WSSC EMPLOYEES' RETIREMENT PLAN

FINANCIAL STATEMENTS AND SUPPLEMENTAL SCHEDULES WITH INDEPENDENT AUDITOR'S REPORT

DECEMBER 31, 2018 AND 2017

TABLE OF CONTENTS

CliftonLarsonAllen LLP
CLAconnect.com

INDEPENDENT AUDITORS' REPORT

The Commissioners and Board of Trustees
Washington Suburban Sanitary Commission
Employees' Retirement Plan
Laurel, Maryland

Report on the Financial Statements

We have audited the accompanying financial statements of the Washington Suburban Sanitary Commission Employees' Retirement Plan (the Plan), as of and for the years ended December 31, 2018 and 2017, and the related notes to the financial statements, which collectively comprise the Plan's basic financial statements as listed in the table of contents.

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 opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the 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 opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Plan as of December 31, 2018 and 2017, and the respective changes in financial 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 (MD&A), the schedule of changes in net pension liability and related ratio, the schedule of employer contributions, and the schedule of investment returns as listed in the table of contents 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 Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated September 25, 2019, on our consideration of the Plan's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Plan's internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Plan's internal control over financial reporting and compliance.

CliftonLarsonAllen LLP

CliftonLarsonAllen LLP

Baltimore, Maryland
September 25, 2019

WASHINGTON SUBURBAN SANITARY COMMISSION
EMPLOYEES' RETIREMENT PLAN
MANAGEMENT'S DISCUSSION AND ANALYSIS (UNAUDITED)
DECEMBER 31, 2018 AND 2017

The Washington Suburban Sanitary Commission Employees' Retirement Plan (the "Plan") provides retirement benefits to the employees, retirees, and beneficiaries of the Washington Suburban Sanitary Commission. To facilitate understanding the Plan's financial performance for the years ended December 31, 2018 and 2017, management has prepared this discussion and analysis. The following discussion and analysis should be read in conjunction with the Plan's financial statements and supplementary information provided in this report.

OVERVIEW OF THE FINANCIAL STATEMENTS AND SCHEDULES

The financial information presented in this report includes two financial statements, the notes to the financial statements, and supplementary information.

The Statements of Fiduciary Net Position show the amount of assets and deferred outflow of resources, liabilities and deferred inflow of resources, and net position held in trust for pension beneficiaries as of the end of the current and prior calendar years.
`

The Statements of Changes in Fiduciary Net Position show the additions to, and reductions in, the Plan's net position during the current and prior fiscal years. The statements present the major sources and uses of funds.

The Notes to Financial Statements contain disclosures and discussions which support the data presented in the financial statements. The notes present information about the creation and administration of the Plan, significant accounting policies and investments. The notes are an integral part of the financial statements and should be considered in conjunction with any review of the financial statements.

The Supplementary Information includes additional information on the Plan's financial condition and trends, including information on changes in the net pension liability and related ratios, contributions, actuarial assumptions, investment returns, investments and actuarial assumptions.

FINANCIAL HIGHLIGHTS

<u>Fiscal Year 2018</u>

- As of December 31, 2018, the Plan's net position held in trust for current and future retirement benefits were $741.6 million. This reflects a decrease in the Plan's net position of $92.2 million from the prior year.

- The net investment loss was $60.3 million for fiscal year 2018. This was comprised of $74.1 million net depreciation in the fair market value of investments off set by $16.5 million in dividends and interest income, and investment expenses of $2.8 million. For fiscal year 2017, the net investment income was $118.2 million. The 2018 decrease reflects the world equity markets decline and the volatility due to on-going concerns over trade tensions and global growth.

- The total investment return for 2018 was a decline of 7.4%. For the period ended December 31, 2018, the Plan returned 4.3% per annum over the past five years and 8.2% annualized over the past ten years.

Fiscal Year 2017

- As of December 31, 2017, the Plan's net position held in trust for current and future retirement benefits were $833.8 million. This reflects an increase in the Plan's net position of $89.0 million from the prior year.

- The net investment gain was $118.2 million for fiscal year 2017. This was comprised of $106.0 million net appreciation in the fair market value of investments, $14.9 million in dividends and interest income, and investment expenses of $2.7 million. For fiscal year 2016, the net investment income was $61.9 million. The 2017 increase reflects the continued bull market for global equities, international and emerging markets.

- The total investment returns for 2017 was 16.2%. For the period ended December 31, 2017, the Plan returned 9.3% per annum over the past five years and 5.5% annualized over the past ten years.

FINANCIAL ANALYSIS

Table 1 – Condensed Statements of Plan Net Position as of December 31, 2018, 2017, and 2016.

				2018-2017		2017-2016	
	2018	**2017**	**2016**	**Variance**	**% Variance**	**Variance**	**% Variance**
ASSETS							
Cash, cash equivalents and investments	$ 769,142,802	$ 867,140,094	$781,709,232	$ (97,997,292)	-11.3%	$ 85,430,862	10.9%
Receivables	606,391	874,547	575,661	(268,156)	-30.7%	298,886	51.9%
Total Assets	769,749,193	868,014,641	782,284,893	(98,265,448)	-11.3%	85,729,748	11.0%
LIABILITIES							
Payables for collateral received under securities lending agreements	27,643,078	33,118,532	35,924,584	(5,475,454)	-16.5%	(2,806,052)	-7.8%
Benefits payable and accrued expenses	521,273	1,070,751	1,562,357	(549,478)	-51.3%	(491,606)	-31.5%
Total Liabilities	28,164,351	34,189,283	37,486,941	(6,024,932)	-17.6%	(3,297,658)	-8.8%
NET POSITION RESTRICTED FOR PENSION	$741,584,842	$ 833,825,358	$744,797,952	($92,240,516)	-11.1%	$ 89,027,406	12.0%

Fiscal Year 2018

The Plan's cash, cash equivalents and investments for fiscal year 2018 decreased by $98.0 million or 11.3%. The decrease was due primarily to investment loss of $57.5 million, contributions totaling $29.6 million, benefit payments and refunds of $61.5 million, and a decrease in the value of collateral received under securities lending agreements of $5.5 million.

