



# 2017 Independent Audit Results

**Presentation to:**  
Washington Suburban Sanitary  
Commission [WSSC]  
Commissioners  
**November 15, 2017**



4550 Forbes Blvd., Suite 130  
Lanham, MD 20706  
[www.bcawatsonrice.com](http://www.bcawatsonrice.com)

Telephone: (202) 778-3450  
Facsimile: (202) 463-8883

# Contents

- BCA Project Team
- Summary of Audit Results
- Financial Highlights
- Significant Adjustments and Transactions
- Required Communications
- Internal Controls Related Matters
- GASBs Update

# BCA Project Team

- **Marshall Blair**, *Engagement Partner*
- **Al Lucas**, *Quality Control Partner*

# Summary of Audit Results

## WSSC Financial Statements and OMB Circular A-133 Audits

- Audit of WSSC's financial statements at June 30, 2017
  - Unqualified opinion
- OMB Circular A-133 Audit
  - Report on Internal Control over Financial Reporting and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*
    - Unqualified Opinion
  - Report on Compliance for Each Major Federal Program; Report on Internal Control over Compliance; and Report on Schedule of Expenditures of Federal Awards in Accordance with the Uniform Guidance
    - Unqualified Opinion
- Certain control deficiencies were identified (see page 18). These were not classified as material weaknesses or significant deficiencies.

# Financial Highlights

## WSSC Financial Statements Audit

- See MD&A for detailed discussion
  
- Balance Sheet
  - Capital assets, net of accumulated depreciation, increased by \$437.6 million over prior year.
  - WSSC issued \$382.0 million Consolidated Public Improvement Bonds and redeemed \$12.4 million in Notes. No refunding bonds were sold in 2017.
  
- Statement of Revenues, Expenses and Changes in Net Position
  - Operating revenues increased by \$76.8 million due to a 2.9% increase in water and sewer rates. Billed consumption increased by 5.8%. New infrastructure investment fees resulted in additional revenues in 2017.
  - Operating expenses increased by \$39.0 million. Factors contributing to the increase were: \$4.5 million for water valve assessments; \$2.7 million for PCCP monitoring and analysis; \$5.6 million increase in salaries; \$13.8 for depreciation on capital assets placed in service in recent years; and \$6.3 million increase in operating cost associated with the Consent Decree.
  - Capital contributions were \$84.0 million, a decrease of \$50.6 million from prior year.
  
- Statement of Cash Flows
  - Operating activities provided over \$297.0 million in net cash, an increase of \$21.9 million compared to prior year.
  - Cash used in capital and related financing activities was \$216.9 million, a decrease of \$111.9 million compared to prior year.

# 2017 WSSC Audit Adjustments & Passed Adjustments

- Adjustments made
  - Reclassification of credit balances in receivables to payables and debit balances in payables to receivables.
  - Accumulated net revenue accounts and certain cash-based expenditure accounts were adjusted to be in accordance with GAAP
  - Other client adjustments booked since commencement of audit.
- Adjustments not made
  - Accounts payable over/under accrual
  - Depreciation

The net of these potential adjustments was considered immaterial; therefore, the financial statements were not adjusted.

# Retirement & OPEB Plans

## Financial Statements Audit Results

- Unqualified (“clean”) opinion on the following financial statements:
  - Washington Suburban Sanitary Commission Retiree Other Post-Employment Benefits Trust (OPEB Trust)
  - Washington Suburban Sanitary Commission Employees’ Retirement Plan (Retirement Plan)
  
- Report on Internal Control Related Matters (Management letter):
  - Material weaknesses - none identified
  - Significant deficiencies - none identified

# Financial Highlights – OPEB Trust

- **Net position available for benefits** as of December 31, 2016, as reported in the Statement of Fund Net Position, totaled \$94.3 million, an increase of \$18.4 million or 24% from the prior year.
- **Total additions**, as reflected in the Statement of Changes in Fund Net Position, increased by \$11.1 million during the year ended December 31, 2016, primarily due to an increase of \$11.1 million in investment income. Dividends and interest were \$4.1 million and \$5.4 million for 2016 and 2015, respectively. However, the value of investments increased by \$12.5 million in 2016 compared to a decrease of \$8.2 million in 2015.
- **There were no deductions** for the year ended December 31, 2016, as reflected in the Statement of Changes in Fund Net Position. WSSC did not make payments from the Trust during the phase-in period, and continues to make payments on a pay-as-you-go basis external to the Trust.
- See the Management's Discussion and Analysis for other highlights and discussion.



# Financial Highlights – Retirement Plan

- **Net position available for benefits** as of December 31, 2016, as reported in the Statement of Plan Net Position, totaled \$733.5 million, an increase of \$31.0 million or 4.4% from the prior year.
- **Total additions**, as reflected in the Statement of Changes in Plan Net Position, was \$88.5 million, an increase of \$73.3 million over the prior year. For 2016, net investment income was \$61.9 million and contributions totaled \$26.7 million. For 2015, net investment loss was \$10.4 million and contributions totaled \$25.6 million. Net investment income increased because of the overall performance of the Plan's investments, which reflected a weighted average return of 14.1% and -1.0% for 2016 and 2015, respectively.
- **Total deductions** during the year ended December 31, 2016, as reflected in the Statement of Changes in Plan Net Position, totaled \$57.6 million, an increase of \$0.9 million over the prior year.
- See the Management's Discussion and Analysis for other highlights and discussion.

# 2016 Plan Audit Adjustments & Passed Adjustments

## 2016 Adjustments Made – OPEB Trust:

- There were no audit adjustments

## 2016 Uncorrected Misstatements – OPEB Trust:

- There were no material uncorrected misstatements

## 2016 Adjustments Made - Retirement Plan:

- Deferred contribution adjustment of approximately \$11.3 million
- Investment loss for Wakpamni Bonds of \$4.2 million
- Other miscellaneous adjustments made

## 2016 Uncorrected Misstatements – Retirement Plan:

- There were no material uncorrected misstatements

# Required Communications

## Items to be Communicated

BCA's Responsibility Under Generally Accepted Auditing Standards

## Response

- To express an opinion on the financial statements
- To provide reasonable, not absolute, assurance of detecting material misstatements
- To gain a basic understanding of the internal control policies and procedures to design an effective and efficient audit approach
- To inform the Commissioners of any material illegal acts we become aware of (none)

# Required Communications (Continued)

## Items to be Communicated

- Management Judgments and Accounting Estimates

## Response

We evaluated the key factors and assumptions used by management in making the following accounting estimates and judgments significant to the financial statements, and concluded that all estimates and judgments appeared reasonable:

- Unbilled accounts receivable
- Allowance for potentially uncollectible accounts receivable
- Commitments and contingencies
- Depreciation, amortization and obsolescence
- Pension and OPEB liability
- Valuation of investments

# Required Communications (Continued)

## Other Items to be Communicated

- Adoption/Change in accounting policies
- Significant or unusual transactions
- Alternative treatments discussed with management
- Significant issues discussed with management
- Difficulties encountered in performing the audit
- Consultation with other accountants
- Discussions held prior to retention
- Disagreements with management
- Management representations

# Required Communications (Continued)

- Adoption/Change in accounting policies

GASB Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, reduces the GAAP hierarchy to two categories of authoritative GAAP from the four categories under GASB Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The first category of authoritative GAAP consists of GASB Statements of Governmental Accounting Standards. The second category comprises GASB Technical Bulletins and Implementation Guides, as well as guidance from the AICPA that is cleared by the GASB. This Statement is effective for fiscal years beginning after June 15, 2015. The adoption of the pronouncement did not have an impact on WSSC's financial statements.

GASB Statement No. 77, *Tax Abatement Disclosures*, requires disclosure of tax abatement agreements and programs so that others may evaluate the financial health of governments, make decisions and assess accountability. This Statement is effective for fiscal years beginning after December 15, 2015. The adoption of the pronouncement did not have an impact on WSSC's financial statements.

# Required Communications (Continued)

- Significant or unusual transaction

None

- Alternative treatment discussed with management

None

- Significant issues discussed with management

None

## Required Communications (Continued)

- Difficulties encountered in performing the audit

We encountered no difficulties in dealing with management in performing or conducting the audit.

- Consultation with other accountants

To our knowledge, no such consultation has occurred.

- Discussions held prior to retention

No major issues were discussed as a condition to our retention.



# Required Communications (Continued)

- Disagreements with management

Professional standards define a disagreement with management as a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statement or the auditor's report.

We had no disagreements with management.

- Management representations

We requested certain representations from management which are included in the management representation letters.

# 2017 Report on Internal Controls and Other Matters

- Control deficiencies
  - Strengthen Controls over Approvals and Records Retention of Contracts
  - Strengthen Controls over Bridge Contracts
  - Strengthen Controls over Receiving and Issuing of Materials and Supplies
  - Strengthen Controls over Accounts Payable
  - Develop and/or Update Comprehensive Policies and Procedures

# GASBs Update

No.	Statement Title	Effective for Periods Commencing After
74	Financial Reporting for Postemployment Benefit Plans Other than Pension Plans	June 15, 2016
75	Financial Reporting for Postemployment Benefits Other than Pensions	June 15, 2017
81	Irrevocable Split-Interest Agreements	December 15, 2016
83	Certain Asset Retirement Obligations	June 15, 2018
84	Fiduciary Activities	December 15, 2018
85	Omnibus 2017	June 15, 2017
86	Certain Debt Extinguishment Issues	June 15, 2017
87	Leases	December 15, 2019



Washington Suburban Sanitary Commission  
**Communication of Internal Control Related Matters  
Year Ended June 30, 2017**

**WASHINGTON SUBURBAN SANITARY COMMISSION  
COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS  
YEAR ENDED JUNE 30, 2017**

**TABLE OF CONTENTS**

	<b>Page</b>
Communication of Internal Control Related Matters.....	1
Current Year's Comments:	
Strengthen Controls over Approvals and Records Retention of Contracts.....	2
Strengthen Controls over Bridge Contracts .....	5
Strengthen Controls over Receiving and Issuing of Materials and Supplies .....	7
Strengthen Controls over Accounts Payable.....	10
Develop and/or Update Comprehensive Policies and Procedures .....	14
List of Prior Year's Comments .....	15

The Commissioners and Management  
of the Washington Suburban Sanitary Commission

In planning and performing our audit of the financial statements of the Washington Suburban Sanitary Commission (the Commission or "WSSC") for the year ended June 30, 2017, in accordance with auditing standards generally accepted in the United States of America, we considered the Commission's internal control over financial reporting as a basis for designing our auditing procedures for the purpose of expressing an opinion on the financial statements, and not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control. Accordingly, we do not express an opinion on the effectiveness of the Commission's internal control.

A **deficiency in internal control** exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A deficiency in design exists when (a) a control necessary to meet the control objective is missing, or (b) an existing control is not properly designed so that, even if the control operates as designed, the control objective would not be met. A deficiency in operation exists when a properly designed control does not operate as designed or when the person performing the control does not possess the necessary authority or competence to perform the control effectively.

A **material weakness** is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis.

A **significant deficiency** is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

The matters listed in the report are descriptions of identified deficiencies in internal control that we determined did not constitute significant deficiencies or material weaknesses.

This report is intended for the information of the Commissioners and management of the Commission and is not intended to be and should not be used by anyone other than these specified parties.

Washington, D.C.  
September 15, 2017

*BCA Watson Rice LLP*

**WASHINGTON SUBURBAN SANITARY COMMISSION  
COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS  
YEAR ENDED JUNE 30, 2017**

***CURRENT YEAR'S COMMENTS***

**1. Strengthen Controls over Approvals and Records Retention of Contracts**

***Background***

WSSC's Records Retention for Contract Documents Policy Document (v.1.0812) states:

Section II - Policy

"It is WSSC's policy to maintain contract files for every formal solicitation issued in support of the WSSC Records Retention Schedule. Contracts and purchase orders along with supporting documentation and records shall be retained in their original form for a minimum period as determined by the WSSC Records Retention Schedule."

Section III – Procedures, among other things, states:

- "The Contract Manager and/or the Contracting Officer's Representative should maintain a project file during the administration of all contracts.
- The Procurement Officer responsible for the procurement should maintain the working folder which includes all original documents and supporting information associated with the solicitation. The working folder should be properly labeled for easy access.
- All responses to solicitations and all related materials received as a result of the solicitation following an evaluation by the user department should be returned to the Procurement Officer along with any notes, evaluation forms, etc. relative to the evaluation review. All should be maintained in the project files by the Procurement Officer.
- The Procurement Officer is responsible for securing documents that are to be stored off site according to the WSSC Records Retention Schedule and following the appropriate handling procedures by the offsite document management supplier."

We requested a sample of procurement files for contracts issued during Fiscal Year 2017, as well as, active contracts for which performance and/or payment occurred in Fiscal Year 2017.

Based on our review during the interim audit, we noted the following:

- 24 of 60 construction related disbursements could not be identified or cross-referenced to the contract files provided. 8 of 60 disbursements were not purchase order and/or contract related. Of the contract files reviewed for the other 28 disbursements, 4 contained only the base year and/or prior option year(s)' documents; however, the current year documents were not in the contract files. 15 of 28 files did not contain the relevant contract supports.
- 18 of 60 operating expenses related disbursements could not be identified or cross-referenced to the contract files provided. 9 of 60 disbursements were not purchase order and/or contract related. Of the contract files reviewed for the other 33 disbursements, 7 contained only the base year and/or prior option year(s)' documents; however, current year documents were not in the files. 4 of 33 files did not contain the relevant contract supports.
- 1 of 6 selected from the under \$25,000 files did not contain the purchase order.
- 1 of 6 selected from the under \$25,000 files, a contract file was not provided.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

- 1 of 16 selected from the under \$500,000 files did not contain the appropriate approved procurement exemption from competitive bid form.
- 3 of 16 selected from the under \$500,000 files did not contain a purchase order or contained the wrong purchase order.
- 1 of 16 selected from the under \$500,000 files contained a purchase order with an amount that was different from the sampled purchase order amount.
- 1 of 16 selected from the under \$500,000 files did not contain the purchase order. The purchase order copy later provided was not signed and included the current date. The language in the copy also referenced the wrong Rider Contract.
- 1 of 16 selected from the under \$500,000 files, we observed that two purchase orders were issued, each for \$499,000; therefore, the total contract value was in excess of \$500,000.
- 1 of 18 selected from the over \$500,000 files, the incorrect file was provided.
- 2 of 18 selected from the over \$500,000 files did not contain the purchase order.
- 3 of 18 selected from the over \$500,000 files did not contain the Commissioner's approval documentation; the Commissioners' Approval Package.
- 5 of 18 selected from the over \$500,000 files did not contain the appropriate Commissioners' approvals; the "Approved" Box was not checked.

Based on our review during the final audit, we noted the following:

- For the April 1, 2017 through June 30, 2017 review period, 17 of 50 construction and operating expenses related disbursements could not be identified or cross-referenced to the contract files provided. 13 of 50 disbursements were not purchase order and/or contract related. Of the contract files reviewed for the other 20 disbursements, 3 contained only the base year and/or prior option year(s)' documents; however, current year documents were not in the files. 8 of 20 files did not contain the relevant contract supports.

The conditions noted above resulted from inadequate internal controls over the process of maintaining procurement files, as well as inadequate supporting documentation maintained in some files.

Without complete and accurate procurement files, WSSC may not be able to support business decisions or the progress of procurement activities, as required. The accessibility, consistency, and accuracy of procurement records are essential to ensure the delivery of quality products and services in a timely manner, and on budget; and ensure public confidence. In addition, procurement files without the appropriate approvals may not be valid contracts.

***Recommendation***

The current policy indicates that Contract Manager and/or the Contracting Officer Representative should maintain the contract file during administration of all contracts. The Procurement Office should continue to remind officers of their responsibilities and take the necessary steps in the event of non-compliance. This process should be sufficient to enable supervisory review of the contract files to ensure compliance and completeness. The files should include current contract option periods, purchase orders and appropriate approvals.



**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

As previously recommended, WSSC should conduct a comprehensive audit of its current contracts, and implement periodic audits. These audits should seek to address among other things, the validity of contracts, contract management and duration including change order management, and whether the contracting policies and procedures were followed including obtaining the appropriate approvals for contracts. The audit will also confirm or verify the completeness of the contract file.

In addition, WSSC should ensure that the appropriate Commissioners' approval documentation is included in contract files. For the Commissioners' approval documentation that is not properly checked for approval, WSSC should obtain a copy of the Commission Board Minutes that include the approval language and place a copy in the file.

***Management Response***

The procurement department acknowledges and agrees with these findings and has taken steps to improve internal controls for proper file documentation, review and monitoring and retention of contract files. Contract file checklists are being created and procedures for contract file documentation by contract/solicitation type is currently being developed. Contract files within the Procurement Office are being consolidated and archived in accordance with our records retention process. An interim contract storage and retrieval process is being developed and implemented to properly store and control contract files while the implementation of the Oracle Procurement System, workflow and contract repository is being developed. Contract files will require management review and approval for accuracy and periodic audits will be conducted to ensure contract file maintenance is in accordance with procurement policies and procedures and checklists to include all appropriate documents and appropriate approvals are included in the contract files. The scheduled date for the implementation of the Oracle Procurement System is June 30, 2018. The Procurement Office will report periodically on these efforts until completed.

