 to 24	0	0	0	0	1	21	43	43	28	∞	0	144	10.1%
Years of Creditable Service	15 to 19	0	0	0	9	24	56	38	31	31	15	4	205	14.4%
Y	10 to 14	0	0	3	31	28	35	38	35	23	9	3	202	14.2%
	5 to 9	0	6	48	58	56	53	36	45	30	∞	2	345	24.2%
	1 to 4	3	25	46	49	36	36	36	23	16	2	0	272	19.1%
	Under 1	4	23	29	12	15	11	9	9	5	0	0	1111	7.8%
Attained	Age	Under 25	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 & Up	Total	Freq. Pct.

XHIBIT D

Age, Salary and Service Distribution

	_													,0	
	Total	298,621	2,650,044	7,058,977	9,887,426	10,487,241	14,060,551	14,189,092	15,073,967	11,342,615	3,433,673	1,000,296	89,482,505	100.0%	62,839
	40 & Up	0	0	0	0	0	0	0	0	49,276	113,943	116,423	279,641	0.3%	55,928
	35 to 39	0	0	0	0	0	0	0	338,593	1,106,400	339,863	82,743	1,867,599	2.1%	69,170
	30 to 34	0	0	0	0	0	0	69,250	1,017,093	533,337	342,921	0	1,962,601	2.2%	70,093
	25 to 29	0	0	0	0	0	271,513	1,540,711	1,473,721	1,579,581	256,810	235,409	5,357,745	%0.9	63,032
Years of Creditable Service	20 to 24	0	0	0	0	38,071	1,407,700	2,718,817	3,019,258	1,750,318	475,014	0	9,409,178	10.5%	65,342
	15 to 19	0	0	0	426,515	1,724,176	4,047,040	2,424,136	2,168,715	1,824,654	973,047	253,924	13,842,206	15.5%	67,523
	10 to 14	0	0	135,285	1,868,342	1,950,337	2,361,537	2,393,858	2,393,449	1,454,125	332,938	144,732	13,034,603	14.6%	64,528
	5 to 9	0	488,560	2,994,665	3,647,169	3,598,057	3,298,015	2,257,009	2,836,663	1,792,323	504,852	167,066	21,584,380	24.1%	62,563
	1 to 4	163,835	1,261,771	2,632,811	3,323,043	2,459,905	2,104,579	2,331,574	1,556,115	997,762	94,286	0	5,218,871 16,925,680 21,584,380	18.9%	62,227
	Under 1	134,787	899,713	1,296,217	622,356	716,696	570,166	453,738	270,361	254,838	0	0	5,218,871	5.8%	47,017
Attained	Age	Under 25	25 to 29	30 to 34	35 to 39	40 to 44	45 to 49	50 to 54	55 to 59	60 to 64	65 to 69	70 & Up	Total	Freq. Pct.	Avg. Sal.

XHIBIT E

Average Benefits for Service Retirement

Attained	Mal	e	Female	le	Tota	al
Age	Number	Number Avg. Ben.	Number	Number Avg. Ben.	Number	Number Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	27	19,453	23	23,810	50	21,457
55 to 59	52	21,923	50	21,219	102	21,578
60 to 64	129	24,470	94	18,857	223	22,104
65 to 69	200	24,866	115	18,154	315	22,416
70 to 74	119	20,190	62	13,027	198	17,332
75 to 79	9/	20,644	55	13,622	131	17,696
80 to 84	38	15,568	20	11,070	58	14,017
85 to 89	25	13,849	15	12,778	40	13,448
90 to 94	16	15,431	13	10,801	29	13,355
95 & Up	5	7,031	4	7,300	6	7,151
Total	289	21,814	468	16,731	1155	19,754
Average Age	0.69		68.5		68.8	
Freq. Pct.	%5.65		40.5%		100.0%	