As shown in Table 2a - Investments by Manager/Advisor with Rates of Returns as of December 31, 2018, a significant portion of the Plan's investments were managed by Vanguard (32.1%), JP Morgan Asset Management (9.2%), and Morgan Stanley Asset Management (8.9%). For the year ended December 31, 2018, all but one managers/advisors reflected a negative return for funds under management.

Table 2a - Investments by Manager/Advisor with Rates of Returns as of December 31, 2018

	Investment Value	Percentage of Total Assets	Average Annual Rate of Return
CastleArk Management	$ 42,762,476	5.8%	-3.9%
Northern Trust Asset Management	57,720,224	7.8%	-1.1%
Income Research + Management	27,800,508	3.8%	-1.4%
State Street Global Advisors	32,485,197	4.4%	-8.3%
	160,768,405		
Prudential Retirement Insurance and Annuity Company	56,196,029	7.6%	2.9%
Vanguard	236,513,478	32.1%	-23.4%
Morgan Stanley Asset Management	65,527,605	8.9%	-13.5%
Dimensional Fund Advisors	35,140,374	4.8%	-11.9%
Investment Counselors of Maryland	56,147,356	7.6%	-14.0%
JP Morgan Asset Management	68,045,066	9.2%	-13.1%
Wellington Trust Company	58,995,467	8.0%	-11.5%
	$ 737,333,780	100.0%	

During the year, the Board of Trustees met regularly to monitor investment manager performance. During calendar year 2018, Board actions included:

- Corrected U.S. Equity overweight by transferring $40 million from the Vanguard Total Stock Market Index fund to the Prudential Guaranteed Deposit Account.

Receivables for fiscal year 2018 decreased by $.3 million or 30.7% due to a decrease in dividend and accrued interest receivable.

Total liabilities decreased by $6.0 million or 17.6%. This is due primarily to a decrease in payables for collateral received under securities lending agreements which decreased from $33.1 million in 2017 to $27.6 million in 2018 or 16.5%.

Fiscal Year 2017

The Plan's cash, cash equivalents and investments for fiscal year 2017 increased by $85.4 million or 10.9%. The increase was due primarily to investment gains of $118.2 million, contributions totaling $29.5 million, offsetting benefit payments and refunds of $58.6 million, and a decrease in the value of collateral received under securities lending agreements of $2.8 million.

As shown in Table 2b - Investments by Manager/Advisor with Rates of Returns as of December 31, 2017, a significant portion of the Plan's investments were managed by Vanguard (34.7%), JP Morgan Asset Management (9.4%), and Morgan Stanley Asset Management (9.1%). Overall, the weighted average annual rate of return was 16.2% which contributed to an increase in investment income by 47.67% to $118.2 million.

Table 2 b - Investments by Manager/Advisor with Rates of Returns as of December 31, 2017

	Investment Value	Percentage of Total Assets	Average Annual Rate of Return
CastleArk Management	$ 46,114,937	5.5%	7.9%
Norther Trust Asset Management	60,013,821	7.2%	2.8%
Income Research + Management	28,240,028	3.4%	4.6%
State Street Global Advisors	35,424,142	4.3%	17.2%
	169,792,928		
Prudential Retirement Insurance and Annuity Company	47,909,075	5.8%	3.5%
Vanguard	289,015,395	34.7%	24.0%
Morgan Stanley Asset Management	75,720,617	9.1%	-1.6%
Dimensional Fund Advisors	39,901,472	4.8%	19.8%
Investment Counselors of Maryland	65,257,433	7.8%	31.4%
JP Morgan Asset Management	78,288,752	9.4%	8.8%
Wellington Trust Company	66,664,310	8.0%	6.1%
	$ 832,549,982	100.0%	

During year, the Board of Trustees met regularly to monitor investment manager performance. During calendar year 2017, Board actions included:

- Paying annuity payments throughout the first ten months of the year from the State Street Russell 1000 Value Index holdings to correct an over-weight in the Domestic Equity space.
- Terminating Global Real Estate manager VOYA Clarion in May and using the proceeds, along with a partial liquidation from the State Street account to fund indexed real estate holdings with Vanguard.

Receivables for fiscal year 2017 increased by $0.3 million or 51.9% due to an increase in dividend and accrued interest receivable.

Total liabilities decreased by $3.3 million or 8.8%. This is due primarily to a decrease in payables for collateral received under securities lending agreements which decreased from $35.9 million in 2016 to $33.1 million in 2017 or 7.8%.

Table 3 – Condensed Statements of Changes in Plan Net Position as of December 31, 2018, 2017 and 2016.

				2018-2017		2017-2016	
	2018	2017	2016	Variance	Precent Variance	Variance	Percent Variance
ADDITIONS							
Net investment income (loss)	$ (60,337,268)	$ 118,185,476	$ 61,852,141	$(178,522,744)	-151.1%	$ 56,333,335	91.1%
Contributions	29,630,198	29,483,969	26,820,324	146,229	0.5%	2,663,645	9.9%
Total Additions	(30,707,070)	147,669,445	88,672,465	(178,376,515)	-120.8%	58,996,980	66.5%
DEDUCTIONS							
Benefit payments and refunds	61,533,446	58,642,039	57,554,539	2,891,407	4.9%	1,087,500	1.9%
Net Increase	(92,240,516)	89,027,406	31,117,926	(181,267,922)	-203.6%	57,909,480	186.1%
NET POSITION							
Beginning of Year	833,825,358	744,797,952	713,680,026	89,027,406	12.0%	31,117,926	4.4%
End of Year	$ 741,584,842	$ 833,825,358	$ 744,797,952	$ (92,240,516)	-11.1%	$ 89,027,406	12.0%

Fiscal Year 2018

Net investment income was comprised of interest and dividends and net appreciation/depreciation in the fair value of investments less investment expenses. Interest and dividends increased, from $14.9 million in 2017, to $16.5 million in 2018. The financial markets reflected unfavorable conditions during the year and, accordingly, net depreciation in the fair value of the investments was $74.1 million for 2018, compared to net appreciation of $106.0 million for fiscal year 2017. The decrease in net investment income was primarily due to most of the Plan's funds reflecting negative rates of return. The Plan had an overall rate of return of (7.4) % for fiscal year 2018.

Investment expenses increased by $0.2 million or 6.2%. Investment expenses represent approximately 0.38% or 38 basis points of average net position.