**WASHINGTON SUBURBAN SANITARY COMMISSION  
COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS  
YEAR ENDED JUNE 30, 2017**

**2. Strengthen Controls Over Bridge Contracts**

***Background***

**Bridge Contracts (Procurement Regulation 4-113)** – WSSC may, without competition, enter into a contract with a person if: the CPO determines that: the person has an existing contract with another public entity for the goods and supplies, services, or construction which WSSC would like to procure; a bridge contract is in the best interests of WSSC; and the contract between the person and the other public entity was awarded as the result of a competitive selection process acceptable to the CPO and the person agrees to; provide WSSC materially the same specifications being provided the other public entity; provide WSSC the same prices being charged the other public entity; and additional terms and conditions, if any proposed by WSSC.

**WSSC's Policies:**

1. Bridge contracts may not be used when the total value of the acquisition exceeds \$1 million.
2. Bridge contracts may not be used for predictable, recurring requirements.
3. The base contract with the public entity must have provisions that allow WSSC or other public entities, in general, to piggyback on the contract.
4. The vendor must consent to the bridge contract by executing a separate agreement with WSSC which confirms that the same prices, terms and conditions granted to the original contracting agency, and any additional terms mutually agreed upon, will be granted to WSSC.
5. The bridge contract must be current, that is, the contract has not expired, or, if the initial term has passed, the contract has been extended.

During our review of procurement files, some contracts were identified to be bridge contracts. For these contracts, there were no separate agreements between WSSC and vendors confirming the same prices, terms and conditions granted to the original contracting agency as required by WSSC's policy. It was unclear whether additional terms were mutually agreed to between WSSC and vendors. In addition, policies and procedures for selecting vendor(s) from a multi-vendor public entity contract are undefined.

Also, there are no formal policies/procedures that outline the process to be followed when selecting contract(s) for bridging and the type of documentation which should be maintained to support the decision to bridge and promote transparency.

The condition noted above resulted from inadequate internal controls over the bridge contracting process. In addition, the policies and procedures over the use of bridge contracts appear unclear.

Without clear policies and procedures for bridge contracts, WSSC may enter into contracts whereby the terms and conditions are not in congruent with its procurement guidelines. Also, the use of bridge contracts may circumvent WSSC's contracting process.

***Recommendation***

The policies and procedures for bridge contracts (or contract riders) should be reviewed and new detailed policies and procedures should be implemented. The procedures and documentation

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

requirements for the use of vendors from multi-vendor's public entity contracts should be clearly defined. Audits of bridge contracts should be done to ensure policies and procedures and the documentation requirements are followed. There should also be executed agreements between WSSC and vendors for all bridge contracts.

***Management Response***

The procurement department acknowledges and agrees with the findings regarding the Bridge Contracts and has taken steps to improve the internal controls of the Bridge Contract Process and Public Entity Contracts by developing a formal documented process. Draft policies and procedures for bridge contracts and public entity contracts have been created and are in the review process to ensure the detailed procedures and documentation requirements are clearly defined to include that executed agreements between WSSC and vendors are required for all bridge contracts. The review and finalized Bridge Contracts Process and Public Entity policies and procedures will be completed no later than December 31, 2017. Once completed training for procurement staff will be undertaken and documented.

**WASHINGTON SUBURBAN SANITARY COMMISSION  
COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS  
YEAR ENDED JUNE 30, 2017**

**3. Strengthen Controls over Receiving and Issuing of Materials and Supplies**

***Background***

The Materials Management Group conducts cycle counts every month and makes adjustments for differences identified from the count. The policies indicate that Class A items are counted 4 times annually, Class B items are counted twice annually and Class C items are counted once annually. The policies also indicate that there is a zero percent (0%) and five percent (5%) tolerance for discrepancies in Class A and Class B/C items, respectively. Management also indicated that a wall-to-wall inventory count was conducted after the implementation of the Oracle Inventory Module and the records were adjusted accordingly.

We attended the June 5, 2017 cycle count and counted a sample of 25 Class A and 25 Class B/C items. We also attended a follow-up recount on June 9, 2017, due to items' locations not being properly identified. Of the samples selected, nine (9) Class A items had discrepancies and four (4) Class B/C items had discrepancies greater than the \$500 threshold. Two (2) of the nine (9) Class A items' locations and counts could not be validated because WSSC staff indicated that these items may be at the job site. From our inquiry of the reason(s) for some discrepancies, it was noted that the Service Level Agreement between Materials Management, Utilities Services and other Groups, which allows departments after normal work hours to take inventory items from the inventory yard without supervision, may not have always operated satisfactorily. Departments are required to submit a request form when they remove inventory items from the yard; however, this does not always occur.

Additionally, one of the reasons for the initial count discrepancies was that items were not always stored in the proper location(s). We also noted even after a recount, there were several discrepancies between the count and the All Inventories Value Report.

These situations indicate an internal control deficiency over inventory receipts and issues, as controls may not be appropriately designed or operating as designed.

***Recommendation***

WSSC should continue to review and perform ongoing updates to the current inventory policies and procedures for receiving and issuing of materials and supplies. New policies and procedures, which seek to reduce differences between inventory counts and the records maintained by WSSC, should also continue to be developed and implemented. Receiving and issuing controls, including supervisory controls, should be strengthened. The Service Level Agreement that allows departments to remove inventory items unsupervised should be reconsidered. WSSC should consider implementing an "after-hours access report" that alerts the Materials Management Group the next business day of all access to the yard after business hours and weekends. WSSC should ensure that all items to be counted are properly located and identified. WSSC staff should ensure that items are properly and correctly recorded in Oracle when issued.

WSSC should also implement new policies that ensure adequate segregation of duties such that the Materials Management Group does not count itself. Functions such as custody, authorization,

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

record keeping and reconciliation should be kept separate. A department and personnel independent of the Materials Management Group should be in-charge of, and conduct, the count.

***Management Response***

The Materials Management Division concurs with the recommendations of the External Auditors.

Having inventory discrepancies during inventory accuracy measuring events is normal. This condition should not be considered a discrepancy for auditing purposes as long as WSSC follows the standard procedures and the final results are within stated goals. During inventory measuring events at the WSSC warehouses, there are expected differences between Oracle and the physical counts that must be researched to determine cause and/or contributing factors. A discrepancy would be warranted if the overall inventory accuracy does not meet prescribed standards (95%).

The Materials Management Division thoroughly examined each quantity discrepancy reflected on the excel spreadsheet provided by BCA, and was able to favorably reconcile most of the discrepancies. The majority of the "discrepancies" resulted from causative analysis being conducted against an Inventory Value Report that was produced and printed on Friday, June 9, 2017. The count would have been more effective if the report had been produced and printed prior to the commencement of the audit on Monday, June, 2017. Between June 5th and June 9th, there were multiple inventory management transactions that altered the initial system quantity.

The other area that requires further analysis and understanding while researching discrepancies is the issue of individual part numbers with physical quantities in multiple locations. There were several cycle count entries that we entered into the system where the part number had quantity in multiple locations, but only the parts in one location were counted. Any audit needs to recognize and address the impact that multiple locations have on cycle counting activities. See item number 36 on the attached spreadsheet as one example.

WSSC Management considers that a 95% inventory accuracy target adequately supports WSSC construction/repair operations and financial information reporting requirements. This 95% inventory accuracy rate for both dollar and unit counts is in accordance with industry best practices. While a completely error free environment would be preferable, a 100% inventory accuracy target does not eliminate stock-outs and could actually be counterproductive. While having stronger security measures after hours and hiring additional personnel to conduct independent counts would enhance capabilities and improve inventory accuracy, significant additional resources in manpower and equipment would be required to support these initiatives. WSSC management would have to conduct an in-depth assessment to justify the investment. Through a strong quality assurance program, the Materials Management Division staff will continue to validate the effectiveness of existing business process and the accuracy of financial transactions. Documents (summaries of the cycle count process activity for the month of June 2016 and for fiscal year 2017) have been submitted which provide formal evidence that the Materials Management Division met the prescribed inventory accuracy goal of 95% for both periods.

The following actions will be taken to ensure that WSSC inventory accuracy during fiscal year 2018 exceeds standards and expectations:

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

- As a "best in class" industry practice, WSSC will continue to use the cycle counting inventory measurement event during fiscal year 2018. Cycle counting is an industry proven methodology based on the recurring counting of sampled stock keeping units (SKUs) throughout a reporting period.
- Barcoding Technology will be implemented throughout the Anacostia warehouse to automate functions and strengthen inventory control efforts. Barcoding Technology will improve transactional accuracy on receiving, counting, and issuing activity.
- The entire inventory management team will receive training to ensure awareness with industry best practices and efforts. Coordinating efforts with the WSSC Human Resources Team are currently underway.
- A new Inventory Management System (ORACLE E-Business Suite - Procure to Pay module) will be implemented during FY18 to facilitate warehousing functions of receiving and stowing materials into proper locations.
- Warehouse Internal Operation Procedures (IOP) will be updated with emphasis on converting MAPS terminology into Oracle based language. This effort will reduce discrepancies in business practices used in handling issues and receiving at the warehouse. All data system transactions will be governed by the new IOPs to guarantee compliance. Warehouse staff will gain the confidence to negotiate the data system which will enhance productivity and minimize inconsistencies.
- User Guide Handbooks based on job description will be created or updated. Oracle presents each staff member with different facets of completing a process. The knowledge gained from the user guide handbook will improve the aptitude of warehouse staff to effectively execute vital functions that affect the operation of the warehouse. These user guide handbooks will become a fluid reference tools with up to date information.
- Internal controls pertaining to issuing materials to WSSC employees and contractors will be reviewed for compliance. The current business practices in place to mitigate unauthorized usage of material are the following:
  - Warehouse staff conducts an ID check to validate the individual requesting the material.
  - For internal employee orders, the person requesting the material is linked to their supervisor through account information embedded in the Oracle E Business Suite (Inventory) System. Both employees and supervisors can validate usage by reviewing a daily consumption report (sent via email).
  - Contractors requests are confirmed through the use of a bill of material created for that specific project. Warehouse staff ensures the contractor is authorized the material prior to creating the move order document.

The mission to provide world-class inventory and warehousing management services for all customers continues to be the Materials Management Division's primary goal.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

**4. Strengthen Controls Over Accounts Payable**

**Segregation of Duties**

***Background***

The Committee of Sponsoring Organizations (COSO) Framework (the “Framework”) established control activities as one of the five elements of internal controls. Control activities are policies and procedures implemented to eliminate, mitigate or compensate for risks identified by management. One important control activity cited by the Framework is segregation of duties which provides for an independent check on work performed and reduces the risk of error or inappropriate employee actions. The Framework identifies incompatible duties and indicates that in order to achieve a strong internal control environment the following four functions should not be performed by the same employee (each function should be performed by different employees or units):

- Authorizing and approving transactions
- Recording transactions
- Maintaining custody of assets
- Reconciling or comparing recorded transactions.

Bank reconciliations are prepared and reviewed by the Accounts Payable Unit which is also involved in authorizing, approving and recording transactions. While bank reconciliations are prepared by an independent employee, they are reviewed and approved by the Unit Coordinator who also processes and approves invoices for payments.

Management has reviewed the condition as stated above and has provided the following cause. For the past several years, the bank reconciliations have been prepared by a designated member of the Accounts Payable Section. In this case, the Accountant III in the Unit is specifically responsible for the bank reconciliations and does not have the ability or the responsibility to pay invoices. Once the bank statements have been reconciled, they are forwarded to the Accounts Payable Unit Coordinator for final signoff. The Accounts Payable Section Manager is ultimately accountable for all functions within the Unit. In the past two years, the Unit has experienced turnover for the first time in many years. With the frequent turnover in staff and limited resources, the Accounts Payable Section Manager has been forced to cover some of the Clerks’ desks in their absence. With the steady volume of the Section, the working supervisor must make these adjustments as needed to timely pay invoices.

If duties are not appropriately segregated, there is an increased risk that errors and inappropriate employee actions could go undetected or not detected timely.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

***Recommendation***

As noted in the GFOA Best Practice Bulletin on Bank Account Fraud Prevention, WSSC should ensure proper segregation of duties among staff initiating, authorizing, preparing, signing and mailing payments and reconciling bank statements. Specifically, bank reconciliations should be prepared and reviewed by an Accounting Unit other than Accounts Payable or WSSC should ensure that the preparation and review of bank reconciliations within Accounts Payable are independent of the other incompatible functions.

***Management Response***

Management has reviewed the recommendation and agrees that the preparation and review of the bank statements in Accounts Payable should be independent of the other incompatible functions. However, management does not agree that the bank reconciliation process should be handled by an Accounting Unit outside of Accounts Payable. Separation/segregation of duties within the Disbursements Division/Accounts Payable Section has always been paramount. The employees in the Section have been assigned tasks based on their job descriptions and level of responsibility. There is a clear delineation between those who pay invoices, review payments, transfer to the banks, reconcile the bank statements, prepare checks, and other related duties.

In unusual circumstances, such as the turnover that the Section has experienced in the last two years, the Accounts Payable Section Manager (working supervisor) has to make provisions to ensure that her staff can meet the high volume demands of the Section. This includes stepping in to either make payments, enter invoices to be paid, review the clerks work, and/or shift other resources accordingly. During this time, the employee that prepares the bank reconciliations continues in this function with no authority to pay invoices. The Accounts Payable Section Manager continues to review the reconciliations and provide final signoff. There are several banks that are reconciled monthly and the Accounts Payable Section Manager would only have control over one; the general disbursing account. In the interim, until the Section is fully staffed and back to standard operation, the Disbursements Division Manager can countersign the general disbursing account reconciliations on a monthly basis. This is consistent with the arrangements that we have made for other functions that have been shifted. If the Accounts Payable Section Manager initiates and balances the select for payment, the Disbursement Division Manager signs the final select for payment prior to any payments being made. If the Accounts Payable Section Manager needs to perform a cancel and reissue, the Disbursements Division Manager performs the void function in Oracle. We believe this arrangement provides appropriate segregation of duties.



**WASHINGTON SUBURBAN SANITARY COMMISSION  
COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS  
YEAR ENDED JUNE 30, 2017**

**Other Bank Reconciliation Matters**

***Background***

Reconciliations are required to be completed by the 10<sup>th</sup> day of the following month.

We reviewed all bank reconciliations for three (3) months of the period July 2016 to March 2017 and noted the following:

- Bank reconciliations were not prepared and/or reviewed within the ten (10) days timeframe established by WSSC’s policies and procedures. The reconciliations were prepared and reviewed as follows:

<b>MONTHS REVIEWED</b>	<b>DATE PREPARED</b>	<b>DATE REVIEWED</b>
August 2016	September 20, 2016	October 8, 2016
November 2016	December 28, 2016	December 30, 2016
February 2017	March 1, 2017	March 24, 2017

- For the month of August, a reconciliation contained outstanding checks that were issued in excess of six months.
- For each month, certain reconciliations contained outstanding checks for which stop orders were issued. From inquiry, we noted that stopped checks are not reversed in the ledger upon the reissuance of a new replacement check. When reissued checks are cleared at the bank, they are matched against the stopped check on the reconciliation.

Management has reviewed the condition stated above and has provided the following cause:

- The goal of the Section is to have the bank reconciliations prepared and reconciled by the 15<sup>th</sup> of the next month. Due to the resource shortage in the Accounts Payable Section, the bank reconciliations were prepared and reconciled, however, the reconciliation and review was delayed. This was primarily due to prioritization of tasks within the Section.
- It is the banks policy to keep outstanding checks on the statement for up to 6 months for stop payments.
- The issue with the stop payments is only relevant for the Payroll account. For the general disbursing account, all stop payments and subsequent voids in the Oracle Accounts Payable system are recorded against the GL as necessary. In the case of the payroll account, this only happens when we have to issue a check to a beneficiary or estate for a deceased employee or for lost checks. The primary reason for the lack of a reversal in the GL is that you cannot setup a beneficiary or estate in the payroll system to be paid. Therefore, the payroll staff issues a manual check and then manually records the transaction within their hard copy records.

If reconciliations and reconciling items are not completed and cleared timely, errors and irregularities may not be identified and addressed timely. Also, reissuing checks without

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

properly canceling and recording stopped checks in the ledger and offsetting them during the reconciliation process creates a potential mode of circumvention.

***Recommendation***

Bank reconciliations should be prepared and reviewed within the timeframe established, and reconciling items should be cleared timely. Management should review and implement new policies and procedures for the processing and reconciling of checks for which stop orders are issued.

***Management Response***

Management has reviewed the recommendation provided by the external auditors and agree that the bank reconciliation process should be reviewed and new procedures should be implemented. The bank statements are downloaded or received in the mail between the 3<sup>rd</sup> and 7<sup>th</sup> of each month and the goal is to have them reconciled by the 15<sup>th</sup> of the following month. In unusual circumstances, such as the current year resource constraints, there can be a delay in the preparation of the reconciliation and ultimate review of the statements on a monthly basis. While the goal should remain to have them reconciled and reviewed by the 15<sup>th</sup> of the following month, the internal procedure will be to have them completed no later than the close of the following month. In addition, the Disbursements Division Manager will review and sign the reconciliation for the General Disbursing account to ensure segregation of duties and strengthen the controls over that account. There is no regulatory requirement nor policy that impacts this process; it's simply an internal procedure. In the case of the stop payments against the payroll account, there is no way currently to have them recorded within the payroll system. Until there is a systemic solution to this process, we can make sure that the internal procedure for processing cancelled or voided checks against the payroll account is documented and available for review. As stated, the process for cancelling and voiding checks against the general disbursing account is recorded against the GL as necessary.

