# SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM Report of Independent Auditors and Financial Statements with Required Supplementary Information and Additional Information

December 31, 2017 and 2016

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#### INDEPENDENT AUDITORS' REPORT

Board of Administration Seattle City Employees' Retirement System Seattle, Washington

#### **Report on the Financial Statements**

We have audited the accompanying financial statements of the Seattle City Employees' Retirement System (SCERS), which comprise the statements of fiduciary net position as of December 31, 2017 and 2016, 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.

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

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



#### Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of SCERS as of December 31, 2017 and 2016, and the results of its operations for the years then ended in accordance with accounting principles generally accepted in the United States of America.

#### **Report on Required Supplementary Information**

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

#### **Report on Other Information**

Our audits were conducted for the purpose of forming an opinion on the financial statements as a whole. The additional information, as listed in the table of contents, is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the financial statements. The information has been subjected to the auditing procedures applied in the audits 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 additional information, as listed in the table of contents, is fairly stated in all material respects in relation to the financial statements as a whole.

#### CliftonLarsonAllen LLP

Baltimore, Maryland July 26, 2018

### SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS Years Ended December 31, 2017 and 2016

This section presents management's discussion and analysis of the Seattle City Employees' Retirement System's (SCERS or the System) financial performance during the years ended December 31, 2017 and 2016. Please read it in conjunction with the accompanying financial statements and the related notes.

The City of Seattle is responsible for establishing and maintaining an internal control structure designed to ensure the protection of assets from loss, theft, or misuse, and to ensure the accounting information generated is adequate to prepare financial statements in conformity with generally accepted accounting principles. The internal control structure is designed to provide reasonable, though not absolute, assurance of achieving these objectives.

As a department of the City of Seattle, the Seattle City Employees' Retirement System is subject to this internal control structure. In addition, section 4.36.140.D of the Seattle Municipal Code requires the Board of Administration to annually transmit a report of the financial condition of the System to the City Council.

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 value, and revenues include the recognition of unrealized gains and 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. The basis of contributions to the System follows the principles of level cost financing, with current service financed on a current basis. Milliman Consultants and Actuaries, the consulting actuary, evaluates the funding status of the System.

#### This report contains the following information:

#### 1. Basic Financial Statements including:

- a. Statements of Fiduciary Net Position
- b. Statements of Changes in Fiduciary Net Position
- c. Notes to the Financial Statements

#### 2. Required Supplementary Information including:

- a. Schedule of Changes in Net Pension Liability and Related Ratios
- b. Schedule of Employer 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 Statement of Fiduciary Net Position shows the account balances at year-end and includes the net position
available for future benefit payments. The liabilities for future benefit payments are not included in this
statement; however, they are shown in the Schedule of Changes in Net Pension Liability and Related Ratios
that is included in the Required Supplementary Information.

### SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM MANAGEMENT'S DISCUSSION AND ANALYSIS Years Ended December 31, 2017 and 2016

- The Statement of Changes in Fiduciary Net Position shows the sources and uses of funds during the year and illustrates 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 trends that help to reflect the ongoing plan perspective and the long-term nature of the defined benefit plan.

- The Schedule of Changes in Net Pension Liability and Related Ratios contains actuarial information about the status of the plan.
- The Schedule of Employer Contributions contains historical trend information regarding the value of the total annual contributions the employer must pay and the actual contributions paid by employers in meeting this requirement.
- The Schedule of Investment Returns contains the investment returns realized on the total portfolio for the years since 2014.

#### **Financial Highlights**

- Net position increased by \$364 million (14.6%) during 2017. The primary driver was net investment income of \$389 million. Net position increased by \$175 million (7.6%) during 2016. The primary driver was a \$190 million in the net investment income.
- Revenue additions to net position for 2017 were \$575 million which includes member and employer contributions of \$186 million and revenue from investment activity totaling \$389 million. Revenue additions to net position for 2016 were \$370 million which includes member and employer contributions of \$180 million and revenue from investment activity totaling \$190 million.
- Expenses (deductions from net position) for 2017 increased by \$16 million (8.1%) from 2016. This can be primarily attributed to a \$10 million increase in retiree benefits. In 2017, the net increase in the number of retirees receiving benefits was 2.4%. Expenses for 2016 increased by \$11 million (6.0%) from 2015. This can be primarily attributed to an \$9.6 million increase in retiree benefits. In 2016, the net increase in the number of retirees receiving benefits was 2.6%.

#### **Fiduciary Net Position**

The table below provides a summary of assets and current liabilities for the years ended December 31:

	2017	2016	2015
Cash, short-term investments and receivables	\$ 293,323,449	\$ 443,140,843	\$ 170,672,072
Investments at fair value	2,815,776,988	2,351,299,369	2,154,482,878
Securities lending collateral	 11,358,941	11,130,677	50,952,037
Total assets	 3,120,459,378	2,805,570,889	2,376,106,987
Securities lending payable	11,350,612	11,125,376	53,633,431
Other payables	 256,236,201	305,947,349	9,452,393
Total liabilities	 267,586,813	317,072,725	63,085,824
Total net position	\$ 2,852,872,565	\$ 2,488,498,164	\$ 2,313,021,163

#### **Changes in Fiduciary Net Position**

The table below provides a summary of the changes in plan net position and reflects the activities of the fund for the years ended December 31:

	2017		2016		2015
Additions:					
Employer contributions	\$ 112,102,982	\$	108,454,496	\$	101,153,403
Member contributions	73,650,409		71,755,857		65,779,216
Net investment income and other income	 389,136,824		189,941,169	_	7,083,633
Total additions	 574,890,215		370,151,522		174,016,252
Deductions:					
Retiree benefits	179,226,526		168,967,298		159,349,807
Refunds of contributions	19,158,756		16,456,570		16,137,840
Administrative expenses	 12,130,532		9,250,653		8,211,137
Total deductions	 210,515,814	_	194,674,521	_	183,698,784
Net increase (decrease)	\$ 364,374,401	\$	175,477,001	\$	(9,682,532)

#### **Revenues - Additions to Fiduciary Net Position**

- In 2017, employer contributions increased by \$3.6 million (3.4%) compared to 2016. In 2016, employer contributions increased by \$7.3 million (7.2%) compared to 2015.
- Member contributions increased by \$1.9 million (2.6%) compared to 2016. In 2016, member contributions increased by \$6.0 million (9.1%) compared to 2015.
- Net investment income was \$389.1 million in 2017 compared to \$189.9 million in 2016 and \$7.1 million in 2015.

#### **Expenses - Deductions from Fiduciary Net Position**

- Retiree benefits increased in 2017 by \$10.3 million (6.1%) compared to 2016, primarily due to the increased number of members making application for retirement and a mandatory 1.5% COLA (Cost of Living Adjustment). As a comparison, retiree benefits increased \$9.6 million (6.0%) in 2016.
- Refunds of contributions increased in 2017 by \$2.7 million (16.4%) compared to amounts paid in 2016. In 2016, refunds increased by \$0.3 million (2.0%) compared to amounts paid in 2015.