Participant and Plan sponsor contributions increased in 2018 to $29.6 million from $29.5 million in 2018 due to an increase in the number of employees and higher salary levels. Retirement annuity benefit payments and refunds totaled $61.5 million. This represented an increase of $2.9 million over 2017, which is due to an increase in cost-of-living and the number of retirees.

Fiscal Year 2017

Net investment income was comprised of interest and dividends and net appreciation/depreciation in the fair value of investments less investment expenses. Interest and dividends increased, from $12.0 million in 2016, to $14.9 million in 2017. The financial markets reflected favorable conditions during the year and, accordingly, net appreciation in the fair value of the investments was $106.0 million for 2017, compared to net appreciation of $52.2 million for fiscal year 2016. The increase in net investment income was primarily due to most of the Plan's funds reflecting positive rates of return. The Plan had an overall weighted average rate of return of 16.2% for fiscal year 2017.

Investment expenses increased by $0.3 million or 13.9%. Investment expenses represent approximately 0.32% or 32 basis points of average net position.

Participant and Plan sponsor contributions increased in 2017 to $29.5 million from $26.8 million in 2016 due to an increase in the number of employees and higher salary levels. Retirement annuity benefit payments totaled $58.6 million. This represented an increase of $1.1 million over 2016, which is due to an increase in cost-of-living and the number of retirees.

PLAN FUNDING

Fiscal Year 2018

On an annual or biennial basis, the market value of the Plan's assets and its investment gains and losses are reviewed by the Plan's actuary to determine the viability and funding progress of the Plan, the latest of which was performed effective June 30, 2018. The Plan's actuarially determined target rate of investment return is 7.0% net of expenses, reflecting the most recent Assumption Study, which also updated assumptions concerning mortality, inflation, and salary scale.

The Plan began using the average value method to determine actuarial asset value effective July 1, 2007. This smoothing method explicitly recognizes each year's investment gain or loss over a five-year period with the final actuarial value not less than 80% or more than 120% of the market.

WASHINGTON SUBURBAN SANITARY COMMISSION
EMPLOYEES' RETIREMENT PLAN
STATEMENTS OF PLAN NET POSITION
YEARS ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
ASSETS		
Cash and cash equivalents	$ 4,165,944	$ 1,471,580
Collateral received under securities lending agreements (Note E)	27,643,078	33,118,532
Investments at fair value:		
Mutual funds	327,801,208	394,174,299
Commingled funds	225,053,334	256,097,822
U.S. Government and agency bonds	64,858,319	59,541,556
Corporate bonds	20,631,062	28,929,629
Common stock	42,766,190	45,859,109
Investment contracts with insurance company	56,196,029	47,909,075
Limited partnership units	20,000	20,000
Other fixed holdings	7,638	18,492
Total investments	737,333,780	832,549,982
Dividends and accrued interest receivable	462,419	523,663
Contributions receivable from employees	143,972	350,884
Total Assets	769,749,193	868,014,641
LIABILITIES		
Payable for collateral received under securities lending agreements (Note E)	27,643,078	33,118,532
Benefits payable and accrued expenses	521,273	1,070,751
Total Liabilities	28,164,351	34,189,283
NET POSITION RESTRICTED FOR PENSION	$ 741,584,842	$ 833,825,358

The accompanying notes are an integral part of these financial statements

WASHINGTON SUBURBAN SANITARY COMMISSION
EMPLOYEES' RETIREMENT PLAN
STATEMENTS OF CHANGES IN PLAN NET POSITION
YEAR ENDED DECEMBER 31, 2018 AND 2017

	2018	2017
ADDITIONS		
Investment Income:		
Net (depreciation)/appreciation in the fair value of Plan investments	$ (74,049,947)	$ 105,986,226
Dividends and interest	16,545,457	14,866,013
	(57,504,490)	120,852,239
Less investment expenses	(2,832,778)	(2,666,763)
Net investment income	(60,337,268)	118,185,476
Contributions		
WSSC contributions	25,479,895	24,193,212
Employee contributions	4,150,303	5,290,757
Total contributions	29,630,198	29,483,969
Total Additions	(30,707,070)	147,669,445
DEDUCTIONS		
Benefit payments to retirees and refunds	61,533,446	58,642,039
NET DECREASE/INCREASE IN NET POSITION	(92,240,516)	89,027,406
NET POSITION RESTRICTED FOR PENSION BEGINNING OF YEAR	833,825,358	744,797,952
END OF YEAR	$ 741,584,842	$ 833,825,358

The accompanying notes are an integral part of these financial statements.

NOTE A. DESCRIPTION OF PLAN

General

The Washington Suburban Sanitary Commission ("WSSC") Employees' Retirement Plan (the Plan), a single employer contributory defined benefit retirement plan, was established in 1967 to provide retirement and death benefits for the employees of the WSSC under conditions set forth in the Plan Document based on an employee's age, length of service and compensation. The Retirement Plan Document is amended from time to time. As of December 31, 2018, the Plan was last amended in January 2016. The Plan may be amended by Commission resolution or by the Executive Director on behalf of the Commission.

WSSC implemented the Open Version of the Plan on July 1, 1978. Members of the Plan as of June 30, 1978 had an option to be included in the Open Version. This option expired December 31, 1978. The Open Version is mandatory for new employees. It generally provides for reduced employee contributions and benefits.

As of December 31, 2018, and 2017, there were 1,641 and 1616 employees, respectively, participating in the Open Version of the Plan, and 5 and 7 employees, respectively, participating in the Closed Version of the Plan, a total of 1,646 and 1,623 employee participants, respectively.

As of December 31, 2018, and 2017, there were 1,630 and 1,600 retirees and/or beneficiaries, respectively, receiving benefits from the Plan, and there were 110 and 105 terminated vested employees, respectively, not yet receiving benefits. Eleven and sixteen employees retired in fiscal years 2018 and 2017, respectively, and began receiving benefits in subsequent fiscal years.

The Plan provides a review process for participants whose claim for benefits is denied. There were no reviews pending as of December 31, 2018 and 2017.

Contributions

The Plan requires employees under the Closed Version to contribute 6% of gross wages and employees under the Open Version to contribute 3% of gross wages as a condition of employment. WSSC contributions are determined through the budget process as recommended by the Executive Director annually based upon a level percentage of payroll costs based on the advice and recommendation of an Actuary based on generally accepted actuarial principles.