**WASHINGTON SUBURBAN SANITARY COMMISSION  
COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS  
YEAR ENDED JUNE 30, 2017**

**5. Develop and/or Update Comprehensive Policies and Procedures (Repeated)**

***Background***

WSSC does not have a comprehensive accounting manual, and an organization-wide congruent set of policies and procedures. Some departments have developed policy and procedures, which in some instances are outdated and/or inadequate. Other departments, for example, Utilities Services and Revenue Management, do not have formal documented policy and procedures.

Policies and procedures are important internal control measures, which help organizations operate with greater consistency, promote goal congruence and are useful for training current and new employees. Formalized policies and procedures will allow for stronger management of all functions.

WSSC may be exposed to inconsistencies and errors in processing transactions if policies and procedures are not clearly defined, documented and communicated. Also, currently documented policies and procedures may not be sufficiently comprehensive to efficiently support and ensure the secured continuation of operations and controls in the event of employee turnover.

***Recommendation***

We recommend that the Accounting Group develops a comprehensive accounting manual which will include all elements of accounting operations. Also, WSSC should continue to update existing policies, and develop an organization-wide congruent set of policies and procedures for all areas of the organization.

***Management Response***

***Accounting Manual***

WSSC agrees with BCA's recommendation:

1. We will create a plan for the development of a comprehensive accounting manual by December 31, 2017.
2. We will hire a consultant to assist in the documentation of policies and procedures by January 31, 2018.
3. We will maintain status reports to monitor our progress in relation to the plan.

***Organization Wide Policies***

The General Counsel's Office (GCO) has been working on developing the WSSC Code of Regulations and Manual of WSSC SPs for several years by compiling WSSC regulations and standard procedures Internal Operating Procedures (IOP) are not included, and are kept within each Team. The Table of Contents for the new Code of Regulations and SP's is organized by function and activity. The final organization of the Code and Manual is in its final stages with the publishers. WSSC operating teams and staff offices will review the draft document before it is published. The Manual of WSSC SPs will be published internally. The Code of Code of Regulations will be adopted by the Commission and published externally. We expect this effort to be completed during FY18.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**COMMUNICATION OF INTERNAL CONTROL RELATED MATTERS**  
**YEAR ENDED JUNE 30, 2017**

***LIST OF PRIOR YEAR'S COMMENTS***

**2016 Comments**

- Strengthen Controls over Accounting for Substantially Complete Construction-In-Progress Projects (*In Process*)
- Strengthen Controls over Approvals and Records Retention of Contracts (*Unresolved*)
- Strengthen Controls over Bridge Contracts (*Unresolved*)
- Strengthen Controls over Receiving and Issuing of Materials and Supplies (*In Process*)
- Strengthen Controls over P-Card Activities (*Resolved*)
- Develop and/or Update Comprehensive Policies and Procedures (*Unresolved*)

**2015 Comments**

- Strengthen Controls over Capital Assets (*In Process*)
- Strengthen Controls over P-Card Activities (*In Process*)
- Strengthen Controls over Receiving and Issuing of Materials and Supplies (*In Process*)
- Strengthen Controls over Accounts Payable Accruals (*Resolved*)
- Develop and/or Update Comprehensive Policies and Procedures (*Unresolved*)

**2014 Comments**

- Split Transactions Identified During P-Card Controls Review (*In Process*)
- Strengthen Controls over Receiving and Issuing of Materials and Supplies (*In Process*)
- Strengthen Controls over Accounts Payable Accruals (*Resolved*)
- Implement Comprehensive Capital Asset Management Policies, Procedures and System (*Unresolved*)





# Annual Financial Report

Year Ended  
June 30, 2017



## **REPORT OF INDEPENDENT AUDITORS**

To The Commissioners  
of the Washington Suburban Sanitary Commission:

### **Report on Financial Statements**

We have audited the accompanying financial statements of Washington Suburban Sanitary Commission (WSSC), which comprise the balance sheets as of June 30, 2017 and 2016, and the related statements of revenues, expenses and changes in net position, and cash flows for the years then ended, and the related notes to the financial statements.

### **Management's Responsibility for the Financial Statements**

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

### **Auditor's Responsibility**

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

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

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

## Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of WSSC as of June 30, 2017 and 2016, and the results of its operations and its cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

## Other Matter

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the accompanying management discussion and analysis on pages 3-11, the schedule of changes in net pension liability and related ratios and related notes on pages 45 and 46, the schedule of contributions and related notes on pages 47 and 48, and the schedule of historical other postemployment benefits information on page 49 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.

Washington, D.C.  
September 15, 2017

*BCA Watson Rre LLP*

**WASHINGTON SUBURBAN SANITARY COMMISSION  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
REQUIRED SUPPLEMENTARY INFORMATION  
FOR THE YEARS ENDED JUNE 30, 2017 AND 2016  
(Unaudited)**

This section of the Washington Suburban Sanitary Commission (WSSC) annual financial report presents our discussion and analysis of WSSC's financial performance for the fiscal years ended June 30, 2017 and 2016.

**FINANCIAL HIGHLIGHTS**

*Fiscal Year 2017*

- WSSC maintained AAA bond ratings from Fitch Ratings, Moody's Investors Service, and Standard & Poor's.
- In December 2016, WSSC issued \$382.0 million of Consolidated Public Improvement Bonds to fund new construction, rehabilitation and replacement of water and sewer infrastructure.
- No refunding bonds were sold in fiscal year 2017.
- The Commission redeemed \$12.4 million in Notes on June 28, 2017 as part of the water, sewer and general debt service amortization.
- A Consent Decree with the Environmental Protection Agency, the Department of Justice, the State of Maryland, and four environmental groups entered its twelfth year. The Consent Decree formally identifies the remedial measures to eliminate and/or reduce sanitary sewer overflows. In fiscal 2016, the U.S. District Court approved a six-year extension to the original term of the Consent Decree. Costs of the remedial measures are estimated at \$1,967.0 million and are to be expended over at least 18 years, \$748.0 million of which is expected to be incurred after fiscal year 2017. The costs for each fiscal year are or will be included in WSSC's budget and six-year capital improvements program.
- Under a Consent Decree executed by the District Court of Maryland on April 15, 2016, the Commission is required to undertake short-term operational changes and capital improvements at the Potomac Water Filtration Plant that will enable WSSC to reduce solids discharged to the river, and to plan, design and implement upgrades or new construction to achieve requirements established by MDE and incorporated in a new discharge permit. An Audit report and Long-Term Upgrade Plan were submitted by WSSC for consideration by MDE on December 26, 2016. Costs for implementation of improvements under the proposed plan are estimated at \$157.5 million, and are to be expended over at least 7 years, \$156.0 of which is expected to be incurred after fiscal year 2017. The costs are included in WSSC's budget and capital improvements program.
- WSSC's operating revenues rose \$76.8 million. Average rates for water consumption and sewer use revenues increased 2.9% and billed consumption for the year increased 5.8%. The second phase-in year of the new Infrastructure Investment Fee resulted in additional revenues from the ready-to-serve charge.
- Operating expenses increased \$39.0 million, or 7.0%, during fiscal year 2017. WSSC continues to focus their efforts on meeting the requirements of the Consent Decree and incurred additional operating costs this year of \$6.3 million. Increased expenditures of \$4.5 million were realized for water valve assessments and \$2.7 million for PCCP monitoring and analysis. Merits, COLAs and the hiring of additional staff triggered a \$5.6 million increase in salaries. The majority of the remaining variance, or \$13.8 million, represents depreciation on capital assets placed in service in recent years.
- Capital assets (water and sewer lines, water tanks, treatment plants, pumping stations, multi-purpose facilities and other facilities), net of accumulated depreciation, increased by \$437.6 million, while overall debt increased \$355.6 million in comparison to the previous fiscal year.
- The increase in net position during the year included net income of \$95.5 million, and capital contributions of \$84.0 million.



## *Fiscal Year 2016*

- WSSC maintained AAA bond ratings from Fitch Ratings, Moody's Investors Service, and Standard & Poor's.
- In October 2015 and May 2016, WSSC issued \$390.0 million and \$145.0 million, respectively, of Consolidated Public Improvement Bonds to fund new construction, rehabilitation and replacement of water and sewer infrastructure.
- In November 2015 and May 2016, WSSC sold \$145.0 million and \$36.0 million of refunding bonds to refund \$148.0 million and \$42.0 million, respectively, of outstanding callable water supply, sewage disposal and general construction bonds. The November 2015 and May 2016 refundings will reduce WSSC's total debt service payments by \$13.0 million and \$5.0 million and provide an economic gain of \$12.0 million and \$5.0 million, respectively.
- The Commission redeemed \$90.0 million in Notes on November 18, 2015 as part of the water, sewer and general debt service amortization.
- A Consent Decree with the Environmental Protection Agency, the Department of Justice, the State of Maryland, and four environmental groups entered its eleventh year. The Consent Decree formally identifies the remedial measures to eliminate and/or reduce sanitary sewer overflows. In fiscal 2016, the U.S. District Court approved a six-year extension to the original term of the Consent Decree. Costs of the remedial measures are estimated at \$1,931.0 million and are to be expended over at least 18 years, \$888.0 million of which is expected to be incurred after fiscal year 2016. The costs for each fiscal year are or will be included in WSSC's budget and six-year capital improvements program.
- Under a Consent Decree executed by the District Court of Maryland on April 15, 2016, the Commission is required to undertake short-term operational changes and capital improvements at the Potomac Water Filtration Plant that will enable WSSC to reduce solids discharged to the river, and to plan, design and implement upgrades or new construction to achieve requirements established by MDE and incorporated in a new discharge permit. An Audit report and Long-Term Upgrade Plan are to be submitted by WSSC for consideration by January 2, 2017. Costs for implementation of improvements are estimated at \$43.0 million, and are to be expended over at least 7 years, all of which is expected to be incurred after fiscal year 2016. The costs are included in WSSC's budget and capital improvements program.
- WSSC's operating revenues rose \$3.4 million. Although average rates for water consumption and sewer use revenues increased 1.0%, billed consumption for the year decreased 4.5%. The enactment of a new Infrastructure Investment Fee and changes to the Account Maintenance Fee resulted in additional revenues from ready-to-serve charges.
- Operating expenses increased \$31.2 million, or 5.9%, during fiscal year 2016. Intermunicipal agency sewage disposal expenses decreased \$6.6 million, savings which are attributable to the recent construction of the digester at Blue Plains. WSSC continues to focus their efforts on meeting the requirements of the Consent Decree and incurred additional operating costs this year of \$5.0 million. Increased expenditures of \$6.1 million were realized in the implementation of the Information Technology Team's 5-Year Strategic Plan and data storage improvement projects. Merits, COLAs and the hiring of additional staff triggered a \$4.3 million increase in salaries. Emergency work to address the smooth operation of an aging infrastructure required an additional \$3.5 million. The majority of the remaining variance, or \$19.6 million, represents depreciation on capital assets placed in service in recent years, an abandonment of assets with planned replacements, and an impairment of the Western Branch incinerator.
- Capital assets (water and sewer lines, water tanks, treatment plants, pumping stations, multi-purpose facilities and other facilities), net of accumulated depreciation, increased by \$580.7 million, while overall debt increased \$334.2 million in comparison to the previous fiscal year.
- The increase in net position during the year included net income of \$79.3 million, and capital contributions of \$134.7 million.

## OVERVIEW OF THE FINANCIAL STATEMENTS

This annual report consists of three parts - management's discussion and analysis, the required financial statements, and other required supplementary information. The required financial statements consist of:

- Balance sheets
- Statements of revenues, expenses, and changes in net position
- Statements of cash flows
- Notes to the financial statements

The balance sheets provide a snapshot of WSSC's financial position at June 30, the end of the fiscal year. WSSC's balance sheets present current and long-term assets and liabilities, deferred outflows and inflows of resources, as well as net position.

WSSC's statements of revenues, expenses and changes in net position reflect activity for the fiscal years. These statements measure operating revenues and expenses as well as non-operating revenues and expenses. The statements also present capital contributions as well as changes in net position.

The statements of cash flows present WSSC's inflows and outflows of cash. Cash flows from operating activities, capital and related financing activities, and investment activities are shown separately. Cash provided by operating activities is reconciled to operating income. WSSC uses the direct method for presenting the statements of cash flows.

The financial statements also include notes that provide more detailed data and explanations for some of the information in the financial statements.

WSSC operates as an enterprise fund, which is one type of proprietary fund. Enterprise funds operate similarly to private businesses in that charges for services to customers are expected to cover expenses. WSSC's financial statements are presented using the accrual basis of accounting and the economic resources measurement focus. All assets and liabilities are included in the financial statements. Revenue is recognized when water or other services are delivered. Expenses are recognized when goods and services are received. All revenues and expenses are recognized regardless of when cash is received or paid.

## FINANCIAL ANALYSIS

### Net Position

#### *Fiscal Year 2017*

WSSC's net position increased 3.9% to \$4,723.0 million (See Table A-1). The majority of this increase is attributable to the change in the net investment in capital assets. Capital assets, net of accumulated depreciation, increased 6.0% to \$7,767.3 million. Unused bond proceeds at the end of the year were \$3.4 million. During fiscal year 2017, developers constructed \$35.3 million of capital assets and donated them to WSSC. In addition, land and rights of way donated in fiscal year 2017 decreased \$34.9 million in comparison to fiscal year 2016. Additional information is presented in the Capital Asset and Debt Administration section of this discussion.

Total debt, including current maturities increased to \$3,006.8 million. Capital contributions of \$46.6 (net of donated capital assets) million were available to finance capital projects during the year. These funding sources reduced the amount of bonds WSSC needed to sell for construction of water and sewer projects. A more detailed description of WSSC's debt can be found in Notes J and K of the financial statements.

***Fiscal Year 2016***

WSSC's net position increased 4.9% to \$4,543.6 million (See Table A-1). The majority of this increase is attributable to the change in the net investment in capital assets. Capital assets, net of accumulated depreciation, increased 8.6% to \$7,329.7 million. There were no unused bond proceeds at the end of the year. During fiscal year 2016, developers constructed \$34.9 million of capital assets and donated them to WSSC. In addition, land and rights of way donated in fiscal year 2016 increased \$36.9 million in comparison to fiscal year 2015. Additional information is presented in the Capital Asset and Debt Administration section of this discussion.

Total debt, including current maturities increased to \$2,651.2 million. Capital contributions of \$62.8 (net of donated capital assets) million were available to finance capital projects during the year. These funding sources reduced the amount of bonds WSSC needed to sell for construction of water and sewer projects. A more detailed description of WSSC's debt can be found in Notes J and K of the financial statements.

**TABLE A-1**  
**WSSC's Condensed Balance Sheet**  
**(in millions of dollars)**

	<b>FY 2017</b>	<b>FY 2016</b>	<b>FY 2015</b>	<b>FY 2017</b> <b>% Change</b>	<b>FY 2016</b> <b>% Change</b>
Current and other assets	\$ 398.3	\$ 327.2	\$ 353.5	21.7	(7.4)
Capital assets, net of accumulated depreciation	7,767.3	7,329.7	6,749.0	6.0	8.6
<b>Total assets</b>	<b>8,165.6</b>	<b>7,656.9</b>	<b>7,102.5</b>	<b>6.6</b>	<b>7.8</b>
<b>Total deferred outflows of resources</b>	<b>68.2</b>	<b>92.3</b>	<b>16.6</b>	<b>(26.1)</b>	<b>456.0</b>
Current and other liabilities	801.8	759.2	793.9	5.6	(4.4)
Bonds and notes payable, net of current maturities	2,658.9	2,395.2	1,968.4	11.0	21.7
<b>Total liabilities</b>	<b>3,460.7</b>	<b>3,154.4</b>	<b>2,762.3</b>	<b>9.7</b>	<b>14.2</b>
<b>Total deferred inflows of resources</b>	<b>50.1</b>	<b>51.2</b>	<b>27.3</b>	<b>(2.1)</b>	<b>87.5</b>
Net position:					
Net investment in capital assets	4,573.3	4,429.0	4,262.5	3.3	3.9
Restricted for growth construction	19.3	31.1	12.6	(37.9)	146.8
Unrestricted	130.4	83.5	54.4	56.2	53.5
<b>Total net position</b>	<b>\$ 4,723.0</b>	<b>\$ 4,543.6</b>	<b>\$ 4,329.5</b>	<b>3.9</b>	<b>4.9</b>

**Changes in Net Position**

***Fiscal Year 2017***

WSSC's operating revenues rose \$76.8 million (see Table A-2). Average rates for water consumption and sewer use revenues increased 2.9% and billed consumption for the year increased 5.8%. The second phase-in year of the new Infrastructure Investment Fee resulted in additional revenues from the ready-to-serve charge. Conversely, income from front foot benefit assessments and house connection charges continued to decline. Front foot benefit extensions and related house connections have been built primarily by outside developers for in excess of fifteen years. Assessments for construction by WSSC prior to that time are collected over the remaining term of the debt utilized to finance the construction.