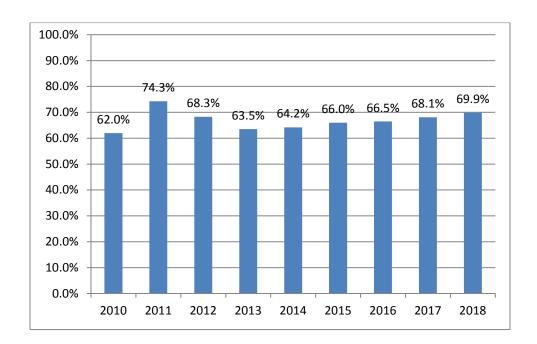
#### **Changes in Plan Membership**

The table below reflects the active membership and retiree changes for the years ended December 31:

	2017	2016	Change
Retirees and beneficiaries receiving benefits	6,534	6,382	2.4%
Current and terminated employees:			
Current employee members	9,283	9,151	1.4%
Terminated members entitled to, but not yet receiving benefits, Vested	1,312	1,257	4.4%
Terminated members not entitled to benefits			
beyond contributions and accumulated			
interest, Non-Vested	1,193	1,095	8.9%
Total	11,788	11,503	2.5%

#### **Funding Status**

#### Schedule of Funding Progress Funding Ratio As of January 1st Valuation Date



With the January 1, 2011 Valuation and the 2007-2010 Experience Study, the Board of Administration adopted a policy of asset smoothing over a 5-year period. The reported funding ratio as of January 1, 2012 reflects that change. Prior to January 1, 2011, all funding ratios were reported on a market basis.

Funds are accumulated from employer and employee contributions and investment earnings, and are used to pay present and future benefit obligations and administrative expenses. We continue to make a constant effort to achieve a fully funded status, thereby assuring the participants of a financially sound retirement system. In 2017, most active members contributed 10.03% of their salaries to the retirement fund and the City contributed 15.29%. In 2016, most active members contributed 10.03% of their salaries to the retirement fund and the City contributed 15.23%.

The graph above refers to the results of actuarial valuations prepared for funding purposes in accordance with Actuarial Standards of Practice (ASOPs). However, GASB 67 requires a separate actuarial valuation for accounting purposes. The primary purpose of the valuation for accounting purposes is to provide consistent, standardized methodology that allows comparability of amounts and increased transparency of the pension liability across U.S. pension plans complying with GASB 67. When reporting in accordance with GASB 67, the Plan Fiduciary Net Position as a Percentage of the Total Pension Liability was 72.04% as of December 31, 2017.

#### **Investment Activities**

One-year returns on asset classes (gross of fees) and comparative benchmarks are presented in the table below for the years ended December 31. These returns are calculated on a time-weighted rate of return basis:

#### 2017 Investment Performance

Total Portfolio	16.0%
Bench Mark: Policy Index	15.6%
Public Equity	23.9%
Bench Mark: MSCI ACWI IMI W/US Gross	24.3%
Core Fixed Income	3.9%
Bench Mark: Bloomberg: Barclays U.S Assergate	3.5%
Credit Fixed Income	8.1%
Bench Mark: Bloomberg: Custom Credit Index	7.2%
Private Equity	9.2%
Bench Mark: Custom Private Equity Index	9.7%
Real Estate	7.7%
Bench Mark: NCREIF ODCE Index	6.7%
Divesifying Strategies	8.8%
Bench Mark: HFRI Fund of Funds Comp. Index	7.7%
Cash	0.0%
Bench Mark: Citigroup 3-Month T-Bills	0.9%

0.4%

9.7%

9.1%

0.0%

0.5%

0.0%

0.3%

#### **Total Portfolio** 8.6% **Domestic Equities** 13.2% Benchmark: Russell 3000 Index (Blend) 12.7% International Equities 5.2% Benchmark: MSCI ACWI ex US IM/ND 4.4% **Broad Fixed Income** 4.3% Benchmark: Barclays U.S. Universal Index 3.9% **Private Equity** 6.5%

Benchmark: ASP Custom Private Equity Index

Benchmark: Russell NCREIF Property Index

Benchmark: HFRI Fund of Funds Comp. Index

Benchmark: Citigroup 3-Month T-Bills

**2016 Investment Performance** 

The investments of the System are governed primarily by the prudent investor rule. The prudent investor rule, as set forth by the Revised Code of Washington, establishes a standard for all fiduciaries, which includes anyone who has authority with respect to the fund. The System invests retirement funds for the long-term, anticipating both good and poor performing financial markets. The overall investment portfolio is positioned in a diversified manner to maximize return given the System's risk tolerance.

#### Contacting the Seattle City Employees' Retirement System

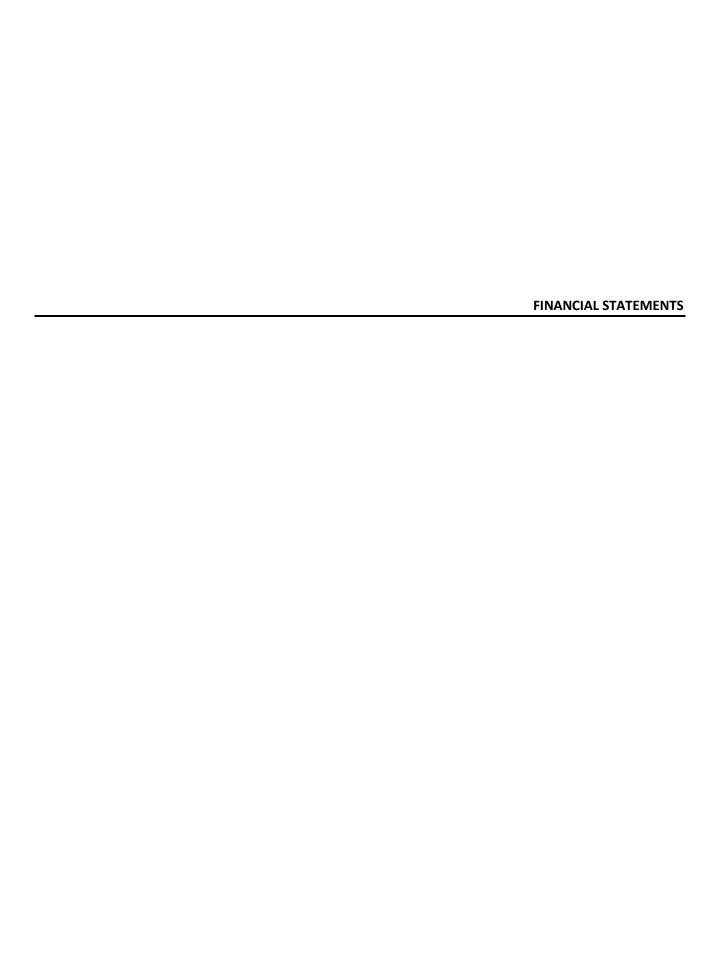
**Real Estate** 

Cash

**Diversifying Strategies** 

If you have questions about this report or need additional information, please contact us by telephone at: 206.386.1293 or by e-mail at: retirecity@seattle.gov or you may mail your questions to:

Seattle City Employees' Retirement System 720 Third Avenue, Suite 900 Seattle, WA 98104



## SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM STATEMENTS OF FIDUCIARY NET POSITION Years Ended December 31, 2017 and 2016