XHIBIT F

Average Benefits for Survivor Beneficiary

Attained	Male	e	Female	le	Total	Ta
Age	Number	Number Avg. Ben.	Number	Number Avg. Ben.	Number	Number Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	0	0	3	12,605	3	12,605
55 to 59	1	9,123	6	15,814	10	15,145
60 to 64	2	23,765	19	17,024	21	17,666
65 to 69	0	0	11	17,209	11	17,209
70 to 74	0	0	11	14,420	11	14,420
75 to 79	0	0	29	11,891	29	11,891
80 to 84	2	8,243	23	10,578	25	10,391
85 to 89	1	2,339	17	10,372	18	9,926
90 to 94	0	0	9	6,557	9	6,557
95 & Up	0	0	2	7,675	2	7,675
Total	9	12,580	130	12,851	136	12,839
Average Age	71.7		74.9		74.7	
Freq. Pct.	4.4%		%9.56		100.0%	

XHIBIT G

Average Benefits for Disability Retirement

Attained	Mal	e	Female	le	Total	al
Age	Number	Number Avg. Ben.	Number	Number Avg. Ben.	Number	Number Avg. Ben.
Under 50	0	0	0	0	0	0
50 to 54	1	18,583	1	19,080	2	18,831
55 to 59	2	13,054	0	0	2	13,054
60 to 64	1	16,772	0	0	1	16,772
65 to 69	0	0	3	10,497	3	10,497
70 to 74	1	13,295	0	0	1	13,295
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	S	14,952	4	12,643	6	13,925
Average Age	59.6		62.3		8.09	
Freq. Pct.	55.6%		44.4%		100.0%	

XHIBIT H

Average Benefits for Vested Terminations

Attained	Mal	e	Fema	ale	Tota	1
Age	Number	Number Avg. Ben.	Number	Number Avg. Ben.	Number	Number Avg. Ben.
Under 30	0	0	0	0	0	0
30 to 34		3,030	1	8,529	2	5,780
35 to 39	2	6,094	9	9,406	8	8,578
40 to 44	8	14,379	8	7,063	16	10,721
45 to 49	10	7,477	11	14,099	21	10,946
50 to 54	4	7,404	3	6,373	7	6,962
55 to 59	Т	7,084	2	24,044	3	18,390
60 to 64	0	0	2	8,939	2	8,939
65 & Up	0	0	0	0	0	0
Total	26	9,297	33	10,959	59	10,227
Average Age	45.5		45.7		45.6	
Freq. Pct.	44.1%		55.9%		100.0%	

XHIBIT I

Average Benefits for Portables

Spokane Employees' Retirement System

Attained	Male	** 9 0	Female	о С	Total	A *:: ~ D
Age	Number Avg. ben."	/g. ben. ~	Number Avg. Ben."	vg. ben."	Number	number Avg. ben."
Under 30	0	0	0	0	0	0
30 to 34	1	3,920	æ	3,732	4	3,779
35 to 39	2	1,530	2	5,339	4	3,434
40 to 44	2	6,519	1	1,754	3	4,931
45 to 49	4	3,628	4	10,658	∞	7,143
50 to 54	4	2,652	1	7,207	5	3,563
55 to 59	2	4,033	4	8,388	9	6,936
60 to 64	2	4,478	2	2,761	4	3,619
65 & Up	æ	2,797	1	2,885	4	2,819
Total	20	3,527	18	6,413	38	4,894
Average Age	51.6		48.1		49.9	
Freq. Pct.	52.6%		47.4%		100.0%	

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

Statistical Section

Schedule of Revenues by Source

Fiscal Year	Employer Contribution	Employer Contributions	Member Contributions	Net Investment Income	Total Revenues
2006	6.72%	4,287,457	4,336,560	21,140,066	29,764,083
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

^{*} 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.