NOTE A. DESCRIPTION OF PLAN (Continued)

Expenses

WSSC pays the administrative expenses of the Plan, other than investment management and consulting fees.

Pension Benefits

The Plan provides for 100% vesting of retirement benefits after five years of credited service.

Generally, the normal retirement benefits payable to an eligible participant are equal to the sum of:

1. 2.1% of final average monthly compensation multiplied by the Closed Version credited service, plus

2. 1.4% of final average monthly compensation multiplied by the Open Version credited service where the sum of Closed Version credited service and Open Version credited service, exclusive of accumulated sick leave service is subject to a maximum of 36 years.

The Plan provides options for disability and early retirement to eligible participants or their surviving spouses.

The Plan provides for periodic cost of living increases to retirement benefits. Participants covered by the Closed Version will receive an increase two months following a sustained increase in the Consumer Price Index of 3% or more. Participants in the Open Version receive an increase each March 1, based on the preceding calendar year's increase in the Consumer Price Index. The first increase may be pro-rated depending on the time of retirement.

Plan Termination

In the event of termination, Plan assets are to be allocated in the following priorities:

1. Expenses, fees and other charges under the Plan, not previously paid.
2. Pension benefits based upon contributions made by employees and interest earned thereon.
3. Pension benefits based upon contributions made by the employer which are vested.
4. All other pension benefits under the Plan.

NOTE A. DESCRIPTION OF PLAN (Continued)

Plan Governance

WSSC established a Board of Trustees (the "Board") for the Plan to be responsible for the investment management of the Plan's assets for the exclusive benefit of the Plan's participants. The trustees are governed by a Trust Agreement. The agreement provides for trustees to be appointed by WSSC and for the eleven-member Board to be composed of two Commissioners, four employees who are participants of the Plan, two representatives of the public, two retirees who are participants in the Plan, and the Executive Director of the Plan.

The administration of the Plan is managed by the Executive Director of the WSSC Employees' Retirement Plan who is appointed by the General Manager of WSSC

NOTE B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Accounting

The financial statements of the Plan are presented on the accrual basis of accounting, under which expenses are recorded when the liability is incurred, and revenues are recorded in the accounting period in which they are earned and become measurable.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Cash and Cash Equivalents

The Plan considers all cash and highly liquid investments with an original maturity of three months or less to be cash and cash equivalents.

Investments

The Plan categorizes fair value measurements within the fair value hierarchy established by GASB Statement No. 72, *Fair Value Measurement and Application*. The valuation technique uses a three-level hierarchy of inputs to measure the fair value of the asset and gives the highest priority to unadjusted quoted prices in active markets (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

NOTE B. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

These classifications are summarized as follows:

- *Level 1 Inputs*: Quoted prices (unadjusted) for identical assets or liabilities in active markets that a reporting entity can access at the measurement date.
- *Level 2 Inputs*: Inputs other than quoted prices included within Level 1 that are observable for an asset or liability, either directly or indirectly.
- *Level 3 Inputs*: Unobservable inputs for an asset or liability.

Fair value of certain investments that do not have a readily determinable fair value is established using net asset value (or its equivalent) as a practical expedient. These investments are not categorized according to the fair value hierarchy.

The Plan holds investment contracts with Prudential Financial. The fair value of these contracts is determined based on the fair value of the underlying pooled assets and is an estimate only and not the result of a precise calculation which would be done at contract discontinuance or to measure the impact of excess withdrawals in any calendar year. It does not constitute an offer by Prudential Financial or a final experience adjustment.

Net appreciation/depreciation in the fair value of investments reflected in the Statement of Changes in Fiduciary Net Position includes realized gains and losses on investments that were sold during the year and unrealized appreciation/depreciation in the fair value of investments.

Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

NOTE C. TAX STATUS

The Plan obtained its latest determination letter dated April 26, 2017, in which the Internal Revenue Services stated that the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. The Plan is currently designed and being operated in compliance with the applicable requirements of the Internal Revenue Code; therefore, the Plan was qualified, and the related Trust was tax exempt as of December 31, 2018 and 2017.

NOTE D. CASH AND CASH EQUIVALENTS

Cash and cash equivalents consisted of short-term investments funds of $4,165,944 and $1,471,580 as of December 31, 2018 and 2017 respectively.

NOTE E. SECURITY LENDING

The Board of Trustees permits the Plan to lend its securities to broker-dealers and other entities (the "Borrowers") for collateral that will be returned for the same securities in the future. The Plan's custodian is the agent in lending the Plan's securities for collateral of 102 percent for domestic securities and 105 percent for international securities. The custodian receives cash, securities or irrevocable bank letters of credit as collateral. All securities loans can be terminated on demand by either the Plan or the Borrowers. Cash collateral received from the Borrowers is invested by the lending agent, as an agent for the Plan, in a short-term investment pool in the name of the Plan, with guidelines approved by the Board. Such investments are considered a collateralized investment pool. The relationship between the maturities of the investment pool and the Plan's loans is affected by the maturities of securities loans made by other plan entities that invest cash collateral in the investment pool, and which the Plan cannot determine. The Plan records a liability for the return of the cash collateral shown as collateral held for securities lending in the Statements of Plan Net Position. The Board does not restrict the amount of loans the lending agent may make on its behalf. The agent indemnifies the Plan by agreeing to purchase replacement securities, or return the cash collateral thereof, in the event a Borrower fails to return loaned securities or pay distributions thereon.

As of December 31, 2018, and 2017, the fair value of securities on loan was $27,081,567 32,356,216, respectively. Cash received as collateral and the related liability of 27,643,078 and $33,118,532 as of December 31, 2018 and 2017 are shown on the Statements of Plan Net Position. Securities received as collateral are not reported as assets since the Plan does not have the ability to pledge or sell the collateral securities.

Securities lending revenues and expenses amounting to $856,629 and $777,476, respectively, for December 31, 2018 and $511,235 and $418,162, respectively, for December 31, 2017, have been classified with investment income and investment expenses, respectively, in the accompanying financial statements.