	2017	2016
Assets:		
Cash	\$ 5,513,428	\$ 6,302,934
Short-term investments	111,309,124	336,427,114
Total cash and short-term investments	116,822,552	342,730,048
Receivables:		
Members	4,327,168	3,434,870
Employer	5,657,238	6,143,927
Interest and dividends	4,103,031	3,486,918
Sales proceeds receivable	162,413,460	87,345,080
Total receivables	176,500,897	100,410,795
Investments, at fair value:		
Fixed income	676,019,482	539,527,403
Equity	1,604,858,505	1,350,196,766
Real estate	304,854,074	287,996,774
Alternative investments	230,044,927	173,578,426
Total investments, at fair value	2,815,776,988	2,351,299,369
Securities lending collateral	11,358,941	11,130,677
Total assets	3,120,459,378	2,805,570,889
Liabilities:		
Pensions payable and other	3,321,750	1,370,010
Obligations under securities lending	11,350,612	11,125,376
Investment commitments payable	252,914,451	304,577,339
Total liabilities	267,586,813	317,072,725
Fiduciary net position held in trust for pension benefits	\$ 2,852,872,565	\$ 2,488,498,164

## SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION Years Ended December 31, 2017 and 2016

	2017		2016
Additions:			
Contributions:			
Employer	\$ 112,102,982	\$	108,454,496
Member	 73,650,409		71,755,857
Total contributions	 185,753,391	_	180,210,353
Investment activities:			
Investment income:			
Net change in fair value of investments	363,468,284		163,299,357
Interest	13,471,317		10,569,831
Dividends	 22,509,987		24,780,531
Net investment income	399,449,588	_	198,649,719
Securities lending activities:			
Securities lending income	133,711		100,217
Borrowing rebates	(44,277)		165,375
Total securities lending income	89,434		265,592
Securities lending management fees	(20,135)		(66,376)
Net income from securities lending	69,299		199,216
Investment activity expenses:			
Investment management fees	(9,783,194)		(8,186,323)
Investment consultant fees	(295,000)		(295,000)
Investment custodial fees	(303,869)		(426,443)
Total investment activity expenses	(10,382,063)		(8,907,766)
Net income from investment activities	389,136,824	_	189,941,169
Total additions	574,890,215	_	370,151,522
Deductions:			
Benefits	179,226,526		168,967,298
Refunds of contributions	19,158,756		16,456,570
Administrative expenses	 12,130,532		9,250,653
Total deductions	210,515,814		194,674,521
Net change	364,374,401		175,477,001
Fiduciary net position held in trust for pension benefits			
Beginning of year	 2,488,498,164	_	2,313,021,163
End of year	\$ 2,852,872,565	\$	2,488,498,164

#### Note 1 - Plan Description

The Seattle City Employees' Retirement System (the System) is a multiple employer defined benefit public employee retirement plan, covering employees of the City of Seattle and administered in accordance with Chapter 4.36 of the Seattle Municipal Code. The System is a pension trust fund of the City of Seattle.

The System is administered by the Retirement System Board of Administration (the Board). The Board consists of seven members including the Chair of the Finance Committee of the Seattle City Council, the City of Seattle Finance Director, the City of Seattle Personnel Director, two active members and one retired member of the System who are elected by other system members, and one outside board member who is appointed by the other six board members. Elected and appointed board members serve for three-year terms.

All employees of the City of Seattle are eligible for membership in the System with the exception of uniformed police and fire personnel who are covered under a retirement system administered by the State of Washington. Employees of METRO and the King County Health Department who established membership in the System when these organizations were City of Seattle departments were allowed to continue their System membership (there are currently fewer than 50 members in this category). There are currently 6,534 retirees and beneficiaries receiving benefits, and 9,283 active members of the System. There are 1,312 terminated, vested employees entitled to future benefits.

The System provides retirement, death, and disability benefits. Retirement benefits vest after five years of credited service, while death and disability benefits vest after ten years of service. Retirement benefits are calculated as 2% multiplied by years of creditable service, multiplied by average salary, based on the highest 24 consecutive months. The benefit is actuarially reduced for early retirement. The System provides post-retirement benefit increase including an automatic 1.5% annual COLA increase and a 65% restoration of purchasing power benefit.

The City of Seattle adopted a second tier for the System in 2016. Starting January 1, 2017, new eligible employees will join this second tier. The tier is a defined benefit plan much like the original tier but has a lower contribution rate for members and calculates final average salary based on the highest 60 consecutive months of service. Other changes related to the new tier can be found in the Seattle Municipal Code 4.36.

#### Note 2 - Summary of Significant Accounting Policies and Plan Asset Matters

**Basis of Accounting** - These financial statements have been prepared with an "economic resources" measurement focus on the accrual basis of accounting in accordance with generally accepted accounting principles, as prescribed by the Government Accounting Standards Board.

Use of Estimates in Preparing Financial Statements - The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires the System to make estimates and assumptions that affect the reported amounts of assets, liabilities, additions and deductions to net position held in trust for pension benefits and disclosure of contingent assets and liabilities at the date of the financial statements and during the reporting period. Actual results could differ from those estimates.

#### Note 2 - Summary of Significant Accounting Policies and Plan Asset Matters (Continued)

**Cash and Short Term Investments -** The System classifies cash on deposit in financial institutions and cash on deposit in the City of Seattle's internal cash management pool as cash. The System also recognizes certain short-term highly liquid securities with an original maturity of three months or less as short-term investments.

**Method Used to Value Investments** - Plan investments are reported at fair value. Fair value is defined as the amount at which an investment could be exchanged in a current arm's length transaction between willing parties in which the parties each act knowledgeably and prudently. All investments are valued based on objective, observable, unadjusted quoted market prices in an active market on the measurement date, if available. In the absence of such data, valuations are based upon those of comparable securities in active markets. For illiquid or hard to value investments such as real estate, private equity, and other private investments, valuations are based upon data provided by the respective investment managers. These private asset valuations are generally based upon estimated current values and/or independent appraisals.

Investment income consists of realized and unrealized appreciation (depreciation) in the fair value of investments, interest and dividend income earned, less investment expense, plus income from securities lending activities, less deduction for security lending expenses. Interest income is recorded on the accrual basis and dividends are recorded on the ex-dividend date. Securities and securities transactions are reflected in the financial statements on a trade-date basis. Investments are made in accordance with the Prudent Person Rule as defined by the State of Washington RCW 35.39.060.

**Federal Income Tax Status -** The System is a qualified plan under section 401(a) of the Internal Revenue Code and is exempt from federal income taxes under section 501(a).

**Contributions** - Employee and employer contributions are reported in the year they are due to the System.

**Benefits and Refunds of Contributions** - Benefits and refunds of contributions are recognized when due and payable in accordance with the System's policy.

#### **Note 3 - Contributions**

Member and employer contributions rates are established by the Seattle Municipal Code Chapter 4.36.

The employer contribution rate is determined by the actuarial formula identified as the Entry Age Cost Method. The formula determines the amount of contributions necessary to fund the current service cost, representing the estimated amount necessary to pay for benefits earned by the employees during the current service year and the amount of contributions necessary to pay for prior service costs. Total required contributions, including amounts necessary to pay administrative costs, are determined through annual actuarial valuations.