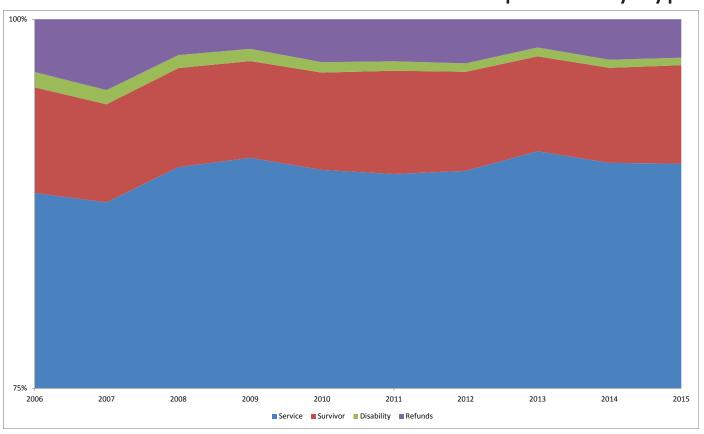
Schedule of Expenses by Type

Fiscal			Net	Total
Year	Benefits	Refunds	Administrative	Expenses
2006	13,322,042	492,193	412,824	14,227,059
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

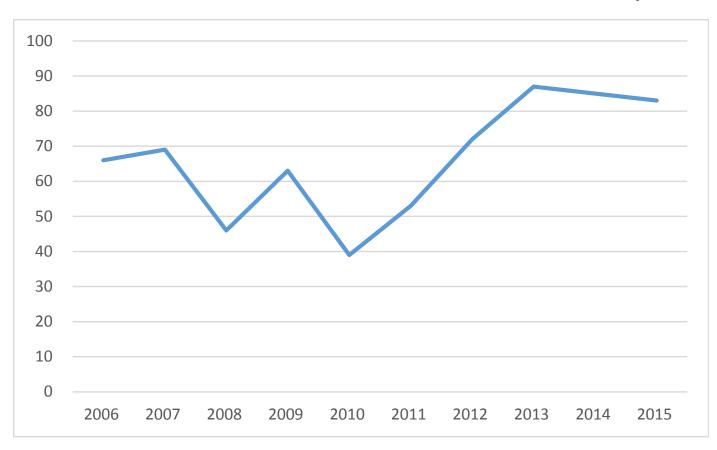
Schedule of Benefit Expenses by Type

			Disability			
	Service Retiree	Survivor	Retiree			
Year	Benefits	Benefits	Benefits	Refunds	Total	
2006	12,189,473	988,579	143,990	492,193	13,814,235	
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	