NOTE E. SECURITY LENDING (Continued)

The following represents the balances relating to the securities lending transactions as of December 31:

	2018		2017	
	Fair Value of Underlying Securities	Cash Collateral Investment Value	Fair Value of Underlying Securities	Cash Collateral Investment Value
Securities Loaned for Cash Collateral				
Corporate Bonds	$ 3,176,418	$ 3,246,459	$ 3,838,278	$ 3,938,325
Common Stock	8,272,934	8,430,773	5,162,846	5,298,452
U.S. Government & Agency Bonds	15,632,215	15,965,846	23,355,092	23,881,755
Total	$ 27,081,567	$ 27,643,078	$ 32,356,216	$ 33,118,532

As of December 31, 2017, the Plan has credit risk exposure to Borrowers because the amount the Plan owes the Borrowers is less than the amounts the Borrowers owe the Plan. The Plan is fully indemnified by its custodial bank against any losses incurred as a result of Borrower default. The Plan was not exposed to credit risk as of December 31, 2018.

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the Plan will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At December 31, 2018 and 2017, there were no funds held by a counterparty that was acting as the Plan’s agent in securities lending transactions.

NOTE F. INVESTMENTS

Investment Policy

The Plan’s investment policy and any changes to the policy are adopted by the Board of Trustees of the Plan. The most recent version of the policy was approved in April 2017 and contains long-term asset allocation ranges.

The primary objective of the investment policy is to assure that assets will be available to pay retirement benefits throughout the life of the Plan and to maintain or improve the market value of the fund relative to vested and accrued benefit liabilities. The objectives seek to preserve the actuarial soundness of the Plan by achieving a long-term return of at

NOTE F. INVESTMENTS (Continued)

least the actuarial return rate and to prudently manage the inherent investment risks that are related to the achievement of this goal.

Long-term asset allocation ranges are developed based on several factors including: the long-term investment goals of the Plan; the Trustee's tolerance for short-term losses; the Plan's liquidity needs; and any legal or regulatory requirements.

The Plan has a rebalancing policy, which allows the Executive Director and staff the flexibility to adjust assets classes for purposes of rebalancing without approval from the Board of Trustees.

As of December 31, 2018, and 2017, the Plan's long-term asset allocation ranges were as follows:

	2018		2017	
	Target	**Range**	**Target**	**Range**
U.S. Stocks	40%	35-45%	40%	35-45%
Non-U.S. Stocks	12%	9 - 15%	12%	9 - 15%
Emerging Markets Stocks	5%	2 - 8%	5%	2 - 8%
Global Tactical Asset Allocation	10%	6-14%	10%	6-14%
Total equity	67%		67%	
Fixed Income	23%	19-27%	23%	19-27%
Real Return Strategies	5%	0 - 10%	5%	0 - 10%
Real Estate	5%	0 - 10%	5%	0 - 10%
Total	100%		100%	

Money-Weighted Rate of Return

For the years ended December 31, 2018 and 2017, the annual money-weighted rate of return on Plan investments, net of investment expense, was -7.4% and 16.2% respectively. The money-weighted rate of return considers the changing amounts invested during a period and weights the amount of pension plan investments by the proportion of time they are available to earn a return during that period. External cash flows are determined on a monthly basis and are assumed to occur at the end of each month. External cash inflows are netted with external cash outflows, resulting in a net external cash flow in each month. The money-weighted rate of return is calculated net of investment expenses.

NOTE F. INVESTMENTS (Continued)

The Plan has the following fair value measurements as of December 31, 2018 and 2017:

	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Balance as of December 31, 2018
Investments by fair value level:				
Fixed Income Securities:				
Government and Agency Bonds				
Domestic Bonds	$ -	$ 64,650,169	$ -	$ 64,650,169
International Bonds	-	208,150	-	208,150
Corporate Bonds and Securities				
Domestic Bonds and Securities	-	16,156,114	-	16,156,114
International Bonds and Securities	-	4,474,948	-	4,474,948
Common Stock:				
U.S Stock	42,766,190	-	-	42,766,190
Mutual Funds:				
U.S Equity Funds	292,660,834	-	-	292,660,834
Emerging Market Funds	-	35,140,374	-	35,140,374
Limited partnership units	-	20,000		20,000
Other fixed holdings	-	7,638	-	7,638
	$ 335,427,024	$ 120,657,393	$ -	456,084,417
Investments carried at amortized cost:				
Investment contracts with insurance company				56,196,029
Investments carried at the Net Asset Value (NAV):				
Commingled funds				225,053,334
Total Investments				$ 737,333,780

	Quoted Prices in Active Markets for Identical Assets Level 1	Significant Other Observable Inputs Level 2	Significant Unobservable Inputs Level 3	Balance as of December 31, 2017
Investments by fair value level:				
Fixed Income Securities:				
Government and Agency Bonds				
Domestic Bonds	$ -	$ 59,308,356	$ -	$ 59,308,356
International Bonds	-	233,200	-	233,200
Corporate Bonds and Securities				
Domestivc Bonds and Securities	-	22,464,920	-	22,464,920
International Bonds and Securities	-	6,464,709	-	6,464,709
Common Stock				
U.S Stock	45,859,109	-	-	45,859,109
Mutual Funds				
U.S Equity Funds	354,272,828	-	-	354,272,828
Non-U.S Equity Funds	-	39,901,471	-	39,901,471
Limited partnership units	-	20,000		20,000
Other fixed holdings	-	18,492	-	18,492
	$ 400,131,937	$ 128,411,148	$ -	528,543,085
Investments carried at amortized cost:				
Investment contracts with insurance company				47,909,075
Investments carried at the Net Asset Value (NAV):				
Commingled funds				256,097,822
Total Investments				$ 832,549,982

NOTE F. INVESTMENTS (Continued)

Common stock and mutual funds classified in Level 1 of the fair value hierarchy are valued utilizing prices last quoted sales/bid prices provided by independent pricing vendors. U.S government and agency securities, municipal and corporate bonds, and mutual funds classified in Level 2 or the fair value hierarchy are valued utilizing a matrix pricing technique. Matrix pricing is utilized to value securities based on the securities' relationship to benchmark quoted prices.

Commingled funds consist of investments in four investments trusts, the objectives of these funds are to invest in a diversified portfolio of international equity securities for capital appreciation, approximate the performance of the Russell 1000 Value Index, and invest in a portfolio of equity securities of companies in developed and emerging markets. These investments are valued at the net asset value (NAV) of units of the commingled trust. The NAV, as provided by the trustee, is used as a practical expedient to estimate fair value. The NAV is based on the fair value of the underlying investments held by the fund less its liabilities.