Operating expenses increased \$39.0 million, or 7.0%, during fiscal year 2017. WSSC continues to focus their efforts on meeting the requirements of the Consent Decree and incurred additional operating costs this year of \$6.3 million. Increased expenditures of \$4.5 million were realized for water valve assessments and \$2.7 million for PCCP monitoring and analysis. Merits, COLAs and the hiring of additional staff triggered a \$5.6 million increase in salaries. The majority of the remaining variance, or \$13.8 million, represents depreciation on capital assets placed in service in recent years.

The net changes in revenues and expenses during the year resulted in a 20.4% increase in income before capital contributions to \$95.5 million. Capital contributions decreased by 37.6% to \$84.0 million. Grant revenue decreased \$17.8 million due to a reduction in costs incurred on ENR projects. Donated assets, constructed and contributed by developers were comparable to the prior fiscal year. The methodology utilized to estimate acquisition values for donated land and rights of way was changed in fiscal year 2016 resulting in a \$36.9 million increase. The increase in 2017, by utilizing the same methodology, was \$2.1 million.

***Fiscal Year 2016***

WSSC's operating revenues rose \$3.4 million (see Table A-2). Although average rates for water consumption and sewer use revenues increased 1.0%, billed consumption for the year decreased 3%. The enactment of a new Infrastructure Investment Fee and changes to the Account Maintenance Fee resulted in additional revenues from ready-to-serve charges. Conversely, income from front foot benefit assessments and house connection charges continued to decline. Front foot benefit extensions and related house connections have been built primarily by outside developers for in excess of fifteen years. Assessments for construction by WSSC prior to that time are collected over the remaining term of the debt utilized to finance the construction.

Operating expenses increased \$31.2 million, or 5.9%, during fiscal year 2016. Intermunicipal agency sewage disposal expenses decreased \$6.6 million, savings which are attributable to the recent construction of the digester at Blue Plains. WSSC continues to focus their efforts on meeting the requirements of the Consent Decree and incurred additional operating costs this year of \$5.0 million. Increased expenditures of \$6.1 million were realized in the implementation of the Information Technology Team's 5-Year Strategic Plan and data storage improvement projects. Merits, COLAs and the hiring of additional staff triggered a \$4.3 million increase in salaries. Emergency work to address the smooth operation of an aging infrastructure required an additional \$3.5 million. The majority of the remaining variance, or \$19.6 million, represents depreciation on capital assets placed in service in recent years, an abandonment of assets with planned replacements, and an impairment of the Western Branch incinerator.

The net changes in revenues and expenses during the year resulted in a 25.0% decrease in income before capital contributions to \$79.3 million. Capital contributions increased by 54.6% to \$134.7 million. Grant revenue increased \$13.4 million due to increased funding on WSSC's portion of costs incurred to upgrade the Blue Plains' Enhanced Nutrient Removal (ENR) and Tunnel projects. Donated assets, constructed and contributed by developers, decreased \$5.0 million. The methodology utilized to estimate acquisition values for donated land and rights of way was changed in fiscal year 2016 resulting in a \$36.9 million increase.

**TABLE A-2**  
**WSSC's Condensed Changes in Net Position**  
**(in millions of dollars)**

	<b>FY 2017</b>	<b>FY 2016</b>	<b>FY 2015</b>	<b>FY 2017</b> <b>% Change</b>	<b>FY 2016</b> <b>% Change</b>
Operating revenues	\$ 725.8	\$ 649.0	\$ 645.6	11.8	0.5
Operating expenses	(599.3)	(560.3)	(529.1)	7.0	5.9
Net non-operating revenues (expenses)	(31.0)	(9.4)	(10.7)	229.8	(12.1)
<b>Income before capital contributions</b>	95.5	79.3	105.8	20.4	(25.0)
Capital contributions	84.0	134.7	87.1	(37.6)	54.6
<b>Changes in net position</b>	<b>\$ 179.5</b>	<b>\$ 214.0</b>	<b>\$ 192.9</b>	<b>(16.1)</b>	<b>10.9</b>

## CAPITAL ASSETS AND DEBT ADMINISTRATION

### Capital Assets

#### *Fiscal Year 2017*

As of June 30, 2017, WSSC had invested \$7,767.3 million, net of accumulated depreciation, in a broad range of capital assets including water and sewer lines, water tanks, treatment plants, pumping stations, multi-purpose facilities and other facilities. This amount represents a net increase of \$437.6 million, or 6.0%, over fiscal year 2016.

#### *Fiscal Year 2016*

As of June 30, 2016, WSSC had invested \$7,329.7 million, net of accumulated depreciation, in a broad range of capital assets including water and sewer lines, water tanks, treatment plants, pumping stations, multi-purpose facilities and other facilities. This amount represents a net increase of \$580.7 million, or 8.6%, over fiscal year 2015.

**TABLE A-3**  
**WSSC's Capital Assets**  
**(net of depreciation and impairment losses, in millions of dollars)**

	<b>FY 2017</b>	<b>FY 2016</b>	<b>FY 2015</b>	<b>FY 2017</b> <b>% Change</b>	<b>FY 2016</b> <b>% Change</b>
Land and rights of way	\$ 121.7	\$ 117.9	\$ 78.9	3.2	49.4
Construction in progress	1,582.3	1,439.6	1,366.5	9.9	5.3
Water supply	1,941.3	1,756.1	1,665.2	10.5	5.5
Sewage disposal	1,649.7	1,512.5	1,211.3	9.1	24.9
General construction	1,376.3	1,386.6	1,387.1	(0.7)	(0.0)
Intangible assets	1,053.4	1,071.7	993.9	(1.7)	7.8
Other	42.6	45.3	46.1	(6.0)	(1.7)
<b>Total capital assets</b>	<b>\$ 7,767.3</b>	<b>\$ 7,329.7</b>	<b>\$ 6,749.0</b>	<b>6.0</b>	<b>8.6</b>

Capital assets completed and placed in service in 2017 decreased \$60.8 million or 11.4%, in comparison to fiscal year 2016. Rehabilitation or replacement of water and sewer mains and related house connections increased 75.0%, or \$170.1 million. Upgrades on wastewater treatment facilities decreased \$239.2 million. Major additions to capital assets being depreciated during fiscal year 2017 are illustrated in Table A-4.

Capital assets completed and placed in service in 2016 increased \$123.0 million or 29.9%, in comparison to fiscal year 2015. Rehabilitation or replacement of water and sewer mains and related house connections decreased 35.7%, or \$125.9 million. Upgrades on wastewater treatment facilities and water filtration plants increased \$261.7 million. Major additions to capital assets being depreciated during fiscal year 2014 are illustrated in Table A-5.

Additional information relative to WSSC's capital assets is presented in Note D of the financial statements.

**TABLE A-4**  
**WSSC's Additions to Capital Assets Being Depreciated**  
**Fiscal Year 2017**  
(in millions of dollars)

	Water Supply	Sewage Disposal	General Construction
<b>Financed from proceeds of bonds, notes, operating revenues or capital contributions:</b>			
Water and sewer mains	\$ 190.3	\$ 160.4	\$ 4.0
House connections	11.0	25.8	5.3
Water meters	1.3	1.3	
Water filtration plants	(2.4)		
Water storage facilities	34.8		
Wastewater treatment facilities		2.7	
Wastewater pumping stations		2.6	
Miscellaneous assets	1.2		
<b>Constructed and contributed by developers:</b>			
House connections			4.8
Water and sewer mains		1.5	29.0
<b>Total fiscal year 2017 additions to capital assets being depreciated</b>	<b>\$ 236.2</b>	<b>\$ 194.3</b>	<b>\$ 43.1</b>

**TABLE A-5**  
**WSSC's Additions to Capital Assets Being Depreciated**  
**Fiscal Year 2016**  
(in millions of dollars)

	Water Supply	Sewage Disposal	General Construction
<b>Financed from proceeds of bonds, notes, operating revenues or capital contributions:</b>			
Water and sewer mains	\$ 104.2	\$ 84.6	\$ 3.0
House connections	6.4	22.6	5.9
Water meters	1.2	1.1	
Water filtration plants	20.1		
Wastewater treatment facilities		241.9	
Wastewater pumping stations		2.3	
Multi-use facilities			6.1
Miscellaneous assets	0.1		
<b>Constructed and contributed by developers:</b>			
House connections			5.6
Water and sewer mains		1.3	28.0
<b>Total fiscal year 2016 additions to capital assets being depreciated</b>	<b>\$ 132.0</b>	<b>\$ 353.8</b>	<b>\$ 48.6</b>

## Bonds and Notes Payable

### *Fiscal Year 2017*

At the end of fiscal year 2017, bonds and notes outstanding totaled \$3,006.8 million, a \$355.6 million increase in comparison to the previous fiscal year. In December 2016, WSSC issued \$382.0 million of Consolidated Public Improvement Bonds to fund new construction, rehabilitation and replacement of water and sewer infrastructure.

The Commission redeemed \$12.4 million in Notes on June 28, 2017 as part of the water, sewer and general debt service amortization.

No refunding bonds were sold in fiscal year 2017.

### *Fiscal Year 2016*

At the end of fiscal year 2016, bonds and notes outstanding totaled \$2,651.2 million, a \$334.2 million increase in comparison to the previous fiscal year. In October 2015 and May 2016, WSSC issued \$390.0 million and \$145.0 million, respectively, of Consolidated Public Improvement Bonds to fund new construction, rehabilitation and replacement of water and sewer infrastructure.

The Commission redeemed \$90.0 million in Notes on November 18, 2015 as part of the water, sewer and general debt service amortization.

In November 2015 and May 2016, WSSC sold \$145.0 million and \$36.0 million of refunding bonds to refund \$148.0 million and \$42.0 million, respectively, of outstanding callable water supply, sewage disposal and general construction bonds. The November 2015 and May 2016 refundings will reduce WSSC's total debt service payments by \$13.0 million and \$5.0 million and provide an economic gain of \$12.0 million and \$5.0 million, respectively.

**TABLE A-6**  
**WSSC's Bonds and Notes Payable**  
**(in millions of dollars)**

	<b>FY 2017</b>	<b>FY 2016</b>	<b>FY 2015</b>	<b>FY 2017</b> <b>% Change</b>	<b>FY 2016</b> <b>% Change</b>
Water supply	\$ 1,155.9	\$ 970.7	\$ 847.2	19.1	14.6
Sewage disposal	1,647.3	1,474.3	1,230.0	11.7	19.9
General construction	203.6	206.2	239.8	(1.3)	(14.0)
<b>Total</b>	<b>3,006.8</b>	<b>2,651.2</b>	<b>2,317.0</b>	<b>13.4</b>	<b>14.4</b>
Current maturities	347.9	256.0	348.5	35.9	(26.5)
Long-term portion	2,658.9	2,395.2	1,968.5	11.0	21.7
<b>Total bonds and notes payable</b>	<b>\$ 3,006.8</b>	<b>\$ 2,651.2</b>	<b>\$ 2,317.0</b>	<b>13.4</b>	<b>14.4</b>

### *Bond Ratings*

Fitch Ratings, Moody's Investors Service, and Standard & Poor's assigned and affirmed ratings of 'AAA', 'Aaa', and 'AAA', respectively, on WSSC's outstanding water supply, sewage disposal and general construction general obligation bonds. The agencies identified strengths of the Commission in support of their ratings which include a sizeable, diverse tax base in Montgomery and Prince George's Counties, good finances characterized by the self-supporting nature of the water and sewer system, and a skilled management team.

### ***Limitations on Debt***

Maryland law limits the amount of bonds and notes WSSC may have outstanding at any time. This limitation is generally based on legislated percentages of the real property assessable tax base and personal property and operating real property assessments within the Washington Suburban Sanitary District. As of June 30, 2017 and 2016, the calculated limits were \$10,898.3 million and \$10,451.2 million, respectively. WSSC's outstanding debt was significantly below those limits.

Additional information relative to WSSC's Bonds and Notes activity is presented in Notes J and K of the financial statements.

### **FUTURE FACTORS**

In June 2016, WSSC initiated efforts with staff from both Prince George's and Montgomery Counties to review the existing 16-tier inclining block water and sewer rate structure and to identify alternate rate structures. The 16-tier rate structure had been in place since 1992. In March 2017, the Public Service Commission (PSC) in the case of *Richard D. Boltuck v. Washington Suburban Sanitary Commission* found, *inter alia*, that the existing rate structure was "unduly preferential to low-usage customers" and ordered the Commission to adopt a new rate structure. With the support of staff and consultants, WSSC has developed a Cost of Service Study to analyze the cost of providing water and wastewater services to residential and non-residential customers and the revenues recovered from these customers. WSSC has also developed numerous rate structure options that may replace the current 16-tier rate structure including a single volume rate, and 3-tier and 4-tier increasing block rates. All options developed are intended to be revenue neutral in comparison to the fiscal year 2018 water and sewer rate revenues. The Commission plans to approve a resolution in June of 2018 for an Intent to Adopt and Implement a new rate structure in June of 2019.

### **CONTACT INFORMATION**

Any questions regarding this report can be directed to the Finance Office at 14501 Sweitzer Lane, Laurel, Maryland, 20707. A copy of the report is also available on WSSC's website at [www.wsscwater.com](http://www.wsscwater.com).



**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**BALANCE SHEETS**  
**AS OF JUNE 30, 2017 AND 2016**  
(in thousands)

	<b>2017</b>	<b>2016</b>
<b>ASSETS</b>		
Current assets:		
Cash (Note B)	\$ 18,514	\$ 15,743
Investments (Note B)	210,784	129,639
Receivables, net (Note C)	133,446	126,871
State grants receivable	6,694	28,467
Prepaid expenses	264	628
Materials and supplies, net	15,442	16,065
Total current assets	385,144	317,413
Non-current assets:		
Capital assets, net of accumulated depreciation (Note D)	7,767,282	7,329,656
Investments restricted for capital construction (Note B)	3,383	-
Note receivable (Note E)	9,790	9,757
Total non-current assets	7,780,455	7,339,413
Total assets	8,165,599	7,656,826
<b>DEFERRED OUTFLOWS OF RESOURCES</b>		
Deferred amount from pension differences between projected and actual plan investments (Note L)	26,261	43,213
Deferred amount from pension resulting from changes in assumptions (Note L)	21,505	26,882
Deferred amount from pension contributions (Note L)	11,291	11,173
Deferred amount from debt refunding (Note F)	9,129	11,016
Total deferred outflows of resources	68,186	92,284
Total assets and deferred outflows of resources	\$ 8,233,785	\$ 7,749,110

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

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**BALANCE SHEETS**  
**AS OF JUNE 30, 2017 AND 2016**  
(in thousands)

	<b>2017</b>	<b>2016</b>
<b>LIABILITIES</b>		
Current liabilities:		
Bonds and notes payable, current maturities (Notes J and K)	\$ 347,899	\$ 256,015
Accounts payable and accrued liabilities	214,836	230,318
Accrued bond and note interest payable	9,832	8,871
Deposits and unearned revenue	3,328	2,951
Total current liabilities	575,895	498,155
Non-current liabilities:		
Bonds and notes payable, net of current maturities (Notes J and K)	2,658,926	2,395,189
Net pension liability (Note L)	183,998	210,570
Other postemployment benefits liability (Note M)	15,826	20,875
Deposits, unearned revenue and other long-term liabilities (Note I)	26,012	29,545
Total non-current liabilities	2,884,762	2,656,179
Total liabilities	3,460,657	3,154,334
<b>DEFERRED INFLOWS OF RESOURCES</b>		
Deferred amounts from pension differences between expected and actual experience (Note L)	50,073	51,226
Total deferred inflows of resources	50,073	51,226
Total liabilities and deferred inflows of resources	3,510,730	3,205,560
<b>NET POSITION</b>		
Net investment in capital assets	4,573,318	4,428,965
Restricted for growth construction	19,284	31,073
Unrestricted	130,453	83,512
Total net position	4,723,055	4,543,550
Total liabilities, deferred inflows of resources and net position	\$ 8,233,785	\$ 7,749,110

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

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**  
(in thousands)

	<u>2017</u>	<u>2016</u>
<b>OPERATING REVENUES:</b>		
Water consumption, sewer use and service charges	\$ 669,536	\$ 589,014
Front foot benefit assessments	18,241	20,666
House connection charges	4,980	5,310
Other	33,039	34,034
	<u>725,796</u>	<u>649,024</u>
<b>OPERATING EXPENSES:</b>		
Operations	107,002	98,666
Maintenance	165,723	156,161
Intermunicipal agency sewage disposal	54,334	53,206
Administrative and general	88,440	82,281
Depreciation and amortization	183,759	169,943
	<u>599,258</u>	<u>560,257</u>
Total operating revenues	<u>126,538</u>	<u>88,767</u>
<b>NON-OPERATING REVENUES (EXPENSES):</b>		
Interest on bonds and notes payable	(79,861)	(57,735)
Capitalized interest	40,156	35,252
Pension	5,396	11,032
Interest income on investments	1,776	452
Other interest income	1,485	1,583
	<u>(31,048)</u>	<u>(9,416)</u>
Net non-operating expenses	<u>(31,048)</u>	<u>(9,416)</u>
Income before capital contributions	95,490	79,351
Capital contributions (Note G)	84,015	134,654
	<u>179,505</u>	<u>214,005</u>
Changes in net position	<u>179,505</u>	<u>214,005</u>
Net position, beginning of the year	<u>4,543,550</u>	<u>4,329,545</u>
Net position, end of year	<u>\$ 4,723,055</u>	<u>\$ 4,543,550</u>