Schedule of Benefit Expenses by Type



Retirements by Year



Retirements During 2015

				Date		Yrs	
	Name	Department	Position	Retired	Option	Serv	Age
1	Richard G.	Integrated Capital	Engineering Technician IV	1/1/2015	E	31.0	60
2	McDermott	Management Solid Waste Management	Landfill/Transfer Station Forenerson	1/2/2015	Е	2/12	63
2	Ross J. Davenport Warren E. Beck	S .	Landfill/Transfer Station Foreperson	1/3/2015 1/3/2015	E E	24.3 16.3	03 71
3 4	Richard D. Poetter	Solid Waste Management Sewer Maintenance	Heavy Equipment Operator Laborer II	1/9/2015	A	5.8	62
5	Pamela J. Dolan	Accounting	Director	1/15/2015	E	20.1	50
6	Kristine G. Williams	CD/HS Operations	Associate Planner	1/15/2015	ST	18.4	52
7	James R. Robertson	Fleet	Heavy Equipment Mechanic	1/31/2015	ST	35.3	69
8	Karen A. Schatz	Library	Library Assistant II	2/1/2015	ST	9.1	64
9	Ellis L. Shupe	Water	Water Superintendent	2/3/2015	E	41.6	64
10	Jerrie L. Allard	CD/HS Operations	Director	2/3/2015	В	8.5	57
11	Randall J. Hathaway	Engineering Services	Water Construction Inspection	2/4/2015	E	37.3	62
	•		Supervisor				
12	George W. Williams	Advanced Wastewater Treatment	Stationary Engineer	2/4/2015	E	22.5	71
13	Sharon S. Bowers	Accounting	Accountant I	2/14/2015	ST	25.9	50
14	Jolynn D. Morse ^	Advanced Wastewater Treatement Plant	Stationary Engineer	2/20/2015	E	15.0	50
15	Raymond J. Schug	IT	Information Analyst	3/3/2015	Ε	26.3	50
16	Alan R. Milsom	Solid Waste Management	Refuse District Supervisor	3/3/2015	Ε	23.6	59
17	Louise B. Sullivan	Library	Library Branch Manager	3/7/2015	ST	19.5	60
18	William G. Nesbitt	Solid Waste Management	Refuse Collector III	4/2/2015	Ε	21.3	64
19	Wendy S. Henneman	Water	Certified Water Service Specialist	4/3/2015	ST	24.3	51
20	Judy K. Babb	Parks & Recreation	Storekeeper	4/4/2015	ST	24.0	64
21	Debra A. Lehinger	Building Services	Permit Specialist	4/4/2015	ST	22.1	62
22	Kenneth A. Ristau	Water	Water Service Foreperson	4/11/2015	D	36.8	63
23	Betty M. Peters	Street	Clerk III	4/11/2015	ST	30.1	66
24	Mallur R. I. Nandagopal	Water	Senior Engineer	4/14/2015	E	38.1	76
25	Victor J. Nicholson	Water	Certified Water Hydroelectric Plant Mechanic	5/2/2015	ST	28.4	56
26	Robert A. Glasser	Water	Certified Water Service Specialist	5/2/2015	ST	19.1	62
27	Anthony D. Snow *	IT	Computer Network Analyst	5/3/2015	D	5.0	52
28	William T. Todd	Engineering Services	Field Engineer	5/5/2015	Ē	35.9	63
29	Mary R. McIntyre	Accounting	Accountant II	5/5/2015	ST	20.5	63
30	Bruce K. Vails	Parks & Recreation	Park Caretaker	5/6/2015	ST	21.3	53
31	Briana L. Bradley	Public Defender	Clerk II	5/8/2015	ST	20.1	60
32	Debroah M. Stussi	Combined Communications Center	Fire Communications Specialist	5/11/2015	D	15.8	61
33	Donna M. Starr	Solid Waste Disposal	Cash Accounting Clerk I	5/14/2015	ST	23.4	66
34	Teresa R. Stapleton *	Solid Waste Management	Laborer II	5/28/2015	D	18.5	52
35	Gregory A. Charbonneau	Street	Laborer II	6/3/2015	ST	13.2	64
36	James A. Bond	Fleet	Parts Technician	6/6/2015	Ε	28.3	62
37	Meta S. Marshall	Police	Clerk III	6/6/2015	E	15.3	69
38	Michelle M. Stanton	City Clerk	Clerk II	6/9/2015	ST	25.0	60
39	Douglas C. Roberts	Library	Library Assistant	6/14/2015	D	42.4	65
40	Timothy O. Burns *	Police Ombudsman	Police Ombudsman	6/28/2015	Ē	5.5	62
41	Ngoc T. Nguyen	Sewer Maintenance	Waste Water Specialist	7/1/2015	Ē	33.3	69
42	Nancy L. McLaughlin*	City Council	Councilmember	7/1/2015	Ē	8.0	57
43	Steven D. Harvey	Library	Reprographics Technician	7/3/2015	ST	14.1	62

Retirements During 2015 (continued)