The valuation method for investments measured at the net asset value (NAV) per share (or its equivalent) as of December 31, 2018 and 2017 is presented on the following tables:

	December 31, 2018			
	Fair value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
International Equity Trust	$ 65,527,605	$ -	Daily	Daily
State Street Global Advisor	32,485,197		Daily	Daily
Wellington OIA Fund	58,995,466	-	Monthly	30 Days
JP Morgan Global Focus Fund	68,045,066	-	Daily	Daily
	$ 225,053,334	$ -		

	December 31, 2017			
	Fair value	Unfunded Commitments	Redemption Frequency	Redemption Notice Period
International Equity Trust	$ 75,720,617	$ -	Daily	Daily
State Street Global Advisor	35,424,143		Daily	Daily
Wellington OIA Fund	66,664,310	-	Monthly	30 Days
JP Morgan Global Focus Fund	72,822,752	-	Daily	Daily
	$ 250,631,822	$ -		

NOTE F. INVESTMENTS (Continued)

Risks Common to Investments

The Plan's investments are subject to the following risks common to investments:

- ***Custodial Credit Risk*** is the risk that, in the event of a failure of the counterparty, the Plan will not be able to recover its investment or collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the Plan, and are held by either the counterparty or the counterparty's trust department or agent but not in the Plan's name.

  The Plan's investments for fiscal year 2018 and 2017 are partially insured and registered in the Plan's name and are generally segregated by the counterparty in a manner to protect them from certain claims by creditors. The Plan also invests in mutual and commingled trust funds which are not generally exposed to custodial credit risks. At December 31, 2018 and 2017, there were no deposits subject to custodial credit risk.

- ***Credit Risk*** is the risk that an issuer to an investment will not fulfill its obligations. The Plan seeks to maintain a diversified portfolio of fixed income securities in order to obtain the highest total return at an acceptable level of risk. As of December 31, 2018, and 2017, the quality ratings of the Plan's fixed income investments in U.S. Government obligations and corporate bonds were as follows.

	2018		2017	
Fiscal Year Quality Rating	**Fair Value**	**Percentage of Total**	**Fair Value**	**Percentage of Total**
U.S Government and Agency Bonds:				
AAA/AA+	$ 64,858,319	75.87%	$ 59,308,356	67.04%
BBB+	-	-	233,200	0.26%
	64,858,319	75.87%	59,541,556	67.30%
Corporate Bonds:				
AAA	1,208,799	1.41%	842,285	0.95%
AA	531,780	0.62%	222,249	0.25%
AA-	-	-	894,690	1.01%
A+	-	-	698,521	0.79%
A	2,720,112	3.18%	1,185,506	1.34%
A-			3,785,335	4.28%
BAA	12,542,592	14.67%	-	-
BBB+	-	-	7,050,650	7.97%
BBB	-	-	5,605,518	6.34%
BBB-	-	-	6,495,197	7.34%
BA	1,648,948	1.93%	-	-
BB+	-		199,194	0.23%
Unrated	1,978,831	2.31%	1,950,484	2.20%
Total Corporate Bonds	20,631,062	24.13%	28,929,629	32.70%
Total	$ 85,489,381	100.00%	$ 88,471,185	100.00%

NOTE F. INVESTMENTS (Continued)

Certain mutual and/or commingled funds of the Plan maintain investments that include fixed income securities, such as, the Vanguard High Yield Corporate Fund (Vanguard) and Wellington OIA (Wellington) Funds. As of December 31, 2018, and 2017, the ratings of the underlying securities of the Vanguard Fund were AAA/BBB/BB/B/Below B. Ratings were unavailable for the underlying securities of the Wellington Fund. The other mutual funds, which were equity-based, and the investment contracts were unrated.

- ***Interest Rate Risk*** is the risk that changes in interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. Information about the sensitivity of the fair values of the Plan's investments to market interest rate fluctuations is provided by the following table that shows the distribution of the Plan's fixed income investments by maturity:

Fiscal Year 2018

		Remaining Maturities (In Months)			
Investment Type	**Total**	**12 Months Or Less**	**13 to 24 Months**	**25 - 60 Months**	**More Than 60 Months**
U.S. Government and Agency Bonds:					
Mortgage-backed Securities	$ 17,172,438	$ 1,864	$ 54,670	$ 11,149	$17,104,755
U.S. Treasury Notes	47,685,881	2,851,811	11,776,477	12,012,046	21,045,547
Corporate bonds	20,631,061	1,007,835	1,060,250	2,757,608	15,805,369
	$ 85,489,380	$ 3,861,510	$12,891,397	$ 14,780,803	$53,955,671

Fiscal Year 2017

		Remaining Maturities (In Months)			
Investment Type	**Total**	**12 Months Or Less**	**13 to 24 Months**	**25 - 60 Months**	**More Than 60 Months**
U.S. Government and Agency Bonds:					
Mortgage-backed Securities	$ 17,494,358	$ -	$ 223,428	$ 1,774,627	$15,496,303
U.S. Treasury Notes	42,047,198	1,931,285	1,391,771	14,112,769	24,611,373
Corporate bonds	28,929,629	339,500	1,534,658	4,023,919	23,031,552
	$ 88,471,185	$ 2,270,785	$ 3,149,857	$ 19,911,315	$63,139,228

The mortgage-back securities listed above are considered highly sensitive to interest rate risk.