Actuarially determined contribution rates were 10.03% for most members in 2017 and 2016 and 15.29% and 15.23% for the employers in 2017 and 2016. There are no long-term contracts for contributions outstanding and currently no legally required reserves. See Note 9 for additional information on assumptions used in calculating the actuarially determined contribution rates.

#### Note 4 - Cash

SCERS' policy for custodial credit risk of deposits is to rely on Federal Deposit Insurance Corporation (FDIC) and Washington Public Deposit Protection Commission (PDPC) insurance. FDIC insures the cash deposits up to \$250,000. As provided by the State of Washington RCW 43.84, the PDPC collateralizes deposits in excess of \$100,000. The bank balances of deposits of a FDIC institution as of the balance sheet date are insured.

#### Note 5 - Investments

**Investment policy** - The pension plan's policy in regard to the allocation of invested assets is established and may be amended by the SCERS Board by a majority vote of its members. It is the policy of the SCERS Board to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The pension plan's investment policy discourages the use of cash equivalents, except for liquidity purposes, and aims to refrain from dramatically shifting asset class allocations over short time spans. The following was the Board's adopted asset allocation policy as of December 31, 2017:

	Target
Asset Class	Allocation
Equity	
Public Equity	48.0%
Private Equity	9.0%
Fixed Income	
Core Fixed Income	16.0%
Credit Fixed Income	7.0%
Real Assets	
Real Estate	12.0%
Infrastructure	3.0%
Diversifying Strategies	5.0%
Total	100.0%

Money-weighted rate of return — As of December 31, 2017, the return for the System, based on a money-weighted rate of return methodology, was 16.25%. As of December 31, 2016, the return for the System, based on a money-weighted rate of return methodology, was 8.62%.

**Short Term Investments** - Short term investments include a Short-term Investment Fund (STIF), which is a collective trust that may include certificates of deposit, treasury bills, and mutual funds.

**Commingled Funds** – The System invests in various commingled funds where it has an ownership interest in a pool of securities alongside other fund holders. For those commingled funds that are anticipated to be held by the System on a long-term basis, the following tables in this Section reflect the System's pro rata net asset value in these commingled funds. The System's investments in commingled funds that are anticipated to be held on a temporary basis are not reflected in this manner.

**Custodial Credit Risk** – For investments, custodial credit risk is the risk that in the event of the failure of a financial institution or a bank, the System will not be able to recover the value of its deposits or investments that are in the possession of an outside party. The System mitigates custodial credit risk by having its investment securities held by the System's custodian (BNY Mellon) and registered in the System's name. The System's short-term investments are created through daily sweeps of excess cash by the System's custodian, and invested in a vehicle managed by the custodian.

Credit Risk - Credit risk is the risk that an issuer, or other counterparty, to an investment will not fulfill its obligations. The Retirement Board provides each of the System's Broad Fixed Income investment managers with a set of investment guidelines. These guidelines specify eligible investments, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control. In general, these guidelines require that at least 70 percent of the net asset value of a manager's portfolio be invested in investment-grade securities. Managers do not have authority to depart from their guidelines. A summary of the credit ratings of the System's fixed income investments is provided on pages 22 and 23.

Concentration of Credit Risk - Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer. The Retirement Board provides each of the System's Broad Fixed Income investment managers with a set of investment guidelines. These guidelines specify eligible investments, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control. In general, these guidelines require that investments in any one issuer may not exceed 5 percent of the net asset value of a manager's portfolio. Managers do not have authority to depart from their guidelines.

Interest Rate Risk - Interest rate risk is the risk that changes in interest rates over time will adversely affect the fair value of an investment. Market or 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. The Retirement Board provides each of the System's Broad Fixed Income investment managers with a set of investment guidelines. These guidelines specify eligible investments, minimum diversification standards, and applicable investment restrictions necessary for diversification and risk control. In general, these guidelines require that the weighted average duration of the security holdings of a manager's portfolio not vary from that of the applicable benchmark by more than 20 percent. Managers do not have authority to depart from their guidelines. A summary of the maturities of the System's fixed income investments is provided on pages 20 and 21.

The fixed income portfolio is primarily managed by four external money management firms. Managers have agreed to a set of guidelines that provide ranges and limits for varying types of securities that may be held within the portfolio. A consultant is hired to measure performance and monitor the investment style. The Investment Committee reviews the consultant's results quarterly.

**Foreign Currency Risk** - Foreign currency risk is the risk that changes in exchange rates will adversely impact the fair value of an investment. The System's currency risk exposures, or exchange rate risk, primarily reside within the non-U.S. equity and fixed income investment holdings. The System expects these managers to maintain adequately diversified portfolios to limit foreign currency and security risk.

The System's exposure to foreign currency risk in U.S. dollars as of December 31, 2017, is summarized in the following table.

Currency Type		Equity	Fixe	ed Income	Derivatives			Cash		Total
Australian Dollar	\$	3,488,650	\$	-	\$	-	\$	71,136	\$	3,559,786
Canadian Dollar		4,874,861		-		-		43,997		4,918,858
Swiss Franc		4,101,755		-		-		3,939		4,105,694
Danish Krone		884,851		-		-		7,655		892,506
Euro Currency Unit		16,438,125		-		-		63,395		16,501,520
Pound Sterling		8,991,644		-		-		73,802		9,065,446
Hong Kong Dollar		1,687,095		-		-		47,360		1,734,455
Israeli Shekel		107,128		-		-		4,251		111,379
Japanese Yen		12,177,697		-		-		75,859		12,253,556
Norwegian Krone		402,048		-		-		22,911		424,959
New Zealand Dollar		75,688		-		-		5,737		81,425
Polish Zloty		-		-		-		-		-
Swedish Krona		1,394,402		-		-		6,447		1,400,849
Singapore Dollar	_	655,546		-	_	-	_	22,687	_	678,233
Total	\$	55,279,490	\$	-	\$	-	\$	449,176	\$	55,728,666

The System's exposure to foreign currency risk in U.S. dollars as of December 31, 2016, is summarized in the following table.

Currency Type	Equity	Fixe	d Income	Derivatives		Cash		Total
Australian Dollar	\$ 3,100,873	\$	-	\$	33,999	\$	22,467	\$ 3,157,339
Canadian Dollar	4,119,689		-		22,374		14,998	4,157,061
Swiss Franc	3,643,597		-		20,659		1,523	3,665,779
Danish Krone	676,323		-		12,509		2,731	691,563
Euro Currency Unit	12,804,253		-		108,622		7,921	12,920,796
Pound Sterling	7,535,544		-		69,738		60,144	7,665,426
Hong Kong Dollar	1,257,177		-		1,041		4,820	1,263,038
Israeli Shekel	86,014		-		-		1,394	87,408
Japanese Yen	9,978,529		-		28,389		44,458	10,051,376
Norwegian Krone	324,414		-		6,956		7,206	338,576
New Zealand Dollar	81,293		-		-		1,857	83,150
Polish Zloty	-		-		10,362		-	10,362
Swedish Krona	1,163,964		-		-		25,638	1,189,602
Singapore Dollar	 474,219				1,396		12,769	 488,384
Total	\$ 45,245,889	\$	-	\$	316,045	\$	207,926	\$ 45,769,860

**Derivatives** - The derivatives used by the System typically have no greater risk than their physical counterparts and, in many cases, are offset by exposures elsewhere in the portfolio. Counterparty risk, the risk that the "other party" to a contract will default, is managed by careful screening of counterparties. Derivative securities are priced and accounted for at fair value. Foreign exchange forward contracts are valued at the price at which the transaction could be settled by offsets in the forward markets.