				Date		Yrs	
	Name	Department	Position	Retired	Option	Serv	Age
44	John W. Miller	Enginnering Services	Senior Engineer	7/7/2015	D	34.1	61
45	Patrick S. Sheeks *	Solid Waste Management	Refuse Collector I	7/7/2015	ST	17.6	50
46	Janet M. Fitzpatrick	Public Works & Utilities	Clerk II	7/7/2015	Ε	7.4	62
47	Debra R. Devenport	Accounting	Clerk II	7/7/2015	D	8.3	58
48	Wayne W. Johnson	Water	Water Service Specialist	7/8/2015	Ε	22.1	64
49	Susan L. Hardie	Public Works & Utilities	Clerk IV	7/17/2015	ST	15.5	61
50	Mark A. Barnett *	Library	Professional Librarian I	7/19/2015	ST	7.6	50
51	Darrell H. Alvis	Street	Laborer II	7/31/2015	ST	5.0	62
52	Eddie L. Mitchell	Water	Laborer II	8/2/2015	ST	7.0	62
53	Judith M. Burke	Solid Waste Disposal	Laborer II	8/3/2015	ST	23.3	55
54	Judy L. Eymont	Asset Management	Custodian II	8/4/2015	ST	16.8	64
55	Laurie A. Churchill	Public Defender	Clerk IV	8/6/2015	ST	25.0	61
56	Pedro M. Capiral	Solid Waste Disposal	Laborer II	8/6/2015	Ε	23.4	61
57	Daryl J. Wing	EMS Fund	Fire Apparatus Maintenance	8/8/2015	Ε	23.6	58
			Foreperson				
58	Dennis R. Van Meter	Library	Information Technology Manager	8/11/2015	ST	18.8	50
59	Richard A. Cain	Law Enforcement Information	Supervisory Analyst	8/14/2015	Ε	22.3	55
60	D:1/ T	Systems	A Programme A Lorente	0/4/2045		444	65
60	Di V. Truong	IT .	Application Analyst	9/1/2015	A	14.1	65
61	Denis G. Desmarais #	Civil Service	Chief Examiner	9/1/2015	E	4.1	65
62	Duane H. Hille *	Parks & Recreation	Marketing Assistant	9/3/2015	E	5.8	50
63	Karrie L. Duncan	Water	Inventory Control Specialist	9/12/2015	D	18.8	52
64	Shannon M. Hallam	Police	Police Evidence Supervisor	9/12/2015	ST	15.7	50
65	Douglas C. Lewis	Streets	Asphalt Raker	9/24/2015	ST	12.0	60
66	Timothy J. Ryan	Water	Certified Water Service Specialist	10/2/2015	ST	25.3	59
67	Michael R. Jobe *	Advanced Wastewater Treatment	Intrument Repair Technician	10/2/2015	ST	18.3	53
68	Ronald E. Triplett	Water	Certified Water Service Specialist	10/2/2015	ST	30.7	63
69	Robert A. Darilek	Advance Wastewater Treatment	Stationary Engineer Supervisor	10/3/2015	E	37.0	60
70	June E. Watson	Combined Communications Center	Fire Communications Center Shift Supervisor	10/3/2015	D	17.8	58
71	Edward W. Robinson	Building Services	Public Works Lead Inspector	10/3/2015	D	10.0	67
72	Steven G. Anderson	Solid Waste Disposal	Laboratory Technician	10/24/2015	D	11.2	66
73	George A. Worn	Streets	Street Maintenance Foreperson	11/3/2015	Ε	30.4	58
74	Janice L Campbell	Probation Services	Clerk II	11/3/2015	Ε	9.1	66
75	Randal L. Peterson	Solid Waste Management	Refuse Collector III	11/7/2015	ST	22.7	59
76	Susan Creed	Library	Downtown Library Assistant Manager	11/8/2015	ST	18.3	65
77	Roger W. Flint *	Public Works & Utilities	Director	11/9/2015	Ε	18.1	50
78	Lester R. Lea	Water	Certified Water Service Specialist	11/21/2015	ST	14.2	56
79	Nancy L. Goodspeed	Parks & Recreation	Community Affairs Coordinator	12/3/2015	ST	8.8	66
80	Susan R. Arnesen *	Library	Senior Office Assistant	12/5/2015	E	20.7	66
81	Marie C. Wyatt	Library	Library Page II	12/5/2015	ST	11.8	61
82	Johnna M. Boxley #	Public Facilities District	Director - Entertainment Facilities	12/19/2015	E	17.5	67
83	Michael F. Busby *	Police	Police Records Manager	12/29/2015	Ē	16.2	50