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

**WASHINGTON SUBURBAN SANITARY COMMISSION**

**STATEMENTS OF CASH FLOWS**

**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

(in thousands)

	<u>2017</u>	<u>2016</u>
<b>CASH FLOWS FROM OPERATING ACTIVITIES:</b>		
Receipts from water and sewer customers	\$ 658,861	\$ 602,302
Receipts from front foot benefit assessments	19,578	21,955
Receipts from house connection charges	2,626	4,785
Receipts from other customers and miscellaneous	69,764	69,555
Payments to employees	(171,918)	(178,432)
Payments to District of Columbia Water & Sewer Authority	(55,523)	(54,245)
Payments to suppliers and others	(226,406)	(190,788)
Net cash provided by operating activities	<u>296,982</u>	<u>275,132</u>
<b>CASH FLOWS FROM CAPITAL AND RELATED FINANCING ACTIVITIES:</b>		
Proceeds from bonds and notes	497,113	729,468
Capital contributions	105,097	116,286
Bond redemptions and note repayments	(159,040)	(431,197)
Interest payments, premiums and discounts on bonds and notes	(57,981)	(30,667)
Capital asset construction	(602,045)	(712,644)
Net cash used in capital and related financing activities	<u>(216,856)</u>	<u>(328,754)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES:</b>		
Proceeds from the sale of investments	601,840	508,200
Purchases of investments	(685,949)	(489,997)
Pension	5,396	11,032
Interest income received	1,358	330
Net cash (used in) provided by investing activities	<u>(77,355)</u>	<u>29,565</u>
Net increase (decrease) in cash	2,771	(24,057)
Cash, beginning of year	15,743	39,800
Cash, end of year	<u>\$ 18,514</u>	<u>\$ 15,743</u>
<b>Reconciliation of net operating revenues to net cash provided by operating activities:</b>		
Net operating revenue	\$ 126,538	\$ 88,767
Adjustments to reconcile net operating revenue to net cash provided by operating activities:		
Depreciation and amortization	200,811	178,988
Changes in assets, liabilities and deferred outflows of resources:		
Receivables, net	(6,341)	7,035
Materials and supplies	623	(402)
Prepaid expenses	365	893
Deferred outflows of resources	5,249	(70,584)
Accounts payable and accrued liabilities	(9,657)	16,306
Unearned revenue	(5,877)	207
Deferred inflows of resources	15,799	23,970
Long-term pension liability	(26,571)	35,092
Long-term OPEB liability	(3,957)	(5,140)
Net cash provided by operating activities	<u>\$ 296,982</u>	<u>\$ 275,132</u>

**Noncash capital financing activities:**

Capital assets of \$35,345 and \$71,850 were acquired through contributions from developers in 2017 and 2016, respectively.

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

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

Washington Suburban Sanitary Commission (WSSC) is a bi-county political subdivision of the State of Maryland, created to provide water supply and sewage disposal services for Montgomery and Prince George's Counties. The financial statements are presented using the accrual basis of accounting and the economic resources measurement focus. Significant accounting policies are summarized below.

**Operating and Non-Operating Revenues and Expenses**

Revenues and expenses derived from financing and investment activities are classified as non-operating revenues and expenses. All other revenues and expenses are classified as operating.

Water and sewer service rates are established to provide sufficient funds to recover operating costs and debt service relating to the water supply and sanitary sewer systems. Metered water and sewer revenues are invoiced and recognized as customers utilize water. Revenue generated for which customers have not been invoiced is estimated based on past billings and recorded as unbilled revenue.

Estimated intermunicipal agency sewage disposal expenses are paid quarterly. Adjustments resulting from audits and/or reconciliations of WSSC's share of estimated and actual expenses are recognized in the year of settlement.

Front foot benefit and house connection assessments levied on properties where water and/or sanitary sewer service is available are the principal source of funds to service general construction bond debt. Front foot benefit assessments are recorded as operating revenue ratably over the levy year; house connection assessments and fees are recognized as operating revenue over the life of the bonds issued to finance the house connections.

**Capital Contributions**

In July 1993, a system development charge (SDC) was established to help finance the cost of expanding water and sewage systems to accommodate growth in the Washington Suburban Sanitary District. System development charges are recorded as capital contributions when received.

Developer fees and charges are established to recover costs related to services provided to outside developers for the construction of capital assets. These fees are recorded as permits are issued.

Federal and State grants are recognized as capital contributions when related capital costs are incurred.

Donated assets consist principally of capital assets constructed by developers and subsequently donated to WSSC. Values are established by using developers' estimated costs to construct the assets or WSSC's estimated costs to construct similar assets. Donated land and rights of way are recorded at estimated acquisition values. The capital assets, and related capital contributions, are recognized upon completion of construction.

A small portion of capital assets is related to donated assets acquired or constructed under a Department of Defense (DOD) contract executed during fiscal 2005 to operate and maintain the water and sewer systems at Bolling Air Force Base. Costs incurred by WSSC to acquire or enhance these systems are reimbursed by DOD and, consequently, recognized as capital assets and capital contributions. As of March 31, 2017, the contract to serve and maintain the water and wastewater systems at the Joint Base Anacostia-Bolling (formerly known as the Bolling Air Force Base) was terminated for mutual convenience. In the full and final settlement of this termination, WSSC retained funds collected for repairs and replacements while water and wastewater system assets were returned to the Federal government.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

WSSC follows Governmental Accounting Standards Board Statement No. 33, “*Accounting and Financial Reporting for Nonexchange Transactions*” (GASB No. 33). GASB No. 33 requires recognition of all contributions of capital assets, including donated assets, as revenues (capital contributions in the Statements of Revenues, Expenses and Changes in Net Position).

**Investments**

Investments are stated at fair value, with any related gain or loss reported in interest income on the accompanying Statements of Revenues, Expenses and Changes in Net Position. Fair value is generally based on quoted market prices on the last business day of the fiscal year. Investments in market-traded securities, including U.S. government and agency securities, municipal and corporate bonds are reported at last quoted sales/bid prices provided by independent pricing vendors. Non-current investments represent unused bond proceeds at the end of the fiscal year.

**Capital Assets**

Capital assets include water and sewer lines, water distribution, wastewater collection and multi-purpose facilities, equipment and fleet. Capital assets are stated at historical costs, which include related payroll, payroll taxes, fringe benefits, administrative costs and interest capitalized during construction if applicable. Normal recurring maintenance and repair costs are charged to operations, whereas major repairs, improvements and replacements, which extend the useful lives of the assets, are capitalized. Costs incurred for capital construction are carried in construction in progress until completion.

Costs incurred for the purchase of software and water and wastewater capacity are treated as intangibles and amortized over the estimated useful life of the asset or the term of the contractual agreement.

**Depreciation and Amortization**

Capital assets are depreciated or amortized using the straight-line method. Estimated useful lives of some significant asset categories are as follows:

Buildings and other structures	40 – 50 years
Pipe and pipe improvements	35 – 100 years
Equipment and vehicles	3 – 12 years
Purchased capacity	50 years

Depreciation and capitalized interest on constructed assets are appropriately adjusted at substantial completion.

**Inventory**

Materials and supplies inventory is recorded utilizing a perpetual (moving average) cost methodology and is reduced for estimated losses due to obsolescence.

**Bonds Payable**

Bonds payable are recorded at the principal amount outstanding, net of any applicable premium or discount.

Bonds outstanding, which have been refunded and economically defeased, are not included in long-term debt. The related assets are not included in investments. The difference between the reacquisition price and the net carrying amount of the old debt is a deferred outflow of resources and is amortized as a component of interest expense (see Note F).

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

**Pension**

For purposes of measuring the net pension liability, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the net position of the Washington Suburban Sanitary Commission Employees Retirement Plan (the Plan) and additions to/deductions from the Plan's net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**Compensated Absences**

Employees earn annual leave based on length of service. Accumulated annual leave in excess of 360 hours at the end of each year is transferred to sick leave. At termination, employees will be paid for unused annual leave but will not receive any pay or time off for unused sick leave. At retirement, an employee may convert unused annual leave to sick leave. Unused sick leave at retirement may be credited to an employee's total service time for retirement benefit purposes. Annual leave earned but unused is accrued as a liability.

**Estimates**

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

**Reclassifications**

The 2016 financial statements reflect certain reclassifications to conform with the 2017 presentation.

**Net Position**

Capital assets, as defined above, net of related outstanding debt represent the largest portion of WSSC's net position, or net investment in capital assets.

Net position associated with unspent SDC proceeds is restricted for growth construction.

Unrestricted net position is the residual amount not included in the other classifications.

**Accounting Changes**

GASB Statement No. 72, *Fair Value Measurement and Application* addresses accounting and financial reporting issues related to fair value measurements. This Statement also provides guidance for applying fair value to certain investments and disclosures related to all fair value measurements. This Statement is effective for financial statements for periods beginning after June 15, 2015, and was implemented in fiscal 2016.

GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, replaces GASB Statement No. 43, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. Statement No. 74 addresses the financial reports of defined benefit OPEB Plans that are administered through trusts that meet specified criteria. The Statement requires a statement of fiduciary net position, a statement of changes in fiduciary net position, more extensive note disclosures and RSI related to the measurement of the OPEB liabilities for which assets have been accumulated, including information about the annual money-weighted rate of return on plan investments. Statement No. 74 also sets forth note disclosure requirements for defined contribution OPEB plans. This Statement is effective for Plans with fiscal years beginning after June 15, 2016. Management is evaluating the impact of the pronouncement on its financial statements.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**A. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)**

GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, replaces the requirements of GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*. Among other things, Statement No. 75 requires governments to report a liability on the face of the financial statements for the OPEB that they provide and requires governments in all types of OPEB plans to present more extensive note disclosures and required supplementary information about their OPEB liabilities. This Statement is effective for fiscal years beginning after June 15, 2017. Management is evaluating the impact of the pronouncement on its financial statements.

GASB Statement No. 76, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*, reduces the GAAP hierarchy to two categories of authoritative GAAP from the four categories under GASB Statement No. 55, *The Hierarchy of Generally Accepted Accounting Principles for State and Local Governments*. The first category of authoritative GAAP consists of GASB Statements of Governmental Accounting Standards. The second category comprises GASB Technical Bulletins and Implementation Guides, as well as guidance from the AICPA that is cleared by the GASB. This Statement is effective for fiscal years beginning after June 15, 2015. The adoption of the pronouncement did not have an impact on WSSC's financial statements.

GASB Statement No. 77, *Tax Abatement Disclosures*, requires disclosure of tax abatement agreements and programs so that others may evaluate the financial health of governments, make decisions and assess accountability. This Statement is effective for fiscal years beginning after December 15, 2015. The adoption of the pronouncement did not have an impact on WSSC's financial statements.

**B. CASH AND INVESTMENTS**

At June 30, 2017 and 2016, cash per WSSC's records amounted to \$18,514,000 and \$15,743,000, respectively, and per reported bank balances was \$23,379,000 and \$24,252,000, respectively. All collected bank balance funds were secured by Federal depository insurance or by collateral held in WSSC's name under a tri-party collateral agreement with M&T and BNY Mellon.

WSSC's investment policy conforms to Maryland laws on the investment of public monies. Consequently, WSSC is authorized to invest in the investment types identified in the table below. The table also identifies certain provisions of the Maryland law or WSSC investment policy, which address interest rate risk, credit risk and concentration of credit risk.

<u>Authorized Investment Type</u>	<u>Maximum Maturity</u>	<u>Maximum Percentage Of Portfolio</u>	<u>Maximum Investment In One Issuer</u>
U.S. Government securities	1 year	None	None
Federal agency securities	1 year	None	None
Bankers' acceptances	6 months	None	20%
Collateralized repurchase agreements	1 year	None	20%
Commercial paper	1 year	5%	None
Certificates of deposit	1 year	None	20%

Any investment with a maturity in excess of 1 year must be approved by the Treasurer and will be limited to U.S. Government and Federal agency securities. The aggregated value of investments with any one bank or broker will not exceed 20% of the total investment portfolio at the time of investment, unless approved by the Investment Manager or Treasurer.



**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**B. CASH AND INVESTMENTS (continued)**

Custodial credit risk is the risk that, in the event of a failure of a financial institution, WSSC would not be able to recover deposits, the value of its investments, or collateral securities that are in the possession of an outside party. Maryland State law requires that collateral shall be maintained for all deposits and certificates of deposit with amounts in excess of Federal insurance coverage. State law also requires the securities collateralizing repurchase agreements have a market value of at least 102 percent of the principal of the investment plus accrued interest. At June 30, 2017 and 2016, all WSSC investments, or the collateral securities for such investments, were held by various Trust Companies in WSSC's name. None of these investments required securities to be held by a broker's or dealer's trust department or agent in WSSC's name.

Interest rate risk is the risk that changes in market 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. As of June 30, 2017 and 2016, all of WSSC's investments had remaining maturities of 1 year or less.

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. Credit risk is measured by the assignment of a rating by a nationally recognized statistical rating organization. WSSC may invest in bankers' acceptances and commercial paper having a short-term rating of the highest letter and numerical rating issued by at least one nationally recognized statistical rating organization. WSSC does not have a formal policy for other investment types; however virtually all remaining investments are in, or collateralized by, Federal agency securities. Actual ratings as of June 30, 2017 and 2016 are presented below for each investment type.

Investments at June 30, 2017 (in thousands):

<u>Investment Type</u>	<u>Rating</u>	<u>Maturity</u>	<u>Cost</u>	<u>Fair Value</u>
Repurchase agreements	Aaa	1 year or less	\$ 52,014	\$ 52,014
Certificates of deposit	Aaa	1 year or less	12,035	12,017
Commercial paper	A-1+	1 year or less	4,994	5,009
U. S. Government Treasury bonds	Aaa	1 year or less	10,028	9,962
Federal agency securities	Aaa	1 year or less	134,923	135,165
Total investments (includes \$19,284 restricted for capital projects and \$3,383 which is classified as non-current)			<u>\$ 213,994</u>	<u>\$ 214,167</u>

Investments at June 30, 2016 (in thousands):

<u>Investment Type</u>	<u>Credit Rating</u>	<u>Remaining Maturity</u>	<u>Cost</u>	<u>Fair Value</u>
Repurchase agreements	Aaa	1 year or less	\$ 29,680	\$ 29,680
Federal agency securities	Aaa	1 year or less	99,828	99,959
Total investments (includes \$31,074 restricted for capital projects)			<u>\$ 129,508</u>	<u>\$ 129,639</u>

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**B. CASH AND INVESTMENTS (continued)**

Concentration of credit risk is the risk of loss due to the magnitude of WSSC's investment in the securities of any single issuer. The investment policy of WSSC contains no limitations on the amount that can be invested in any one issuer. Those that represent 5% or more of total investments are as follows (in thousands):

Issuer	Investment	2017	2016
	Type		
FHLB	Federal agency securities	\$ 95,141	\$ 89,966
FHLMC	Federal agency securities	40,024	-
FNMA	Federal agency securities	-	9,993
U.S. Government	Treasury bonds	9,962	-

Investments are recorded at fair value in accordance with GASB Statement No. 72, Fair Value Measurement and Application. Accordingly, the change in fair value of investments is recognized as an increase or decrease to investment assets and investment income.

Repurchase agreements are recorded at cost, which approximates fair value.

WSSC categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The valuation technique uses a three level hierarchy of inputs to measure fair value. Investments classified in Level 1 within the fair value hierarchy are valued using prices quoted in active markets for identical assets. Level 2 investment valuations utilize inputs other than quoted prices included in Level 1 that are observable, either directly or indirectly. If fair value inputs are unobservable, the investments will be classified as Level 3.