NOTE F. INVESTMENTS (Continued)

- ***Foreign Currency Risk*** is the risk that changes in exchange rates will adversely affect the fair value of an investment in a foreign financial institution. The Plan mitigates this risk by limiting its investments in non-U.S. securities. As of December 31, 2018, and 2017, the Plan held no investments in foreign currency denominations, however the following mutual and/or comingled funds contained underlying foreign related investments as follows:

	2018	2017
Morgan Stanley Investment Management International Equity Trust	$ 65,527,605	$ 75,720,617
Dimensional Fund Advisors	35,140,374	39,901,471
Vanguard Global EX-US R/E Index Fund	19,872,902	21,952,034
Wellington OIA Fund	58,995,466	66,664,310
JP Morgan Global Focus Fund	68,045,066	78,288,752
Total	$ 247,581,413	$ 282,527,184

- ***Concentration of Credit Risk*** - Individual investments that represent 5 percent or more of the Plan's net position are as follows as of December 31:

	2018	2017
ICM Small Company Portfolio	$ 56,147,357	$ 65,257,433
Vanguard Total Stock Market Index Fund	125,820,091	169,841,194
Morgan Stanley Investment Management International Equity Trust	65,527,605	75,720,617
Vanguard High Yield Corporate Fund	66,573,335	69,042,830
Wellington OIA Fund	58,995,466	66,664,310
JP Morgan Global Focus Fund	68,045,066	78,288,752
Total	$ 441,108,920	$ 524,815,136

NOTE F. INVESTMENTS (Continued)

For U.S. Government or Agency securities, investment managers invest no more than 7 percent of their portion of Plan assets, at cost, and no more than 10 percent at market, in securities of any one issuer or its subsidiaries or affiliates.

NOTE G. RISKS AND UNCERTAINTIES

The Plan invests in various investment securities that are exposed to various risks such as interest rate, market, and credit risk. Due to the level of risk associated with investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such change could materially affect the amounts reported in the statements of plan net position.

NOTE H. RELATED-PARTY TRANSACTIONS

An affiliate of the Plan’s custodian, Northern Trust Asset Management, became an investment manager for the Plan in fiscal year 2014. At December 31, 2018, funds managed totaled $64.3 million, and comprised of cash equivalents and investments of $4.2 million and $60.1 million, respectively. For the year ended December 31, 2018, the Plan incurred approximately $101,945 in management fees with this investment manager.

At December 31, 2017, funds managed totaled $62.3 million, and comprised of cash equivalents and investments of $1.5 million and $60.8 million, respectively. For the year ended December 31, 2017, the Plan incurred approximately $103,111 in management fees with this investment manager.

NOTE K. NET PENSION LIABILITY OF WSSC

The components of the net pension liability of WSSC at December 31, 2018 and 2017 were as follows:

	2018	2017
Total pension liability	$968,212,704	$936,361,482
Plan fiduciary net position	(741,584,842)	(833,825,358)
WSSC's net pension liability	$ 226,627,862	$ 102,536,124
Plan's fiduciary net position as a percentage of the total pension liability	76.6%	89.0%

Actuarial assumptions

The total pension liability was determined by an actuarial valuation as of July 1, 2018, using the following actuarial assumptions, applied to all periods included in the measurement:

	2018	2017
Inflation	2.50%	2.50%
Salary increases	2.75% to 7.50%	2.75% to 7.50%
Investment rate of return	7.00%	7.00%

The mortality rates were based on the RP-2000 Healthy Annuitant Mortality Table for Males or Females, with Blue Collar adjustments and one-year age set-forward and projected to 2025 using Scale BB. The actuarial assumptions used in the July 1, 2018 valuation were based on the results of an actuarial experience analysis covering 2011 through 2015.

The long-term expected rate of return on pension plan investments was determined using a building-block method in which best-estimates 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. This is then modified through a Monte-Carlo simulation process, by which a (downward) risk adjustment is applied to the baseline expected return. Best estimates of arithmetic real rates of return

NOTE K. NET PENSION LIABILITY OF WSSC (Continued)

for each major asset class included in the pension plan's target asset allocation and the final investment return assumption are summarized in the following table:

	2018	Approximate Portfolio Allocation
Asset class:		
U.S Equity	5.70%	40%
Non - U.S. Equity	5.90%	25%
US Fixed Income	2.55%	30%
Real Estate	4.25%	5%
Total Weighted Average Real Ret	4.73%	100%
Plus Inflation	2.50%	
Total Return without Adjustment	7.23%	
Risk Adjustment	-0.23%	
Total Expected Return	7.00%	

Discount Rate

The discount rate used to measure the total pension liability was 7.00% as of December 2018 and 2017. 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 that Commission 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 of projected benefit payments to determine the total pension liability.

Other Key Actuarial Assumptions

The other key actuarial assumptions that determined the total pension liability as of December 31, 2018 and 2017 included:

NOTE K. NET PENSION LIABILITY OF WSSC (Continued)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate

Valuation date	July 1, 2018	July 1, 2017
Measurement date	December 31, 2018	December 31, 2017
Inflation	2.50%	2.50%
Salary increased including inflation	2.75% to 7.50%	2.75% to 7.50%

The following presents the net pension liability of the Plan, calculated using the discount rate of 7.00% for 2018 and 2017, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is 1 percentage point lower or 1 percentage point higher than the current rate.

	2018		
	1% Decrease 6.00%	**Current Discount Rate 7.00%**	**1% Increase 8.00%**
Net pension liability (2018)	$ 335,193,628	$ 226,627,862	$ 134,790,772

	2017		
	1% Decrease 6.00%	**Current Discount Rate 7.00%**	**1% Increase 8.00%**
Net pension liability (2017)	$ 207,446,815	$ 102,536,124	$ 13,785,470

NOTE K. NET PENSION LIABILITY OF WSSC (Continued)

The Plan's change in total pension liability, plan fiduciary net position and net pension liability are presented below:

	Total Pension Liability	Plan Fiduciary Net Position	Net Pension Liability
Balance as of December 2016	$ 917,584,541	$ 744,797,951	$ 172,786,590
Service cost	10,744,774	-	10,744,774
Interest on total pension liability	63,199,824	-	63,199,824
Difference between expected and actual experience	3,474,382	-	3,474,382
Benefit payments, including refunds of contributions	(58,642,039)	(59,434,809)	792,770
Employer contributions	-	24,193,214	(24,193,214)
Member contributions	-	4,497,988	(4,497,988)
Investment income, net of investment expenses	-	119,771,014	(119,771,014)
Net Change	18,776,941	89,027,407	(70,250,466)
	$ 936,361,482	$ 833,825,358	$ 102,536,124
Balance as of December 2017			
Service cost	11,557,550	-	11,557,550
Interest on total pension liability	65,379,327	-	65,379,327
Difference between expected and actual experience	16,447,791	-	16,447,791
Benefit payments, including refunds of contributions	(61,533,446)	(61,533,446)	-
Employer contributions	-	25,479,895	(25,479,895)
Member contributions	-	4,150,303	(4,150,303)
Investment income, net of investment expenses	-	(60,337,268)	60,337,268
Net Change	31,851,222	(92,240,516)	124,091,738
Balance as of December 2018	$ 968,212,704	$ 741,584,842	$ 226,627,862