^{*} Retired as vested employee

[#] Retired under membership through Portability

[^] Retired as spouse of deceased active employee

Retiree Deaths During 2015

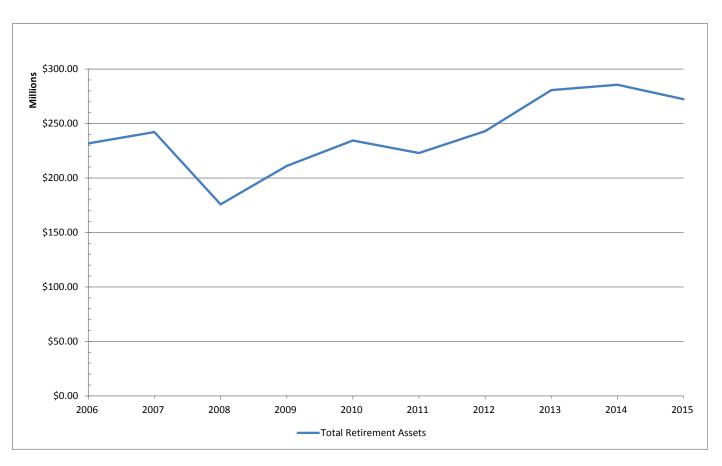
					Retirement
	Name	Date Retired	Date of Death	Age	Option
1	Patricia A. Crook	4/23/97	1/7/15	83	Ε
2	Harry L. Sparks	2/2/85	1/8/15	96	D
3	Thomas A. Phillips	3/7/87	1/12/15	83	Α
4	Sharon A. Bierlair	1/8/00	1/14/15	67	Α
5	Steven W. Gustafson	6/7/05	1/14/15	61	Ε
6	Alice V. White	5/19/86	1/17/15	92	Ε
7	Dorothy L. McMullin	1/31/06	2/7/15	90	D
8	Christine I. Martinelli	10/16/14	2/16/15	75	D
9	Stephen J. Niemczyk	2/15/14	2/18/15	65	Е
10	Clyde C. Clutter	2/9/13	3/11/15	85	ST
11	Theodore S. Todd	2/9/13	4/8/15	63	Е
12	Catherine D. Basta	9/18/05	4/13/15	84	D
13	Marjorie E. Fisk	5/10/86	5/1/15	91	Α
14	Erma B. Kembel	7/3/92	5/8/15	89	ST
15	Claudia R. Bryan	2/18/12	5/13/15	62	ST
16	Calvin D. Tucker	5/4/93	5/13/15	81	ST
17	Eileen L. Parkey	7/24/94	5/28/15	98	D
18	Dale A. Johnson	12/3/06	5/31/15	74	D
19	Alexander M. Schmall	12/3/05	6/1/15	75	ST
20	Steven L. Haynes	7/18/09	6/3/15	62	D
21	Wilbert O. Lenke	1/17/89	6/3/15	85	D
22	Donald E. Witter	3/7/87	6/7/15	79	Α
23	Jacob R. Greenaway	5/21/83	6/8/15	95	Е
24	Terry L. Montgomery	1/13/12	7/9/15	63	D
25	Harland D. Mason	8/2/89	7/30/15	91	Α
26	Morris L. Gaylord	1/5/82	8/4/15	95	Е
27	Verdelle G. O'Neill	4/5/80	8/18/15	89	ST
28	Darwan R. Platz	1/9/85	8/23/15	93	Α
29	Marjorie S. Atwood	4/2/88	10/13/15	92	ST
30	Winnie G. Kreitz	5/4/93	10/13/15	84	ST
31	Anthony I. Montgomery	11/2/96	10/29/15	80	Е
32	Mary F. Stabin	10/6/90	11/13/15	90	ST
33	Duane L. Coble	6/9/01	11/14/15	70	ST
34	Raphael P. Wolf	1/1/87	11/15/15	80	D
35	Andrew G. Hottell	11/1/96	11/19/15	79	D
36	Natella I. Stickels	6/6/07	11/24/15	69	Ε
37	Caryl J. Anstadt	11/4/95	12/4/15	83	В
38	James A. Simpson	10/16/93	12/20/15	85	Е
39	Edward T. Clegg	11/1/97	12/29/15	86	ST
40	John T. King	12/18/04	12/30/15	68	Е