The System's derivative transactions as of December 31, 2017 are summarized in the following table.

		U	nreali	zed Gain/Los	Notional Value					
Туре	Long Position		Short Position		Total		Long Position			Short Position
Futures - Fixed Income	\$	(492,713)	\$	-	\$	(492,713)	\$	127,400,063	\$	-
Futures - Equity		-		(314,398)		(314,398)		-		(47,816,645)
Options - Fixed Income		(20,732)		10,009		(10,723)		N/M		N/M
Options - Equity		-		(141,491)		(141,491)		N/M		N/M
Options - Short-Term		9,741		5,217		14,958		N/M		N/M
Swaps - Fixed Income		437,928		133,744		571,671		109,100,000		(109,100,000)
Total	\$	(65,776)	\$	(306,919)	\$	(372,695)				

The information in the above table on 2017 derivative transactions is displayed differently than prior years. The following tables show the System's derivative transactions as of December 31, 2016 as re-stated and as originally presented.

The System's derivative transactions as of December 31, 2016 as re-stated are summarized in the following table.

		Ur	realiz	ed Gain/Los	SS			Notion	nal V	/alue
Туре	Lor	ng Position	Shor	rt Position		Total	Lo	ong Position		Short Position
Futures - Fixed Income	\$	(435,875)	\$	15,754	\$	(420,122)	\$	124,264,125	\$	(20,996,794)
Futures - Equity		(417,997)		-		(417,997)		35,950,655		-
Options - Fixed Income		-		18,963		18,963		N/M		N/M
Options - Equity		-		133,807		133,807		N/M		N/M
Swaps - Fixed Income		301,468		185,361	_	486,829		151,000,000		(151,000,000)
Total	\$	(552,404)	\$	353,885	\$	(198,520)				

The System's derivative transactions as of December 31, 2016 as originally presented are summarized in the following table.

Currency Type	Pu	rchases	 nrealized ain/Loss	 Sells	Unrealized Gain/Loss	Total Unrealized Gain/Loss	
Australian Dollar	\$	-	\$ -	\$ 35,642	\$ (1,642)	(1,64	2)
Canadian Dollar		-	-	22,589	(215)	(21	.5)
Swiss Franc		-	-	21,803	(1,144)	(1,14	4)
Danish Krone		-	-	14,763	(2,253)	(2,25	3)
Euro Currency Unit		-	-	132,167	(23,542)	(23,54	2)
Pound Sterling		-	-	71,738	(1,999)	(1,99	9)
Hong Kong Dollar		-	-	1,040	-	-	
Japanese Yen		-	-	29,993	(1,604)	(1,60	14)
Norwegian Krone		-	-	11,712	(4,756)	(4,75	6)
Polish Zloty		-	-	11,695	(1,333)	(1,33	3)
Singapore Dollar		-	 -	 1,393	 2		2
Total	\$	-	\$ -	\$ 354,535	\$ (38,486)	\$ (38,48	<u>(6</u> )

As of December 31, 2017, the fixed income portfolio of the System had the following investment maturities:

Investment Maturities (in years) N/A \* Investment Fair Value <1 1-5 6 - 10 >10 Fixed income \$ \$ \$ \$ 1,935,869 \$ 1,935,869 \$ Agencies Asset Backed Security 39,887,331 18,893,763 19,457,546 1,536,022 Commingled Funds 307,815,002 21,001,662 101,627,601 156,467,927 28,717,812 Corporate Debt Derivatives 1,800,232 (260,595)2,109,003 (48,176)8,300,261 Foreign Sovereign 29,142,160 330,819 7,055,414 13,455,666 180,601,625 9,472,854 170,926,163 Mortgage Backed Security 202,608 707,798 Municipal 4,621,829 88,845 3,825,186 110,215,434 45,569,401 32,453,854 30,418,467 1,773,712 Treasury Notes and Bonds Total Fixed Income 676,019,482 22,934,443 177,393,659 231,967,469 243,723,911 \$

<sup>\*</sup>Note - Amounts primarily relate to commingled funds and therefore a weighted average was not available.

As of December 31, 2016, the fixed income portfolio of the System had the following investment maturities:

				In	vestment Ma	turit	ties (in years)				
Investment	Fair Value	_	<1		1-5	6 - 10		>10		_	N/A *
Fixed income											
Agencies	\$ 3,384,578	\$	-	\$	1,951,858	\$	1,432,720	\$	-	\$	-
Asset Backed Security	18,417,402	2	-		8,988,044		8,981,776		447,582		-
Commingled Funds	35,149,819	)	-		-		-		-		35,149,819
Corporate Debt	236,226,048	3	1,620,730		52,011,703		146,404,165		29,676,020		6,513,430
Derivatives	1,761,087	7	(30,617)		1,991,620		-		(199,916)		-
Foreign Sovereign	1,503,600	)	-		-		1,503,600		-		-
Mortgage Backed Security	176,024,872	2	-		-		4,540,822		171,484,050		-
Municipal	5,443,906	5	-		196,728		1,187,943		4,059,235		-
Treasury Notes and Bonds	61,616,091	<u> </u>	8,821,496		18,628,819	_	22,791,357		11,374,419		-
Total Fixed Income	539,527,403	\$	10,411,609	\$	83,768,772	\$	186,842,383	\$	216,841,390	\$	41,663,249

<sup>\*</sup> Note - Amounts primarily relate to commingled funds and therefore a weighted average was not available.

As of December 31, 2017, the fixed income portfolio of the System had the following investment ratings:

					Rat	ings			
Investment	Fair Value	AAA	AA	A	ВВВ	ВВ	В	CCC& Below	Not Rated
Fixed income									
Agencies	\$ 1,935,869	\$ -	\$ 1,935,623	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 246
Asset Backed Security	39,887,330	31,743,697	1,338,259	-	-	-	-	412,693	6,392,681
Commingled Funds	-	-	-	-	-	-	-	-	-
Corporate Debt	307,815,003	873,215	11,022,428	45,897,058	105,048,362	53,883,265	55,828,019	14,203,669	21,058,987
Derivatives	1,800,232	-	-	-	-	-	-	-	1,800,232
Foreign Sovereign	29,142,160	-	-	2,295,639	7,041,800	7,541,209	5,595,255	857,307	5,810,950
Mortgage Backed Security	180,601,625	1,816,758	80,026,060	496,503	515,467	-	-	-	97,746,837
Municipal	4,621,829	1,185,003	732,903	1,930,283	773,640	-	-	-	-
Treasury Notes and Bonds	110,215,434		110,215,434						
Total Fixed Income	\$ 676,019,482	\$ 35,618,673	\$ 205,270,707	\$ 50,619,483	\$ 113,379,269	\$ 61,424,474	\$ 61,423,274	\$ 15,473,669	\$ 132,809,933

As of December 31, 2016, the fixed income portfolio of the System had the following investment ratings:

					Rati	ngs			
Investment	Fair Value	AAA	AA	A	ВВВ	ВВ	В	CCC& Below	Not Rated
Fixed income									
Agencies	\$ 3,384,578	\$ -	\$ 3,382,492	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 2,086
Asset Backed Security	18,417,402	13,720,413	315,854	-	-	-	-	447,582	3,933,553
Commingled Funds	35,149,819	-	-	-	-	-	-	-	35,149,819
Corporate Debt	236,226,048	1,283,302	5,897,549	28,201,323	76,234,613	44,649,385	43,049,133	4,668,682	32,242,061
Derivatives	1,761,087	-	-	-	-	-	-	-	1,761,087
Foreign Sovereign	1,503,600	-	-	-	1,503,600	-	-	-	-
Mortgage Backed Security	176,024,872	1,959,137	66,487,270	1,010,059	848,978	-	-	-	105,719,429
Municipal	5,443,906	1,695,605	1,230,246	2,518,054	-	-	-	-	-
Treasury Notes and Bonds	61,616,091		61,616,091						
Total Fixed Income	\$ 539,527,403	\$ 18,658,457	\$ 138,929,502	\$ 31,729,436	\$ 78,587,191	\$ 44,649,385	\$ 43,049,133	\$ 5,116,264	\$ 178,808,035

#### Note 6 - Fair Value Measurements

Fair value measurements are categorized within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset:

- Level 1: unadjusted quoted prices for identical instruments in active markets
- Level 2: quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable
- Level 3: significant inputs are unobservable

The following schedule<sup>1</sup> presents investments categorized according to the fair value hierarchy, and is proceeded with additional information regarding investments measured at the net asset value as of December 31, 2017:

			Fair Va	alue	Measurements	s Usi	ing
Investments by fair value level	12/31/2017	Quoted Prices in Active Markets Identical Assets (Level 1)		(	Significant Other Observable Inputs (Level 2)		Significant Inobservable puts (Level 3)
Equity Securities	\$ 745,311,784	\$	745,767,811	\$	(471,890)	\$	15,863
Fixed Income Securities	 503,457,043		109,722,722		393,734,321		-
Total investments by fair value level	1,248,768,827		855,490,533		393,262,431		15,863
Fund Investments measured at the net asset value (NAV)							
Equity	868,952,952						
Fixed Income	176,523,956						
Real Estate	304,828,502						
Alternative Investments	230,044,927						
Total investments measured at the NAV	1,580,350,337						
Less total fund investments identifiable as short-term investments	\$ 13,342,176						
Total investments	\$ 2,815,776,988						

#### Fund Investments Measured at the NAV

Redemption Unfunded Frequency (if Redemption Notice **Fair Value** Commitments **Currently Eligible)** Period Alternative Investments 230,044,927 217,378,224 Monthly, N/A 75 Days, N/A 868,952,952 Daily, Monthly 1 - 30 Days Equity Fixed Income 176,523,956 Monthly 5 - 30 Days Real Estate 304,828,502 61,905,884 Quarterly, N/A 45 Days, N/A 1,580,350,337 279,284,108 Total investments measured at the NAV

<sup>&</sup>lt;sup>1</sup> Fund investments may consist of underlying securities that are not exclusively in the fund-defined asset class. In other schedules, those securities are categorized based on the asset class of the underlying security rather than the fund.

#### Note 6 - Fair Value Measurements (Continued)

The following schedule presents investments categorized according to the fair value hierarchy, and is proceeded with additional information regarding investments measured at the net asset value as of December 31, 2016:

			Fair V	alue	Measurements	nts Using			
Investments by fair value level	12/31/2016	Quoted Prices in Active Markets Identical Assets (Level 1)			gnificant Other Observable puts (Level 2)	Und	ignificant observable its (Level 3)		
Equity	\$ 639,807,625	\$	636,258,397	\$	3,533,147	\$	16,081		
Fixed Income	413,737,686		96,765,911		316,971,775		-		
Total investments by fair value level	1,053,545,311		733,024,308		320,504,922		16,081		
Investments measured at the net asset value (NAV)									
Equity	710,389,141								
Fixed Income	125,789,717								
Real Estate	287,996,774								
Alternative Investments	173,578,426								
Total investments measured at the NAV	1,297,754,058	_							
Total investments	\$ 2,351,299,369	-							

Investment		Fair Value		Unfunded Commitments	Redemption Frequency (if Currently Eligible)	Redemption Notice
Equity	\$	710,389,141	\$	-	Daily, Monthly	1 - 30 Days
Fixed Income	Ψ	125,789,717	Ψ	- -	Monthly	30 Days
Real Estate		287,996,774		9.444.262	N/A	N/A
Alternative Investments		173,578,426		242,114,969	N/A	N/A
Total investments measured at the NAV		1,297,754,058		251,559,231		

Alternative Investments – These investments are structured as limited partnerships or limited liability companies. Strategies include private equity, private credit, infrastructure and diversifying strategies. These investments include those with a perpetual life and the ability to redeem as well as investments with an approximate life of 10 years where redemptions are restricted. There are no plans to liquidate the total portfolio.

Equity – These investments are structured as mutual funds, trusts, limited partnerships or limited liability companies. The funds have a perpetual life. Redemption frequencies range from daily to monthly. There are no plans to liquidate the portfolio.

Fixed Income – These investments are structured as limited partnerships. The funds have a perpetual life. The redemption frequency is monthly. There are no plans to liquidate the portfolio.

#### Note 6 - Fair Value Measurements (Continued)

Real Estate – These investments are structured as trusts, limited partnerships or limited liability companies. These investments include those with a perpetual life and the ability to redeem as well as investments with an approximate life of 10 years where redemptions are restricted. There are no plans to liquidate the total portfolio.

#### **Note 7 - Securities Lending Transactions**

Under the authority of State of Washington RCW 41.28.005 and the Seattle Municipal Code 4.36.130, the System's Board of Administration adopted investment policies that define eligible investments, which include securities lending transactions. Through a custodial agent, the System participates in a securities lending program whereby securities are lent for the purpose of generating additional income to the System. The System lends securities from its investment portfolio on a collateralized basis to third parties, primarily financial institutions. The market value of the required collateral must meet or exceed 102% of the market value of the securities lent, providing a margin against a decline in the market value of the collateral, and is limited to a volume of less than \$75 million. The contractual agreement with the System's custodian provides indemnification in the event the borrower fails to return the securities lent or fails to pay the System income it is due on the securities lent. Cash and U.S. government securities were received as collateral for these loans. The System invests cash collateral received; accordingly, investments made with cash collateral appear as an asset. A corresponding liability is recorded as the System must return the cash collateral to the borrower upon the expiration of the loan. Gross income from securities lending transactions are recorded in the operating statements as well as the various fees paid to the institution that oversees the lending activity.

As of December 31, 2017, the fair value of securities on loan was \$11,028,844. Associated cash collateral totaling \$11,350,612 was received. The fair market value of the reinvested collateral was \$11,358,941 at December 31, 2017, which includes an unrealized gain totaling \$8,329.