Fair value measurements at June 30, 2017 (in thousands) using:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investments by fair value level:				
Certificates of deposit	\$ 12,017	\$ -	\$ -	\$ 12,017
Commercial paper	5,009	-	-	5,009
U. S. Government bonds	9,962	-	-	9,962
Federal agency securities	135,165	-	-	135,165
Total investments by fair value level	<u>\$ 162,153</u>	<u>\$ -</u>	<u>\$ -</u>	<u>162,153</u>
Investments measured at cost -				
Repurchase agreements				<u>52,014</u>
Total investments				<u>\$ 214,167</u>

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**B. CASH AND INVESTMENTS (continued)**

Fair value measurements at June 30, 2016 (in thousands) using:

	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	Total
Investments by fair value level:				
Federal agency securities	\$ 99,959	\$ -	\$ -	\$ 99,959
Investments measured at cost -				
Repurchase agreements				29,680
Total investments				\$ 129,639

**C. RECEIVABLES**

Receivables consisted of the following at June 30 (in thousands):

	2017	2016
Front foot benefit assessments accrued and billed	\$ 10,365	\$ 11,858
Water and sewer services unbilled	50,079	49,764
Water and sewer services billed	62,005	56,023
Miscellaneous	21,112	20,823
	143,561	138,468
Less allowance for doubtful accounts	(10,115)	(11,597)
Total receivables, net	\$ 133,446	\$ 126,871

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**D. CAPITAL ASSETS**

Capital asset activity for the year ended June 30, 2017 was as follows (in thousands):

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets not being depreciated:				
Land and rights of way	\$ 117,839	\$ 3,874	\$ -	\$ 121,713
Construction in progress	1,439,620	582,143	(439,475)	1,582,288
Total capital assets not being depreciated	<u>1,557,459</u>	<u>586,017</u>	<u>(439,475)</u>	<u>1,704,001</u>
Capital assets being depreciated:				
Water supply	2,437,122	236,185	(6,894)	2,666,413
Sewage disposal	2,172,255	194,300	(9,415)	2,357,140
General construction	2,553,137	43,060	(2,477)	2,593,720
Intangible assets	1,376,987	11,827	-	1,388,814
Other	156,965	11,773	(1,556)	167,182
Total capital assets being depreciated	<u>8,696,466</u>	<u>497,145</u>	<u>(20,342)</u>	<u>9,173,269</u>
Less accumulated depreciation for:				
Water supply	(681,007)	(46,260)	2,147	(725,120)
Sewage disposal	(659,776)	(51,328)	3,642	(707,462)
General construction	(1,166,525)	(52,819)	1,909	(1,217,435)
Intangible assets	(305,286)	(30,106)	-	(335,392)
Other	(111,675)	(14,412)	1,508	(124,579)
Total accumulated depreciation	<u>(2,924,269)</u>	<u>(194,925)</u>	<u>9,206</u>	<u>(3,109,988)</u>
Capital assets being depreciated, net	<u>5,772,197</u>	<u>302,220</u>	<u>(11,136)</u>	<u>6,063,281</u>
 Total capital assets, net	 <u>\$ 7,329,656</u>	 <u>\$ 888,237</u>	 <u>\$ (450,611)</u>	 <u>\$ 7,767,282</u>

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**D. CAPITAL ASSETS (continued)**

Capital asset activity for the year ended June 30, 2016 was as follows (in thousands):

	Beginning Balance	Increases	Decreases	Ending Balance
Capital assets not being depreciated:				
Land and rights of way	\$ 78,893	\$ 38,946	\$ -	\$ 117,839
Construction in progress	1,366,478	696,384	(623,242)	1,439,620
Total capital assets not being depreciated	<u>1,445,371</u>	<u>735,330</u>	<u>(623,242)</u>	<u>1,557,459</u>
Capital assets being depreciated:				
Water supply	2,305,097	132,025	-	2,437,122
Sewage disposal	1,841,168	353,795	(22,708)	2,172,255
General construction	2,508,398	48,615	(3,876)	2,553,137
Intangible assets	1,267,522	109,465	-	1,376,987
Other	146,815	17,735	(7,585)	156,965
Total capital assets being depreciated	<u>8,069,000</u>	<u>661,635</u>	<u>(34,169)</u>	<u>8,696,466</u>
Less accumulated depreciation for:				
Water supply	(639,925)	(41,082)	-	(681,007)
Sewage disposal	(629,841)	(42,158)	12,223	(659,776)
General construction	(1,121,283)	(47,397)	2,155	(1,166,525)
Intangible assets	(273,618)	(31,668)	-	(305,286)
Other	(100,715)	(13,449)	2,489	(111,675)
Total accumulated depreciation	<u>(2,765,382)</u>	<u>(175,754)</u>	<u>16,867</u>	<u>(2,924,269)</u>
Capital assets being depreciated, net	<u>5,303,618</u>	<u>485,881</u>	<u>(17,302)</u>	<u>5,772,197</u>
 Total capital assets, net	 <u>\$ 6,748,989</u>	 <u>\$ 1,221,211</u>	 <u>\$ (640,544)</u>	 <u>\$ 7,329,656</u>

**Purchased Software**

Purchased software and related development stage costs of \$5.7 million and \$2.1 million were capitalized in accordance with GASB Statement No. 51, *Accounting and Financial Reporting for Intangible Assets* in fiscal years 2017 and 2016, respectively. Costs of \$5.8 million are included in the Construction in Progress balance as of June 30, 2017 and will commence amortization upon implementation of the software. Intangible assets include the balance of costs placed in service, net of accumulated amortization, of \$9.4 million and \$6.1 million in fiscal 2017 and 2016, respectively.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**D. CAPITAL ASSETS (continued)**

**Purchased Capacity**

***Jennings Randolph***

An intangible asset for purchased capacity has been established for WSSC's share of capital costs in the Jennings Randolph Reservoir (Bloomington Dam). The Reservoir provides backup and peak-day water supply to WSSC and is operated by the U.S. Army Corps of Engineers, Baltimore District. WSSC funds 50% of the capital costs, and intangible asset balances of \$27.5 million and \$27.7 million, for fiscal years 2017 and 2016, respectively, are included above.

***Mattawoman and Poolesville***

WSSC participates in the funding of capital costs for the Mattawoman and Poolesville Wastewater Treatment Plants through agreements with Charles County and the Town of Poolesville, respectively. In exchange for this participation, WSSC obtains the right to discharge wastewater from the Washington Suburban Sanitary District into said facilities. Costs of \$1.2 million are included in the Construction in Progress balance as of June 30, 2017 and will commence amortization when placed in service. Asset balances, net of accumulated amortization, totaling \$8.7 million and \$8.4 million, for fiscal years 2017 and 2016, respectively, are included in intangible assets above.

***Blue Plains***

The Commission, the District of Columbia (the District), the District of Columbia Water and Sewer Authority (DC Water), Fairfax County, Virginia, Montgomery County, Maryland, and Prince Georges County, Maryland are "Parties" to a regional Intermunicipal Agreement (IMA) that provides for dedicated allocation of wastewater flow capacity for treatment at the Blue Plains facility in Washington DC. The *Blue Plains Intermunicipal Agreement of 1985 Equity Payment Study* and the subsequent equity payments required by the 1985 IMA reconciled all capital cost contributions for the Parties prior to 1987 and established a new baseline as of 1988 for calculating and allocating future capital costs associated with Blue Plains.

The 1985 IMA was replaced, effective April 3, 2013, by a new Blue Plains Intermunicipal Agreement of 2012 (the "2012 IMA"), which was executed by each of the original signatories to the 1985 IMA. The 2012 IMA provides for the allocation of capital, operating, and maintenance costs among the Parties. The parties have demonstrated their willingness to share in the burdens associated with the demands for regional wastewater collection and treatment and biosolids management. Capital costs of Blue Plains are allocated among the Parties in proportion to their respective capacity allocation of the wastewater treatment, collection, and conveyance facilities as defined in the 2012 IMA. Operating costs are allocated on a proportional basis, by the wastewater flows from each participant to the Blue Plains facilities. The Commission has a wastewater treatment capacity entitlement of 169.60 MGD, which is approximately 45.8% of the Plant's total capacity of 370 MGD.

To address technical, policy and financial issues related to the 2012 IMA, the Parties may act at three different levels of authority: 1) the policy level, as an IMA signatory, 2) the administrative level, as a member of the Leadership Committee, and 3) the technical level, as a member of the Regional Committee. WSSC has representation at each of these levels.

If any participant's projected annual flow is anticipated to exceed its allocated flow capacity, the following options are available for consideration by the Regional and Leadership Committees, with participation from all of the Parties: 1) wastewater flow management adjustments, 2) modification of treatment processes at Blue Plains, 3) diversion of flows from the Blue Plains Service Area to other facilities, 4) sale or rental of excess capacity at Blue Plains between the Parties, and 5) expansion or addition of treatment and/or storage facilities. The rental or sale of allocated flow capacity shall be at the discretion of the Party which is providing the capacity for sale or rent, and the related Parties to the transaction will mutually agree on the cost basis.

The 2012 IMA remains in effect until amended, replaced or terminated by mutual consent of the Parties.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**D. CAPITAL ASSETS (continued)**

The Commission's capital investment in Blue Plains, under the 2012 IMA, is accounted for as an intangible asset and is amortized over the estimated useful lives of the underlying assets. Costs of \$331.4 million are included in the Construction in Progress balance as of June 30, 2017 and will commence amortization when assets are placed in service. Asset balances, net of accumulated amortization, totaling \$1,007.8 million and \$1,029.4 million, for fiscal years 2017 and 2016, respectively, are included in intangible assets above.

The amount shown in the statements of revenues, expenses and changes in net assets for depreciation and amortization does not include depreciation of vehicles and equipment. Depreciation of these assets, \$14.4 million in fiscal 2017 and \$13.4 million in fiscal 2016, is classified with other related operating and maintenance costs.

**E. NOTE RECEIVABLE**

On April 4, 2007, WSSC entered into a Purchase and Sale Contract with Montgomery County for the County's purchase of WSSC's property which previously was the site of a biosolids composting facility. On January 15, 2009, the closing date of the sale, WSSC received a promissory note in the amount of \$10,000,000 from Montgomery County.

Interest accrues at a rate of 4.43%, which commenced six months after the execution of the promissory note. Under the provisions of the promissory note, the minimum annual payment by Montgomery County is \$400,000 and is due on July 15, 2009 and annually thereafter. Payments shall be allocated first to interest, then to principal. At June 30, 2017 and 2016, the balance of this Note Receivable was \$9.8 million and \$9.7 million, respectively.

As Montgomery County develops the property, additional payments become due when a 'Payment Event' occurs. A 'Payment Event' is defined as a sale or ground lease of a parcel or the commencement of initial construction on a parcel. The additional payment shall be applied to the minimum annual payment amount. Montgomery County is obligated to pay additional payments for amounts in excess of the minimum annual payment.

The principal portion of additional payments shall be at least determined based upon the ratio of the developable square feet (DSF) of the sold or developed parcel to the sum of the DSF of the sold or developed parcel plus the total DSF of the unsold parcels. Interest shall be the outstanding unpaid interest accrued as of the date of the applicable Payment Event.

The promissory note was amended and restated in 2017, to change the repayment schedule and extend the maturity date from January 15, 2024 to July 15, 2027. Under the amended Promissory Note, the County agrees to pay \$400,000, with interest at 4.43%, commencing July 15, 2017 and annually thereafter until the principal and all accrued and unpaid interest and other charges are paid.

**F. DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES**

Deferred outflows of resources represent a consumption of net position that is applicable to a future period. Reported examples include:

- (a) Deferred losses on bond refundings resulting from the difference between the carrying value of the refunded debt and its reacquisition price
- (b) Contributions to the Retirement Plan subsequent to the measurement date of the net pension liability and before the end of WSSC's reporting period
- (c) Differences between expected and actual experience in the measurement of the total pension liability
- (d) Net difference between projected and actual earnings on pension plan investments
- (e) Results of changes in pension assumptions

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**F. DEFERRED OUTFLOWS AND INFLOWS OF RESOURCES (continued)**

Deferred inflows of resources represent an acquisition of net assets that is applicable to a future period. Reported examples include:

- (a) Differences between expected and actual experience in the measurement of the total pension liability
- (b) Net difference between projected and actual earnings on pension plan investments

**G. CAPITAL CONTRIBUTIONS**

Capital contributions consisted of the following for the years ended June 30 (in thousands):

	<u>2017</u>	<u>2016</u>
System development charges	\$ 27,386	\$ 27,734
Developer fees	6,233	4,293
Federal and State grants	12,976	30,777
House connections	4,800	5,612
Land and rights of way	2,075	36,939
Other construction projects	30,545	29,299
Total	<u>\$ 84,015</u>	<u>\$ 134,654</u>

**H. COMPENSATED ABSENCE LIABILITY**

Compensated absence liability activity consisted of the following for the years ended June 30 (in thousands):

	<u>2017</u>	<u>2016</u>
Compensated absence liability – beginning of year	\$ 11,949	\$ 11,287
Increases (incurred)	10,270	9,833
Decreases	(9,964)	(9,171)
Compensated absence liability – end of year	<u>\$ 12,255</u>	<u>\$ 11,949</u>

This liability is included in accounts payable and accrued expenses on the balance sheet.



**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**I. DEPOSITS, UNEARNED REVENUE AND OTHER LONG-TERM LIABILITIES**

Deposits, unearned revenue and other long-term liabilities, reflected as non-current liabilities on the Balance Sheet, consisted of the following at June 30 (in thousands):

	<u>2017</u>	<u>2016</u>
Unearned revenue for house connections	\$ 16,693	\$ 17,614
Unearned front foot benefit revenue	759	902
Construction deposits	1,075	1,507
House connection deposits	2,966	4,585
Other	4,519	4,937
Total	<u>\$ 26,012</u>	<u>\$ 29,545</u>

**J. BONDS AND NOTES PAYABLE**

Bonds and notes payable activity for the year ended June 30, 2017 was as follows (in thousands):

	<u>Beginning</u>			<u>Ending</u>	<u>Current</u>
	<u>Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance</u>	<u>Maturities</u>
Bonds and notes payable:					
Water supply	\$ 912,575	\$ 233,000	\$ (57,972)	\$ 1,087,603	\$ 163,041
Sewage disposal	1,394,774	242,093	(79,960)	1,556,907	129,996
General construction	189,489	22,019	(21,107)	190,401	54,862
	<u>2,496,838</u>	<u>497,112</u>	<u>(159,039)</u>	<u>2,834,911</u>	<u>347,899</u>
Plus unamortized premium/discount	<u>154,366</u>	<u>36,924</u>	<u>(19,376)</u>	<u>171,914</u>	<u>-</u>
Total bonds and notes payable	<u>\$ 2,651,204</u>	<u>\$ 534,036</u>	<u>\$ (178,415)</u>	<u>\$ 3,006,825</u>	<u>\$ 347,899</u>

Bonds and notes payable activity for the year ended June 30, 2016 was as follows (in thousands):

	<u>Beginning</u>			<u>Ending</u>	<u>Current</u>
	<u>Balance</u>	<u>Increases</u>	<u>Decreases</u>	<u>Balance</u>	<u>Maturities</u>
Bonds and notes payable:					
Water supply	\$ 804,443	\$ 311,573	\$ (203,441)	\$ 912,575	\$ 112,883
Sewage disposal	1,166,390	357,923	(129,539)	1,394,774	112,125
General construction	227,734	59,971	(98,216)	189,489	31,007
	<u>2,198,567</u>	<u>729,467</u>	<u>(431,196)</u>	<u>2,496,838</u>	<u>256,015</u>
Plus unamortized premium/discount	<u>118,403</u>	<u>52,871</u>	<u>(16,908)</u>	<u>154,366</u>	<u>-</u>
Total bonds and notes payable	<u>\$ 2,316,970</u>	<u>\$ 782,338</u>	<u>\$ (448,104)</u>	<u>\$ 2,651,204</u>	<u>\$ 256,015</u>

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**J. BONDS AND NOTES PAYABLE (continued)**

The unamortized amounts above represent premiums received on outstanding debt issuances.

Bonds payable accrue interest at rates ranging from 0.7% to 6.0%, with an effective interest rate of 3.79% at June 30, 2017. All bonds payable at June 30, 2017, exclusive of refunded bonds, are due serially through the year 2046. Generally, the bonds are callable at a premium after a specified number of years.

In December 2016, WSSC issued \$382 million of Consolidated Public Improvement Bonds to fund new construction, rehabilitation and replacement of water and sewer infrastructure.

In October 2015 and May 2016, WSSC issued \$390 million and \$145 million, respectively, of Consolidated Public Improvement Bonds to fund new construction, rehabilitation and replacement of water and sewer infrastructure.

In September 2009, WSSC issued \$180 million of Consolidated Public Improvement Bonds in two series; \$90 million in Tax-Exempt Bonds, Series 2009A and \$90 million in Taxable Build America Bonds - Direct Payment to the Issuer, Series 2009B. In September 2010, WSSC issued \$240 million of Consolidated Public Improvement Bonds in two series; \$120 million in Tax-Exempt Bonds, Series 2010A and \$120 million in Taxable Build America Bonds - Direct Payment to the Issuer, Series 2010B. The American Recovery and Reinvestment Act of 2009 created the Build America Bonds program. This program is intended to assist state and local municipalities in issuing debt. One provision of the program is for issuance of taxable Build America Bonds to finance capital expenditures while providing a federal subsidy of 35% of the interest payment to the issuer. Due to government sequestration enacted in March 2013, the December 1, 2015 and June 1, 2016 subsidies were reduced by 2.38%. The December 1, 2016 and June 1, 2017 subsidies were by 2.42%. The subsidy is payable over the life of the issue, and in the schedule below it is assumed that the remainder of subsidy payments will be made at the original 35%.

Bond and note maturities and interest thereon, including Taxable Build America Bond subsidies, for the next five years are as follows (in thousands):

Year ended <u>June 30</u>	Principal <u>Maturities</u>	Interest <u>Requirements</u>	Build America <u>Bond Subsidies</u>
2018	\$347,899	\$106,158	\$ (3,279)
2019	140,104	99,446	(3,279)
2020	145,166	92,999	(3,279)
2021	143,214	89,796	(3,142)
2022	136,975	83,577	(2,855)

Bond and note maturities and interest thereon, including Taxable Build America Bond subsidies, in five-year increments for fiscal years after 2021 are as follows (in thousands):

Year ended <u>June 30</u>	Principal <u>Maturities</u>	Interest <u>Requirements</u>	Build America <u>Bond Subsidies</u>
2023-2027	\$645,861	\$334,783	\$ (9,611)
2028-2032	496,578	213,959	(1,684)
2033-2037	270,461	133,666	-
2038-2042	296,258	75,547	-
2043-2046	212,395	17,371	-

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**J. BONDS AND NOTES PAYABLE (continued)**

Bond Anticipation Notes (the Notes) are remarketed weekly by WSSC's remarketing agent at prevailing weekly tax-exempt interest rates. Interest rates on the Notes ranged from 0.39% to 0.95% during fiscal year 2017 and from 0.01% to 0.45% during fiscal year 2016. Any or all buyers of the Notes may demand payment from WSSC's remarketing agent upon seven days' notice. WSSC's remarketing agents are prepared to remarket the Notes in such eventuality. The Notes were sold under a bank line of credit agreement which acts as a guarantee of liquidity for the Notes in the event that the Notes cannot be remarketed. On August 28, 2013, the Commission replaced the series "A" notes with two separate series (A&B), each backed by their own line of credit. The maximum amount available under each line of credit which expires in August 2019, subject to certain conditions, is \$107.5 million. In aggregate, the total line of credit is \$215.0 million.