Active Member Deaths During 2015

					Years of
	Name	Department	Date of Death	Age	Service
1	Eric S. Kempner	Water	1/4/15	32	8.7
2	Duane A. Cooper	Solid Waste Management	1/25/15	35	12.1
3	Glenn E. Martin	Street	12/4/15	64	14.1

Investment Section

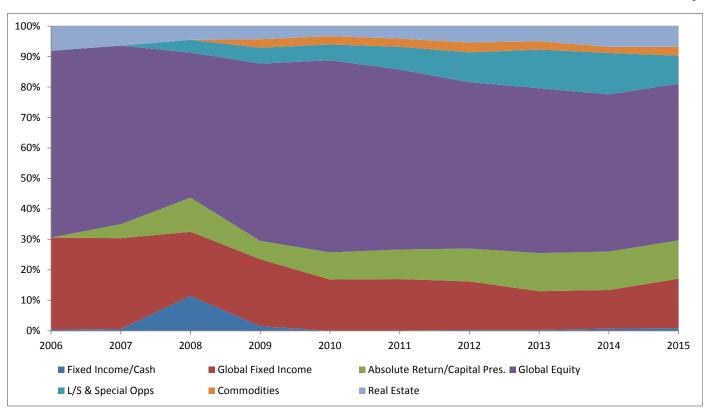
Total Retirement Assets



Schedule of Investment Results

	Market Value of Investments	Net Investment Income	Investment Rate of Return (net of fees)
2006	231,815,276	21,140,066	10.50%
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%

Investment Allocation History



Investment Listed by Type as of December 31, 2015

	Market Value					
Cash and Cash Equivalents:						
Cash Held by Treasurer	\$230,773					
Union Bank	2,373,538					
Fixed Income Investments:						
Vanguard Short-Term	10,226,948					
Hotchkis & Wiley High Yield	10,220,348					
PIMCO Global	11,374,469					
Tivico diobai	11,374,403					
Equity Investments:						
Hotchkis & Wiley Core Value I	14,207,862					
Delaware Large Cap Growth	15,034,295					
Vanguard Institutional Index	7,987,883					
MFS Blended Core	16,426,339					
Sterling Mid Cap Value	7,771,558					
Vanguard Mid Cap Growth	7,666,912					
Vanguard Mid Cap Index	5,087,485					
Champlain Small Cap Growth	4,865,051					
Phocas Small Cap Growth	4,015,755					
Bridge City Small Cap Growth	4,481,096					
Vanguard Small Cap Index	2,289,114					
International Investments:	0 247 505					
Berens Global Value	9,347,585					
Vanguard International Index	14 271 400					
Artisan International Value	14,371,486					
Euro Pacific	11,908,157					
Trivalent	8,604,289					
Real Estate Investments:						
Legacy Partners Realty III	949,195					
Metropolitan Realty V	917,194					
Morrison Street Fund IV	2,905,700					
Morrison Street Fund V	4,121,840					
Principal Global Investors REIT	9,165,127					
Alternative Investments:						
Orbi Med Royalty Opps	4,453,770					
Royalty Opps II	305,292					
Beach Point Select Fund	7,637,021					
Troob Capital Management	4,101,535					
Post Limited Term High Yield	5,515,222					
Rimrock Low Volatility American Beacon Flexible	8,837,463					
Castine Partners II	9,678,671 6,126,527					
Polar Long/Short	5,945,316					
Orbi Med Caduceus II	10,260,009					
Weatherlow Offshore I	14,475,503					
Pimco CommoditiesPLUS Strategy	8,412,201					
	-,,_31					
Total Cash and Investments	\$272,113,900					
	•					