As of December 31, 2016, the fair value of securities on loan was \$10,791,203. Associated cash collateral totaling \$11,125,376 was received. The fair market value of the reinvested collateral was \$11,130,677 at December 31, 2016, which includes an unrealized loss totaling \$5,301.

#### **Note 8 - Commitments**

The System has entered into capital commitments to fund partnership interests in certain alternative investments. At December 31, 2017, the System has unfunded commitments of \$279,284,108 to these partnerships.

#### Note 9 - Net Pension Liability

The components of the net pension liability as of December 31, 2017 were as follows:

Total Pension Liability \$3,960,042,655
Plan Fiduciary Net Position 2,852,872,565
Net Pension Liability \$1,107,170,090

Plan Fiduciary Net Position as a Percentage of the Total Pension Liability 72.04%

#### **Actuarial assumptions**

The total pension liability was determined by an actuarial valuation as of December 31, 2016, using the following actuarial assumptions, applied to all periods including the measurement period:

Investment Rate of Return: 7.50% compounded annually, net of expenses

Salary Increases: 4.00% Inflation: 3.25%

Actuarial Cost Method: Individual Entry Age Normal

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation.

Best estimates of geometric real rates of return for each major asset class included in the pension plan's target asset allocation as of December 31, 2017 (see discussion of pension plan's investment policy) are summarized in the following table:

	Long-Term Expected Real
Asset Class	Rate of Return
Equity	
Public Equity	4.94%
Private Equity	6.25%
Fixed Income	
Core Fixed Income	0.42%
Credit Fixed Income	3.30%
Real Assets	
Real Estate	3.66%
Infrastructure	3.00%
Diversifying Strategies	3.09%

<sup>\*</sup> The actuarial assumptions used in the January 1, 2016 valuation, and the mortality tables included in Appendix A of the valuation, were based on the results of an actuarial experience study for the period January 1, 2010 through December 31, 2013.

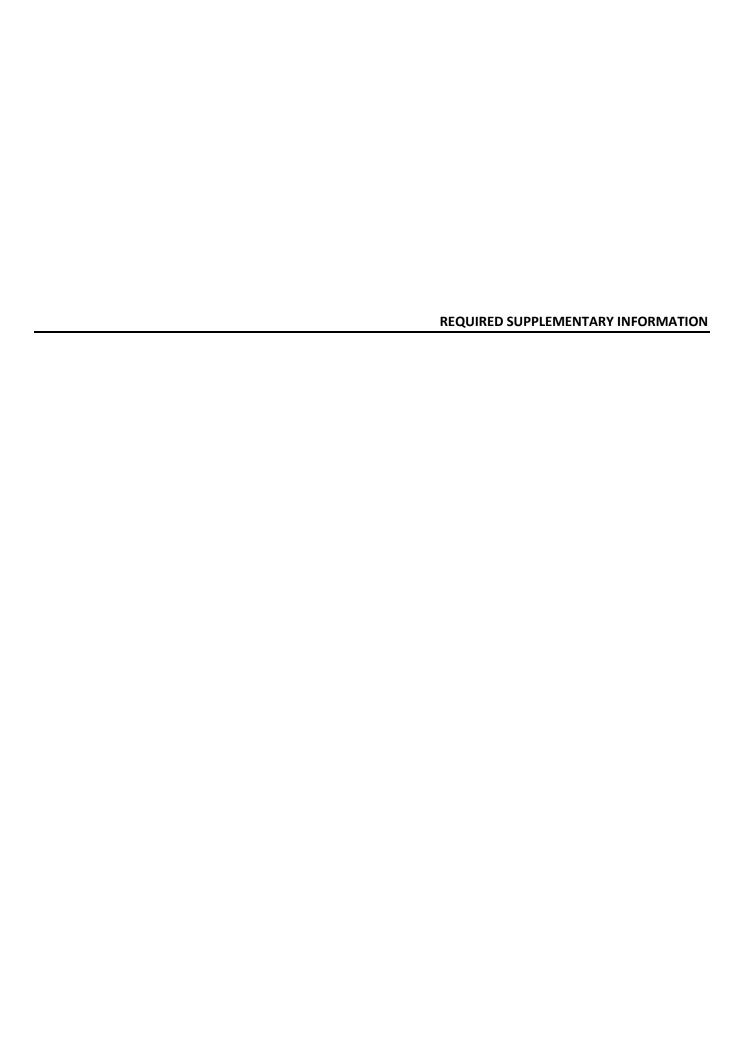
#### Note 9 - Net Pension Liability (Continued)

The above table reflects the expected (30 year) real rate of return for each major asset class. The expected inflation rate is projected at 3.25% for the same time period.

Discount Rate. The discount rate used to measure the total pension liability was 7.50%. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate and the participating governmental entity contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods on projected benefit payment to determine the total pension liability.

Sensitivity of the net pension liability. The following presents the net pension liability of the System, calculated using the discount rate of 7.50%, as well as what the System's net pension liability would be if it were calculated using a discount rate that is 1% lower or 1% higher than the current rate:

1%	Current	1%
Decrease	Discount	Increase
(6.50%)	Rate (7.50%)	(8.50%)
\$1,586,836,840	\$1,107,170,090	\$703,684,341



### SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

	Dec	ember 31, 2017	De	cember 31, 2016	De	cember 31, 2015	Dec	ember 31, 2014
Total pension liability								_
Service Cost	\$	112,691,379	\$	106,450,550	\$	100,415,811	\$	94,017,562
Interest		281,360,916		268,005,035		254,539,867		241,885,785
Benefit changes		-		-		-		-
Difference between expected and actual experience		(29,175,591)		(7,653,756)		1,983,005		-
Changes of assumptions		-		-		-		-
Benefits payments		(179,226,526)		(168,967,298)		(159,349,807)		(150,239,208)
Refunds of contributions		(19,158,756)		(16,456,570)		(16,137,840)		(15,103,615)
Net change in total pension liability		166,491,422		181,377,961		181,451,036		170,560,524
Total pension liability - beginning	_	3,793,551,233		3,612,173,272		3,430,722,236		3,260,161,712
Total pension liability - ending (a)	_	3,960,042,655		3,793,551,233		3,612,173,272		3,430,722,236
Plan net position								
Contributions - employer		112,102,982		108,454,496		101,153,403		89,988,898
Contributions - member		73,650,409		71,755,857		65,779,216		63,969,504
Net investment income		389,136,824		189,941,169		7,083,633		122,510,395
Benefits payments		(179,226,526)		(168,967,298)		(159,349,807)		(150,239,208)
Administrative expense		(12,130,532)		(9,250,653)		(8,211,137)		(5,330,764)
Refunds of contributions	_	(19,158,756)		(16,456,570)		(16,137,840)		(15,103,615)
Net change in plan net position		364,374,401		175,477,001		(9,682,532)		105,795,210
Plan net position - beginning	_	2,488,498,164		2,313,021,163		2,322,703,695		2,216,908,485
Plan net position - ending (b)		2,852,872,565		2,488,498,164		2,313,021,163		2,322,703,695
Net pension liability - ending (a) - (b)	\$	1,107,170,090	\$	1,305,053,069	\$	1,299,152,109	\$	1,108,018,541
Ratio of plan net position to total pension liability (b) / (a)		72.04%		65.60%		64.03%		67.70%
Covered employee payroll	\$	733,300,000	\$	708,600,000	\$	641,700,000	\$	630,900,000
Net pension liability as a percentage of covered-employee payroll		150.98%		184.17%		202.45%		175.63%

Note: Schedule is intended to show information for 10 years. Additional years will be displayed as they become available.

### SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF EMPLOYER CONTRIBUTIONS Amounts Presented in Millions

_	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008
Actuarially determined employer contribution Actual employer	\$112.1	\$107.9	\$100.9	\$90.3	\$77.1	\$62.5	\$72.3	\$93.9	\$46.9	\$46.2
contributions	112.1	108.5	101.2	90.0	77.1	62.5	50.3	45.2	46.7	46.0
Annual contribution										
deficiency (excess)	0.0	(0.6)	(0.3)	0.3	0.0	0.0	22.0	48.7	0.2	0.2
Covered-employee payroll	733.3	708.6	641.7	630.9	597.9	567.8	557.0	563.2	580.9	572.4
Actual contributions as a percentage of covered-	15.29%	15.31%	15.77%	14.27%	12.90%	11.01%	9.03%	8.03%	8.04%	8.04%

#### Notes to Schedule:

Valuation Date: Actuarially determined contribution rates are calculated as of January 1, one year prior to the fiscal year in which the contributions will apply. Methods and Assumptions used to determine contribution rates for fiscal year 2017 are:

Actuarial cost method Individual Entry Age Normal

Amortization method Level percent

Remaining amortization period Closed 30 years as of January 1, 2013 Valuation

Asset valuation method 5 years smoothed, Non-asymptotic

Inflation 3.25%

Salary increases 4.00%, differs slightly from actuarial valuation due to exclusion of 0.50% active membership growth assumption for GASB calculations.

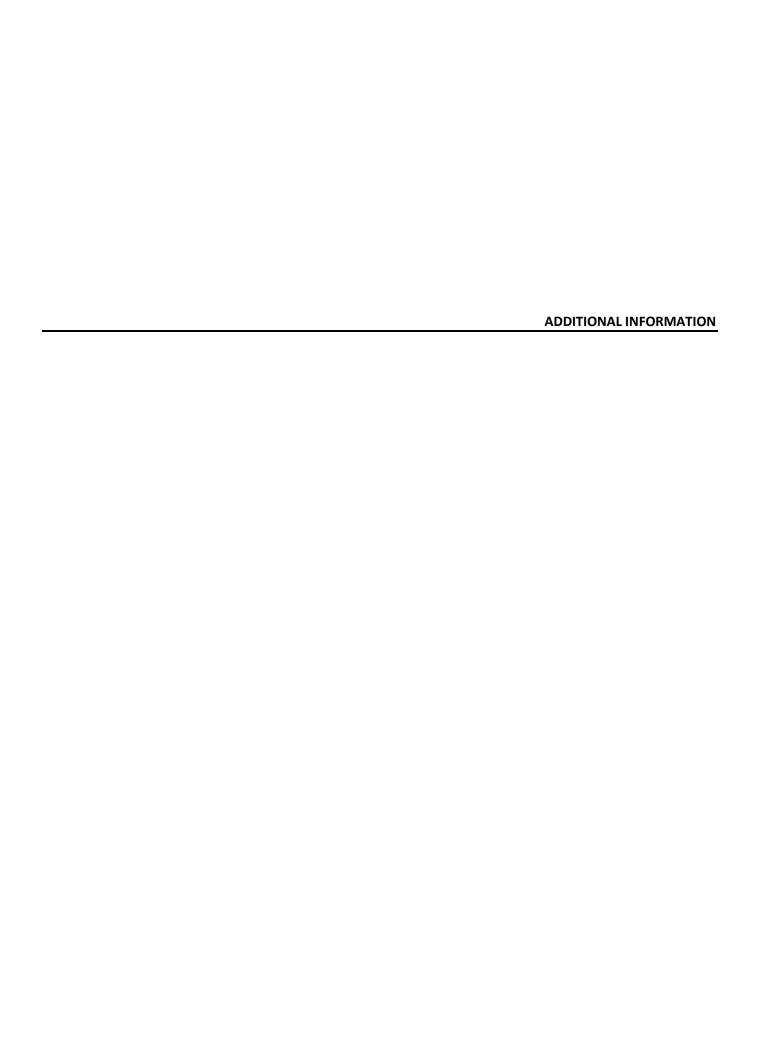
Investment rate of return 7.50%, net of pension plan investment expense, and gross of administrative expenses

Cost of Living Adjustments As noted in the January 1, 2014 actuarial valuation.

### SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF INVESTMENT RETURNS

	<u>2017</u>	<u>2016</u>	<u>2015</u>	2014
Total Portfolio	16.25%	8.62%	0.28%	5.67%

Note: These returns are calculated on a money-weighted rate of return basis. The schedule is intended to show information for 10 years. Additional years will be displayed as they become available.



# SEATTLE CITY EMPLOYEES' RETIREMENT SYSTEM SCHEDULE OF ADMINISTRATIVE EXPENSES Years Ended December 31, 2017 and 2016

	Budget		Actual Expense			
		2017		2017		2016
Personnel Services						
Salaries	\$	2,757,021	\$	3,283,743	\$	2,849,584
Benefits		881,281		1,105,121		914,188
Total Personnel Services		3,638,302		4,388,864		3,763,772
Maintenance and Operations						
Professional Services		3,658,526		5,031,855		3,226,834
Office rent		225,455		477,384		341,023
Data processing and central costs		2,187,354		1,847,283		1,467,775
Office supplies and other expenses		284,294		255,782		325,214
Postage and telephone		59,047		49,022		44,915
Travel		68,295		69,065		65,576
Training		19,618		11,277		15,544
Total Maintenance and Operations		6,502,589		7,741,668		5,486,881
Total Administrative Expenses	\$	10,140,891	\$	12,130,532	\$	9,250,653

Investment Management Fees:		
Adams Street		0,110
AEW Core Property Trust	65	7,510
AQR Multistrat		5,446
Ares	27	4,361
Ashmore	25	2,832
Babson Tower Square	1	7,662
Bison Capital Equity Partners	1	0,681
BlackRock	27	2,939
Bluebay	20	8,410
Brookfield	40	6,367
Capital Point Partners	4	3,153
Carlyle Realty	5	2,049
City of London	7	7,882
DFA International	62	9,261
Dover Street	12	7,242
Global Infrastructure	21	9,414
Heitman American	60	2,479
JP Morgan	1,98	4,449
Oaktree	1	3,105
Parametric Delta Shift	40	1,034
PCCP	3	5,575
PIMCO	95	0,666
Pugh	25	3,108
RhumbLine	11	1,566
Russell	19	5,121
Stonepeak	8	5,853
TA Realty Associates	9	3,956
TCW Crescent		5,995
Cash		68
Total Investment Management Fees	9,22	8,294
True-Up of Prior Year Investment Fees	55	4,900
		,
Performance Measurement:		
NEPC LLC	29	5,000
Custodial Services:		
Bank of New York Mellon	30	3,869
Total Investment Expenses	10,38	2,063
Securities Lending Services:	_	
Bank of New York Mellon	2	0,135