REQUIRED SUPPLEMENTARY INFORMATION

WASHINGTON SUBURBAN SANITARY COMMISSION
EMPLOYEES' RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS

	2018	*2017*	*2016*	*2015*	*2014*	*2013*	2009 - 2012**
Total Pension Liability:							
Service cost	$ 11,557,550	$ 10,744,774	$ 10,576,413	$ 9,828,010	$ 11,098,519	$ 10,541,264	
Interest on total pension liability	65,379,379	63,199,824	61,935,402	61,611,259	67,317,785	66,214,298	
Difference between expected and actual experience	16,269,679	3,474,382	(10,448,960)	(53,390,196)	(8,657,936)	-	
Effect of assumption changes or inputs	-	-	-	32,257,956	-	-	
Benefit payments, including refunds of contributions	(61,533,446)	(58,642,039)	(57,554,539)	(56,672,851)	(54,934,361)	(53,545,268)	
Net change in pension liability	31,673,162	18,776,941	4,508,316	(6,365,822)	14,824,007	23,210,294	
Total pension liability, beginning of the year	936,361,482	917,584,541	913,076,226	919,442,048	904,618,041	881,407,746	
Total pension liability, end of year (a)	968,034,644	936,361,482	917,584,542	913,076,226	919,442,048	904,618,040	
Plan Fiduciary Net Pension:							
Employer contributions	25,479,895	24,193,212	22,606,531	22,346,849	20,965,016	20,498,919	
Member contributions	4,150,303	5,290,757	4,213,793	3,930,364	3,823,065	3,652,732	
Investment income net of investment expenses	(60,337,268)	118,978,245	61,852,141	(10,371,882)	37,575,768	110,734,486	
Benefit payments	(61,533,446)	(59,434,808)	(57,554,539)	(56,672,851)	(54,934,361)	(53,545,268)	
Net change in plan fiduciary position	(92,240,516)	89,027,406	31,117,926	(40,767,520)	7,429,488	81,340,869	
Plan Fiduciary Net Position-Beginning of the Year	833,825,358	744,797,952	713,680,026	754,447,546	747,018,058	665,677,189	
Plan Fiduciary Net Position-End of Year	741,584,842	833,825,358	744,797,952	713,680,026	754,447,546	747,018,058	-
Net Pension Liability- Beginning of Year	102,536,124	172,786,590	199,396,200	164,994,502	157,599,983	215,730,558	
Net Pension Liability- End of Year	$ 226,449,802	$ 102,536,124	$ 172,786,590	$ 199,396,200	$ 164,994,502	$ 157,599,983	
Plan Fiduciary Net Position as a percentage of Total Pension Liability	76.6%	89.0%	81.2%	78.2%	82.1%	82.58%	
Covered Payroll	$ 150,768,609	$ 143,155,112	$ 133,766,444	$ 132,229,882	$ 124,053,349	$ 121,295,379	
Net Pension Liability as a percentage of Covered Payroll	150.2%	71.6%	129.2%	150.8%	133.0%	129.9%	
Average Future Working Lifetime (years)	6	6	6	6	9	9	

This schedule is presented to illustrate the requirement to show information for 10 years. The Plan presents information for available years and additional years will be displayed as they become available.

Notes to Schedule of Changes in Net Pension Liability and Related Ratios:

***Benefit changes* –** There have been no changes in benefit assumptions since the implementation of GASB 67 and 68.

***Changes in assumptions* –** There were several changes in actuarial assumptions since the prior year, including rates of mortality, retirement, and termination; as well as inflation, salary increases, and investment return. Actuarial assumptions are presented in Note K of the financial statements.

WASHINGTON SUBURBAN SANITARY COMMISSION
EMPLOYEES' RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF EMPLOYER CONTRIBUTIONS

Year Ended December 31,	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2009	$ 14,444,809	$ 16,758,266	$ (2,313,457)	$ 99,161,337	16.9%
2010	12,201,033	18,224,804	(6,023,771)	107,839,077	16.9%
2011	26,295,382	18,686,402	7,608,980	110,570,426	16.9%
2012	22,757,807	19,038,875	3,718,932	112,656,065	16.9%
2013	22,739,819	20,498,919	2,240,900	121,295,379	16.9%
2014	25,745,448	20,965,016	4,780,432	124,053,349	16.9%
2015	20,100,358	22,346,849	(2,246,491)	132,229,876	16.9%
2016	18,393,733	22,606,529	(4,212,796)	133,766,444	16.9%
2017	18,591,764	24,193,212	(5,601,448)	143,155,101	16.9%
2018	18,232,265	25,479,895	(7,247,630)	150,768,609	16.9%

Notes to Schedule of Contributions:

Valuation date:

Actuarially determined contribution rates are calculated as of July 1st of the fiscal year in which the contributions are reported. WSSC's policy is to complete an actuarial study at least once every two years.

Methods and assumptions used to determine contribution rates:

Actuarial cost method	Entry age normal (funding valuation uses a fixed rate of contribution)
Inflation	2.50%
Salary increases	2.75 to 7.50 % including inflation
Investment rate of return	7.0% net of pension plan investment expenses, including inflation
Cost of living adjustments	2.50%
Retirement age	Table of rates by age and eligibility
Mortality	Mortality rates were based on the RP-2000 Healthy Annuitant Mortality Table for Males or Females, with Blue Collar adjustments and one-year age set-forward and projected to 2025 using Scale BB. The actuarial assumptions used in the July 1, 2017 valuation were based on the results of an actuarial experience analysis covering 2011 through 2015.

WASHINGTON SUBURBAN SANITARY COMMISSION
EMPLOYEES' RETIREMENT PLAN
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)
SCHEDULE OF INVESTMENT RETURNS

Year Ended December 31,	Net Money-weighted Rate of Return (%)
2009	22.14
2010	14.16
2011	(2.48)
2012	14.1
2013	17.31
2014	5.21
2015	(1.40)
2016	9.5
2017	16.2
2018	(7.4)

This schedule is presented to illustrate the requirement to show information for 10 years.