At June 30, 2017 and 2016, \$202.6 million and \$120.0 million respectively, of the Notes were outstanding. WSSC expects to redeem these Notes with proceeds of future bond issues or annual amortization. The Commission issued \$42.5 million in Series A Notes and \$52.5 million in Series B Notes on August 31, 2016. On June 24, 2015, the Commission issued \$35.0 million in Series A Notes and \$55.0 million in Series B Notes. On February 26, 2014, WSSC issued \$50.0 million in Series B Notes. The Commission redeemed \$12.4 million and \$90.0 million in Notes on June 28, 2017 and November 18, 2015, respectively, as part of the water, sewer and general debt service amortization. The Notes are treated as bonds, and as such, are expected to be amortized over a 20-year term. However, because these Notes are callable, the entire \$202.6 million has been included in current maturities (fiscal 2017 principal maturities), and an estimated \$7.1 million has been included in the fiscal 2018 interest requirements. Additional estimated interest requirements at prevailing rates through 2036 on these Notes, assuming future redemption from proceeds of bonds, would total \$83.3 million.

On July 15, 2005, WSSC commenced work on a utility service contract with the U.S. Department of Defense to operate and maintain the Bolling Air Force Base water distribution and wastewater collection systems. Under the terms of this contract, WSSC acquired the existing water and wastewater systems for \$1.0 million and \$4.3 million, respectively. Corresponding notes payable accrue interest at 7.0% over a 30-year term. As of March 31, 2017, the contract to serve and maintain the water and wastewater systems at the Joint Base Anacostia-Bolling (formerly known as the Bolling Air Force Base) was terminated for mutual convenience. In the full and final settlement of this termination, WSSC retained funds collected for repairs and replacements while water and wastewater system assets were returned to the Federal government.

Since November 1989, WSSC has participated in a loan program established by the State of Maryland to loan money to Maryland municipalities for local water and sewer projects. The program, known as the Maryland Water Quality Revolving Loan Fund, is designed to offer these municipalities loans at reduced interest rates. As of June 30, 2017, WSSC borrowed \$386.3 million from the program. The total principal balance outstanding as of June 30, 2017 and 2016 was \$250.1 million and \$245.4 million, respectively.

Proceeds of notes payable to the Federal government were used to make improvements to the Jennings Randolph Reservoir for backup and peak-day water supply. The note payable accrues interest at 3.25% and balances outstanding at June 30, 2017 and 2016 were \$21.5 million and \$22.2 million, respectively.

WSSC is in compliance with all terms of its debt agreements at June 30, 2017 and 2016.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**K. BOND REFUNDINGS**

In November 2015, WSSC sold \$145,325,000 of refunding bonds with interest rates ranging from 3.00% to 5.00% to refund \$148,100,000 of outstanding callable water supply, sewage disposal and general construction bonds with interest rates ranging from 2.00% to 5.00%. The net proceeds of \$159,320,000 (including a premium of \$14,703,000) were used to purchase U.S. Government securities. Those securities were deposited with an escrow agent to provide for all future debt service payments and the early redemption of callable bonds. The November 2015 refunding will reduce WSSC's total debt service payments over the next 12 years by \$12,800,000 and provide an economic gain of \$12,143,000.

In May 2016, WSSC sold \$36,440,000 of refunding bonds with interest rates ranging from 4.00% to 5.00% to refund \$41,980,000 of outstanding callable water supply, sewage disposal and general construction bonds with interest rates ranging from 4.00% to 4.25%. The net proceeds of \$42,087,000 (including a premium of \$5,751,000) were used to purchase U.S. Government securities. Those securities were deposited with an escrow agent to provide for all future debt service payments and the early redemption of callable bonds. The May 2016 refunding will reduce WSSC's total debt service payments over the next 9 years by \$5,086,000 and provide an economic gain of \$5,009,000.

As a result of the refundings, the refunded bonds are considered to be defeased and the liability is not reflected in the financial statements.

No refunding bonds were sold in fiscal year 2017.

WSSC has sold refunding bonds totalling \$3,555,345,000 for the purpose of refunding and defeasing \$3,443,042,000 of outstanding bonds. The purpose of these refundings was to reduce total debt service payments over the remaining life of the refunded bonds and to obtain an economic gain (difference between the present value of the old and new debt service payments) from the transactions.

Prior to fiscal 1994, these refundings were accounted for in accordance with Statement of Financial Accounting Standards No. 76, *Extinguishment of Debt*. At the time of the respective refundings, WSSC recognized extraordinary losses aggregating approximately \$89,726,000 resulting from the issuance of additional principal. However, interest savings over the remaining terms of the refunded bonds are estimated to aggregate approximately \$191,863,000.

Effective July 1, 1993, WSSC adopted GASB Statement No. 23, *Accounting and Financial Reporting for Refundings of Debt Reported by Proprietary Activities*. GASB No. 23 requires deferral of the difference between the reacquisition price and the carrying amount of the old debt. The difference is reported in the accompanying financial statements as a deferred outflow of resources and is being amortized to interest on bonds and notes through the year 2029 using the proportionate-to-stated interest method. Amortization totaling \$1,887,000 and \$1,625,000 in fiscal 2017 and 2016, respectively, was recorded as interest on bonds and notes payable in the accompanying statements of revenues, expenses and changes in net position.

In accordance with GASB 65, deferred amounts from debt refundings are now illustrated as Deferred Outflows or Inflows of Resources on the Balance Sheet.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**K. BOND REFUNDINGS (continued)**

Details of the current and prior years' refunding are shown in the table below (in thousands):

Date of Refunding	Amount of Refunded Bonds	Remaining Term at Refunding Date	Amount of Refunding Bonds	Estimated Interest Savings	Extraordinary Loss Previously Recognized	Deferred Loss/(Gain)
05/26/16	42,087	9 years	\$ 36,440	\$ (455)	\$ -	\$ 380
11/24/15	148,100	12 years	145,325	10,025	-	6,929
04/15/14	52,830	9 years	47,395	2	-	(663)
04/09/13	105,820	14 years	101,560	4,926	-	4,098
11/25/09	79,730	20 years	83,965	5,622	-	4,467
10/15/06	80,360	19 years	82,285	5,544	-	1,989
03/15/04	63,980	20 years	62,510	731	-	2,880
02/01/04	271,815	19 years	266,395	10,059	-	14,941
10/28/03	14,500	11 years	15,780	3,107	-	1,103
09/15/03	70,485	11 years	70,590	5,435	-	2,352
03/01/03	454,905	17 years	428,945	22,269	-	23,612
04/15/02	43,610	10 years	43,705	4,483	-	904
12/01/01	100,150	14 years	100,095	9,672	-	(110)
15/15/97	42,400	14 years	45,265	4,967	-	2,712
01/01/97	74,375	23 years	79,600	7,467	-	4,595
01/15/94	437,695	22 years	435,675	84,556	-	42,761
11/01/93	243,835	22 years	278,730	38,845	-	28,155
03/01/93	127,975	21 years	139,705	12,908	7,730	-
06/01/92	50,475	20 years	54,775	4,896	4,200	-
11/15/91	88,355	24 years	95,435	8,083	5,580	-
05/15/91	229,775	23 years	248,865	22,276	10,944	-
03/01/90	48,395	21 years	53,885	6,700	4,216	-
10/15/86	64,160	22 years	74,680	15,000	9,182	-
05/15/86	149,055	29 years	174,490	27,000	18,542	-
07/15/85	111,750	23 years	118,015	18,000	11,002	-
04/01/84	24,765	23 years	29,210	8,000	3,797	-
09/01/77	221,660	23 years	242,025	69,000	14,533	-

The refunded bonds continue to be general obligations of WSSC until redeemed or called. However, the net proceeds of the refunding bonds were applied toward the purchase of U.S. Government obligations (held in escrow) with maturities and interest sufficient to meet debt service and call premiums, if any, on the refunded bonds. The holders of the refunded bonds have first lien on all assets held in escrow. Refunded bonds outstanding at June 30, 2017 and 2016, which amounted to \$83.8 million and \$118.8 million, respectively, are considered to be defeased and are not reflected in the accompanying financial statements.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN**

**Plan Description**

The Washington Suburban Sanitary Commission 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 Washington Suburban Sanitary Commission (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, with the Plan last amended on January 15, 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, 2016 and 2015, there were 1,624 and 1,577 employees, respectively, participating in the Open Version of the Plan, and 7 and 8 employees, respectively, participating in the Closed Version of the Plan, a total of 1,631 and 1,585 employee participants, respectively.

As of December 31, 2016 and 2015, there were 1,585 and 1,580 retirees and/or beneficiaries, respectively, receiving benefits from the Plan, and there were 100 and 92 terminated vested employees, respectively, not yet receiving benefits. Six and ten employees retired in fiscal years 2016 and 2015, respectively, and began receiving benefits in subsequent fiscal years.

Actuarial studies are performed at least once every two years as of June 30<sup>th</sup> and the measurement date for the net pension liability is December 31<sup>st</sup>.

**Contributions**

WSSC funds annual pension plan costs based upon a level percentage of payroll costs. WSSC's contribution, which is paid in a lump sum on July 1 each year, amounted to \$22.6 million and \$22.3 million on July 1, 2016 and 2015, respectively. At December 31, 2016 and 2015, \$11.3 million and \$11.2 million, respectively, of these contributions were recorded as deferred outflows of resources on the Balance Sheet. For the years ended December 31, 2016 and 2015, the Plan recognized WSSC's contributions of \$22.5 and \$21.7 million, respectively.

**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.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN (continued)**

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.

**Actuarial Assumptions**

The total pension liability was determined by an actuarial valuation as of July 1, 2016, using the following actuarial assumptions, applied to all periods included in the measurement:

	<u>2016</u>	<u>2015</u>
Inflation	2.50%	2.50%
Salary increases		
Up to 5 years of Service	7.50%	7.50%
6+ years of service	2.75%	2.75%
Investment rate of return	7.00%	7.00%

The mortality rates for 2016 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 GAM83 tables with 10-year set forward were used for the valuation of disabled members.

The actuarial assumptions used in the July 1, 2016 valuation were based on the results of an actuarial experience analysis covering 2011 through 2016.

Further details on assumptions are provided in the valuation report.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN (continued)**

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 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 tables:

<b>Asset class:</b>	2016	2015
U.S. Equity	5.75%	5.70%
Non-U.S. Equity	6.25%	2.00%
U.S. Fixed income	2.80%	2.60%
Real estate	4.40%	4.10%
<b>Total Weighted Average Real Return</b>	<b>4.92%</b>	<b>4.76%</b>
Plus Inflation	2.50%	2.50%
Total Return without Adjustment	7.42%	7.26%
Risk Adjustment	-0.42%	-0.26%
<b>Total Expected Return</b>	<b>7.00%</b>	<b>7.00%</b>

**Discount Rate**

The discount rate used to measure the total pension liability was 7.00% for 2016 and 2015. 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 in 2016 and 2015 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 for 2016 was applied to all periods of projected benefit payments to determine the total pension liability. For the 2015 evaluation, the discount rate represents the single equivalent rate resulting from discounting at the long term expected rates of return until 2066 and discounting with the 20 year municipal bond index rate of 3.15% thereafter.

**Other Key Actuarial Assumptions**

The other key actuarial assumptions that determined the total pension liability as of December 31, 2016 and 2015 included:

Valuation date	July 1, 2016	July 1, 2015
Measurement date	December 31, 2016	December 31, 2015
Inflation	2.50%	2.50%
Salary increased including inflation	2.75% to 7.50%	2.75% to 7.50%



**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN (continued)**

**Changes in the Net Pension Liability**

Changes in the Net Pension Liability for the year ended December 31, 2016 were as follows (in thousands):

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balances at 12/31/15	\$ 913,076	\$ 702,506	\$ 210,570
Changes for the year:			
Service cost	10,576	-	10,576
Interest	61,936	-	61,936
Differences between expected and actual experience	(10,449)	-	(10,449)
Changes in assumptions	-	-	-
Contributions – employer	-	22,477	(22,477)
Contributions – employee	-	4,214	(4,214)
Net investment income	-	61,944	(61,944)
Benefit payments, including refunds of employee contributions	(57,555)	(57,555)	-
Administrative expense*	-	-	-
Net change	4,508	31,080	(26,572)
Balances at 12/31/16	<u>\$ 917,584</u>	<u>\$ 733,586</u>	<u>\$ 183,998</u>
Plan's fiduciary net position as a percentage of the total pension liability	79.95%		

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN (continued)**

Changes in the Net Pension Liability for the year ended December 31, 2015 were as follows (in thousands):

	Increase (Decrease)		
	Total Pension Liability	Plan	
		(a)	Fiduciary Net Position (b)
Balances at 12/31/14	\$ 919,442	\$ 743,965	\$ 175,477
Changes for the year:			
Service cost	9,828	-	9,828
Interest	61,611	-	61,611
Differences between expected and actual experience	(53,390)	-	(53,390)
Changes in assumptions	32,258		32,258
Contributions – employer	-	21,656	(21,656)
Contributions – employee	-	3,930	(3,930)
Net investment income	-	(10,372)	10,372
Benefit payments, including refunds of employee contributions	(56,673)	(56,673)	-
Administrative expense*	-	-	-
Net change	(6,366)	(41,459)	35,093
Balances at 12/31/15	<u>\$ 913,076</u>	<u>\$ 702,506</u>	<u>\$ 210,570</u>
Plan's fiduciary net position as a percentage of the total pension liability	76.94%		

\*Administrative expenses are paid directly by WSSC

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

The following presents the net pension liability of the Plan, calculated using the discount rate of 7.00% for each of 2016 and 2015, 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 (in thousands).

	1% Decrease <u>6.00%</u>	Current Discount Rate <u>7.00%</u>	1% Increase <u>8.00%</u>
WSSC's net pension liability (2016)	\$ 289,449	\$ 183,998	\$ 94,985
	1% Decrease <u>6.00%</u>	Current Discount Rate <u>7.00%</u>	1% Increase <u>8.00%</u>
WSSC's net pension liability (2015)	\$ 315,410	\$ 210,570	\$ 122,063

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN (continued)**

**Pension Expense**

For the years ended June 30, 2017 and 2016, WSSC recognized pension expense as follows (in thousands):

	<u>2017</u>	<u>2016</u>
Pension cost distributions:		
Operating	\$ 18,460	\$ 17,800
Non-operating	(5,396)	(11,032)
Capital	5,129	4,933
	<u>5,129</u>	<u>4,933</u>
Total pension expense	<u>\$ 18,193</u>	<u>\$ 11,701</u>

**Deferred Outflows (Inflows) of Resources**

Deferred outflows of resources and deferred inflows of resources related to pensions were reported for the years ended June 30, 2017 and 2016 from the following sources (in thousands):

	<u>2017</u>	<u>2016</u>
<b>Deferred Outflows</b>		
Net difference between projected and actual earnings on pension plan investments	\$ 26,261	\$ 43,213
Changes in assumptions	21,505	26,882
	<u>21,505</u>	<u>26,882</u>
Deferred Outflows	<u>\$ 47,766</u>	<u>\$ 70,095</u>
<b>Deferred Inflows</b>		
Differences between expected and actual experience	\$ (50,073)	\$ (51,226)
	<u>(50,073)</u>	<u>(51,226)</u>
Deferred Inflows	<u>\$ (50,073)</u>	<u>\$ (51,226)</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows (in thousands):

Year ended <u>June 30</u>	<u>Amortization</u>
2018	\$3,134
2019	(\$8,762)
2020	(4,729)
2021	8,998
2022	2,703
Thereafter	963

Historical trend information showing the Plan's progress is presented in the Plan's December 31, 2016 comprehensive annual financial report, which can be requested from WSSC's offices.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**L. RETIREMENT PLAN (continued)**

**Retirement Restoration Plan**

Effective July 1, 1995, WSSC established the Washington Suburban Sanitary Commission Employees' Retirement Restoration Plan (the Restoration Plan), a non-qualified plan. The purpose of the Restoration Plan is to restore most of the benefits foregone by participants in the WSSC Employees' Retirement Plan when such benefits are limited by the maximum benefit provisions of Section 415 of the Internal Revenue Code. During fiscal years 2017 and 2016, the Restoration Plan paid benefits totaling \$39,000 and \$27,000, respectively.

**M. OTHER POSTEMPLOYMENT BENEFITS (OPEB)**

**Plan Description**

WSSC provides healthcare, prescription drug, dental and life insurance benefits to retirees and their dependents, and pays a portion of the related costs. All full time active employees who retire or are disabled directly from WSSC and meet the eligibility criteria can participate. The Washington Suburban Sanitary Commission Other Postemployment Benefits Trust (the "Trust") is a single-employer contributory fund established in 2007 to provide life insurance and medical benefits for the Retiree Plan participants and beneficiaries of WSSC under conditions set forth by the Trust Agreement. The provision of postemployment benefits is determined under a set of personnel policies (herein referred to, collectively, as the "Plan").

Eligibility for post retirement health care benefits requires a minimum of two years participation in a WSSC sponsored plan immediately prior to retirement. At the end of fiscal 2017, substantially all of WSSC's retired employees (or beneficiaries) are eligible for those benefits. WSSC contributes up to 72% of the amount of health care insurance costs for eligible retired employees and their families.

Employees who retired in 1982 and after are eligible for life insurance benefits. The amount of retiree life insurance begins at 85% of the employee's salary as of the day immediately prior to retirement, and decreases over a four-year period, until coverage equals either 25% of that salary or \$5,000, whichever is greater.

**Funding Policy**

The required contribution is based on projected pay-as-you-go obligations, with an additional amount to prefund benefits as determined annually by WSSC.

For fiscal year 2017, WSSC contributed \$19.9 million, including \$9.9 million for current claims and/or premiums (approximately 59% of total claims and/or premiums) and an additional \$10.0 million to fund the Trust. Retirees receiving benefits contributed \$4.2 million or approximately 28% of total claims and/or premiums, through their required contributions.

For fiscal year 2016, WSSC contributed \$21.4 million, including \$11.4 million for current claims and/or premiums (approximately 53% of total claims and/or premiums) and an additional \$10.0 million to fund the Trust. Retirees receiving benefits contributed \$3.8 million or approximately 24% of total claims and/or premiums, through their required contributions.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**M. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)**

**Annual OPEB Cost and Net OPEB Obligation**

WSSC's annual OPEB cost is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities over thirty years, beginning with the year that the phase-in funding ends.

The long-term OPEB liability is estimated based on existing WSSC policies regarding retiree healthcare benefits. This level of coverage is not guaranteed in the future. The obligation will be periodically re-evaluated.

WSSC's annual OPEB cost and long-term liability for fiscal years 2017 and 2016 were (in thousands):

	2017	2016
Annual required contribution	\$ 14,961	\$ 14,961
Correction to the prior year contribution	(1,573)	(2,068)
Interest on long-term OPEB liability	1,461	1,922
Annual OPEB cost	14,849	14,815
Phase-in funding	(10,000)	(10,000)
Benefits paid	(9,898)	(11,398)
Increase in long-term OPEB liability	(5,049)	(6,583)
Long-term OPEB liability – beginning of year	20,875	27,458
Long-term OPEB liability – end of year	<u>\$ 15,826</u>	<u>\$ 20,875</u>

WSSC's annual OPEB cost, the percentage of annual OPEB cost contributed and the long-term OPEB liability for fiscal years 2017 and 2016 were (in thousands):

Fiscal Year		Percentage of Annual OPEB	Long - term
Ended	Annual OPEB Cost	Cost Contributed	OPEB Liability
6/30/2017	\$14,850	134.00%	\$15,826
6/30/2016	\$14,815	144.40%	\$20,875

**Funded Status and Funding Progress**

As of June 30, 2015, the most recent actuarial valuation date, the plan was 31.7% funded. The actuarial accrued liability for benefits at June 30, 2015 was \$218.2 million, and with assets of \$69.1 million, the resulting unfunded actuarial liability (UAAL) was \$149.0 million. The covered payroll (annual payroll of active employees covered by the OPEB Plan) was \$118.1 million, and the ratio of the UAAL to the covered payroll was 124.5%.

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of the occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the Trust and the annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress is presented as required supplementary information following the notes to the financial statements in Schedule B. This schedule presents multi-year trend information about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial liabilities for benefits.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**M. OTHER POSTEMPLOYMENT BENEFITS (OPEB) (continued)**

**Actuarial Methods and Assumptions**

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and the plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between employer and plan members to that point. The actuarial methods and assumptions used include techniques that are designed to reduce the effects of short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

As of the last valuation, WSSC had 1,594 retired employees and 1,582 active employees who participated in health plans, excluding spouses and dependents. Life insurance plan participation was 1,207 and 1,424, respectively for retirees and active employees. The average age is 70.1 and 47.8 respectively for retirees and active employees.

Actuarial assumptions used in the most recent valuation, as of June 30, 2015, are as follows:

Actuarial cost method	Entry age normal.
Discount rate	7.0%
Yearly increase in medical/prescription costs	Medical claims and retiree premiums will increase at an annual trend rate of 8.0% pre-65 and 6.0% post-65 for 2013, grading down to an ultimate rate of 5.5% in 2018 for pre-65 and 5.5% in 2018 for post-65.
Mortality rates after retirement	Retirement Plan–2000 Health Mortality Tables, with Blue Collar adjustments and one year set forward for non-disability retirees; RP2000 Disabled Mortality Tables for disability retirees.
Retirement age assumptions	Ranging from 50 to 70+
Coverage	100% of current retirees are covered and 100% of current active employees will elect coverage at least two years prior to retirement age under the medical and life insurance plans.
Amortization method	30 year amortization of the unfunded Actuarial Accrued Liability as a level dollar.

**N. DEFERRED COMPENSATION PLAN**

WSSC offers its employees a deferred compensation plan created in accordance with Internal Revenue Code Section 457. The deferred compensation plan, available to all employees, permits them to defer a portion of their salaries until future years. The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. All of the assets of the deferred compensation plan are held in a trust for the exclusive benefit of participants and beneficiaries. Participants' rights under the plan are equal to the fair market value of the deferred account for each participant.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**O. COMMITMENTS AND CONTINGENCIES**

Construction expenditures for fiscal 2018 are not expected to exceed \$697 million, a portion of which will be funded by capital contributions. Commitments in connection with this construction program approximated \$247 million at June 30, 2017.

The Commission, the District of Columbia (the District), the District of Columbia Water and Sewer Authority (DC Water), Fairfax County, Virginia, Montgomery County, Maryland, and Prince Georges County, Maryland are “Parties” to a regional Blue Plains Intermunicipal Agreement of 2012 (2012 IMA) that provides for dedicated allocation of wastewater flow capacity for treatment at the Blue Plains facility in Washington DC. The parties have demonstrated their willingness to share in the burdens associated with the demands for regional wastewater collection and treatment and biosolids management. Capital costs of Blue Plains are allocated among the Parties in proportion to their respective capacity allocation of wastewater treatment, collection, and conveyance facilities as defined in the 2012 IMA. Operating costs are allocated on a proportional basis by the wastewater flows from each participant to the Blue Plains facility. The Commission has a capacity entitlement of 169.60 MGD, which is approximately 45.8% of the Plant’s total capacity of 370 MGD.

For fiscal years 2017 and 2016, the Commission paid \$84.1 million and \$102.7 million, respectively, to fund its share of construction costs. The Commission estimates its share of the construction costs over the next seven years to be \$302.3 million, of which \$75.5 million is expected to be incurred in fiscal year 2018 and the balance over fiscal years 2019 to 2024. In addition, for fiscal years 2017 and 2016, the Commission made total payments of \$56.5 million and \$55.7 million, respectively, to DC Water for its share of operating and maintenance costs.

WSSC receives several federal and state grants. The grant funds expended are subject to compliance audits by the grantors.

The United States Department of Justice, the United States Environmental Protection Agency and the Maryland Department of the Environment (collectively, “the Regulators”) alleged, in previous years, that sanitary sewer overflows (“SSOs”) from WSSC’s sanitary sewer collection system were violations of the Federal Clean Water Act and analogous State law. Federal agencies have pursued similar enforcement actions nationally against public wastewater treatment system owners. WSSC contested this action and the initial remedial measures proposed by the Regulators. Negotiations to resolve the enforcement action through the entry of a mutually agreeable Consent Decree began in March 2002. In July 2005, a proposed Consent Decree was executed between WSSC, the Regulators and four environmental groups in which WSSC agreed to undertake certain remedial measures to eliminate and/or reduce SSO occurrences. The proposed Consent Decree was approved by the U.S. District Court with an official start date of December 7, 2005. In fiscal 2016, the U.S. District Court approved a six-year extension to the original term of the Consent Decree. Costs of these remedial measures are estimated at \$1,967.0 million and are to be expended over at least 18 years, \$748.0 million of which is expected to be incurred after fiscal year 2017. The costs are included in WSSC’s budget and capital improvements program. WSSC also paid civil penalties totaling \$1.1 million. These costs were accrued in fiscal 2005, and paid in fiscal 2006.

In February 2014, the Potomac Riverkeeper, Inc. (“PR”) and the Chesapeake Bay Foundation, Inc. (“CBF”) filed a complaint for injunctive relief and penalties in U.S. District Court in Maryland alleging violations of the Clean Water Act (“CWA”) by the Commission (the “Issuer”). Under a Consent Decree executed by the District Court of Maryland on April 15, 2016, the Commission is required to undertake short-term operational changes and capital improvements at the Potomac Water Filtration Plant that will enable WSSC to reduce solids discharged to the river, and to plan, design and implement upgrades or new construction to achieve requirements established by MDE and incorporated in a new discharge permit. An Audit report and Long-Term Upgrade Plan were submitted by WSSC for consideration by MDE on December 26, 2016. Costs for implementation of improvements under the proposed plan are estimated at \$157.5 million, and are to be expended over at least 7 years, \$156.0 of which is expected to be incurred after fiscal year 2017. The costs are included in WSSC’s budget and capital improvements program.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**NOTES TO FINANCIAL STATEMENTS**  
**FOR THE YEARS ENDED JUNE 30, 2017 AND 2016**

**O. COMMITMENTS AND CONTINGENCIES (continued)**

WSSC is involved in judicial and administrative proceedings. These actions include personal injury, property damage, personnel and environmental claims, and various claims filed by contractors against WSSC for cost overruns on construction contracts. While the outcomes of these matters are uncertain, it is the opinion of management and WSSC's General Counsel that resolution of all claims outstanding will not have a material adverse effect on the financial position or changes in net position of WSSC.

WSSC purchases insurance on its property (structures, contents, boiler and machinery, etc.) for physical damages where it has been determined that a reasonable amount of exposure exists. In addition, WSSC is self-insured for workers' compensation in accordance with the statutory requirements of the State of Maryland. The workers' compensation accrued liability includes an estimate for claims incurred but not yet reported to the claims administrator. WSSC also maintains crime and terrorism insurance and fiduciary liability policies having various self-insured retention levels.

WSSC is self-insured for all public liability. Each year, funds are budgeted for normal claims. However, should the past loss experience change, or should a catastrophic loss occur in excess of applicable insurance coverage, funds for such loss or losses would have to be obtained from ad valorem taxation or other sources of revenue since a self-insurance fund has not been established.

General liability and workers' compensation claim activity consisted of the following at June 30 (in thousands):

	<u>2017</u>	<u>2016</u>
Claim liability - beginning of year	\$ 21,742	\$ 20,555
Current year claims and changes in estimates	7,014	9,054
Claim payments	(11,775)	(7,867)
Claim liability - end of year	<u>\$ 16,981</u>	<u>\$ 21,742</u>

This liability is included in accounts payable and accrued expenses on the balance sheet.

During fiscal 2017 and 2016, WSSC leased a variety of equipment with annual rental payments of approximately \$1,766,000 and \$763,000, respectively.

**P. SUBSEQUENT EVENTS**

The WSSC has evaluated events subsequent to September 15, 2017 and through the date the financial statements were available to be issued, and determined there have not been any events that have occurred that would require adjustments to the financial statements.



**REQUIRED SUPPLEMENTARY INFORMATION**

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)**  
**SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS**  
**SCHEDULE A-1**

	2016	2015	2014	2013	2007 - 2012**
<b>Total Pension Liability:</b>					
Service cost	\$ 10,576,413	\$ 9,828,010	\$ 11,098,519	\$ 10,541,264	
Interest on total pension liability	61,935,402	61,611,259	67,317,785	66,214,298	
Effect of plan changes	-	-	-	-	
Effect of assumption changes or inputs	(10,448,960)	32,257,956	-	-	
Difference between expected and actual experience	-	(53,390,196)	(8,657,936)	-	
Benefit payments, including refunds of contributions	(57,554,539)	(56,672,851)	(54,934,361)	(53,545,268)	
Net change in pension liability	4,508,316	(6,365,822)	14,824,007	23,210,294	
Total pension liability, beginning of the year	913,076,226	919,442,048	904,618,041	881,407,746	
Total pension liability, end of year (a)	917,584,542	913,076,226	919,442,048	904,618,040	
<b>Plan Fiduciary Net Pension:</b>					
Employer contributions	22,476,689	21,655,933	20,731,968	19,768,897	
Member contributions	4,213,793	3,930,364	3,823,065	3,652,732	
Investment income, net of investment expenses	61,943,796	(10,371,882)	37,575,768	110,734,486	
Benefit payments	(57,554,539)	(56,672,851)	(54,934,361)	(53,545,268)	
Administrative expenses	-	-	-	-	
Net change in plan fiduciary position	31,079,739	(41,458,436)	7,196,440	80,610,847	
Fiduciary net position, beginning of the year	702,506,602	743,965,038	736,768,598	656,157,751	
Fiduciary net position, end of year (b)	733,586,341	702,506,602	743,965,038	736,768,598	
Net pension liability, end of year (a-b)	\$ 183,998,201	\$ 210,569,624	\$ 175,477,010	\$ 167,849,442	
Plan fiduciary net position as a percentage of total pension liability	79.95%	76.94%	80.91%	81.45%	
Covered payroll	\$ 132,998,160	\$ 128,141,615	\$ 122,674,367	\$ 116,975,722	
Plan's net pension liability as a percentage of covered payroll	138.35%	164.33%	143.04%	143.49%	

*See accompanying independent auditor's report.*

*\*\*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.*

**WASHINGTON SUBURBAN SANITARY COMMISSION  
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULE OF CHANGES IN NET PENSION LIABILITY AND RELATED RATIOS  
SCHEDULE A-1**

**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 no changes in actuarial assumptions used for 2016 compared to 2015. Several changes in actuarial assumptions were made in 2015 compared to the prior years, including rates of mortality, retirement, and termination; as well as inflation, salary increases, and investment return. Actuarial assumptions are presented in Note L of the financial statements for the current and prior fiscal year.

**WASHINGTON SUBURBAN SANITARY COMMISSION  
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULE OF EMPLOYER CONTRIBUTIONS  
SCHEDULE A-2**

Year Ended December 31,	Actuarially Determined Contribution	Actual Employer Contribution	Contribution Deficiency (Excess)	Covered Payroll	Contribution as a % of Covered Payroll
2007	\$ 20,663,778	\$ 15,755,202	\$ 4,908,576	\$ 93,226,047	16.9%
2008	18,115,582	15,832,225	2,283,357	93,681,805	16.9%
2009	13,322,921	16,337,171	(3,014,250)	96,669,651	16.9%
2010	19,248,208	17,491,535	1,756,673	103,500,207	16.9%
2011	24,526,595	18,455,605	6,070,990	109,204,763	16.9%
2012	22,748,813	18,862,636	3,886,177	111,613,231	16.9%
2013	24,242,634	19,768,897	4,473,737	116,975,722	16.9%
2014	27,284,797	20,731,968	6,552,829	122,674,367	16.9%
2015	20,100,358	21,655,933	(1,555,575)	128,141,615	16.9%
2016	18,393,733	22,476,689	(4,082,956)	132,998,160	16.9%

*See accompanying independent auditor's report.*

**WASHINGTON SUBURBAN SANITARY COMMISSION  
REQUIRED SUPPLEMENTARY INFORMATION (UNAUDITED)  
SCHEDULE OF CONTRIBUTIONS  
SCHEDULE A-2**

**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, 2016 valuation were based on the results of an actuarial experience analysis covering 2011 through 2016.

**WASHINGTON SUBURBAN SANITARY COMMISSION**  
**REQUIRED SUPPLEMENTAL INFORMATION**  
**SCHEDULE OF HISTORICAL OTHER POSTEMPLOYMENT BENEFITS (OPEB) INFORMATION**  
**SCHEDULE B**  
**Unaudited**  
**(In thousands)**

Actuarial Valuation Date <u>June 30</u>	Actuarial Value of Assets <u>          </u>	Actuarial Accrued Liability (AAL) <u>          </u>	Unfunded AAL (UAAL) <u>          </u>	Funded Ratio <u>          </u>	Covered Payroll <u>          </u>	UAAL as a Percentage of Covered Payroll <u>          </u>
2011	\$ 21,296	\$205,941	\$184,645	10.34%	\$113,634	162.5%
2013	41,300	217,196	175,896	19.02	103,943	169.2
2015	69,137	218,175	149,038	31.69	118,090	124.5

Fiscal Year Ended <u>June 30</u>	Annual OPEB Cost <u>          </u>	Percentage of OPEB Contributed <u>          </u>	Long-term OPEB Liability <u>          </u>
2015	\$ 16,766	133.5%	\$ 27,458
2016	14,815	144.4	20,875
2017	14,849	134.0	15,826

According to policy, WSSC completes an actuarial study at least once every two years. No studies were performed in 2012, 2014 and 2016, consequently results are not displayed.