ROANOKE VALLEY RESOURCE AUTHORITY

ROANOKE, VIRGINIA

Comprehensive Annual Financial Report
For The Year Ended June 30, 2017

Prepared by:

Roanoke County Finance Department

ROANOKE VALLEY RESOURCE AUTHORITY

Comprehensive Annual Financial Report
For The Year Ended June 30, 2017

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INTRODUCTORY SECTION

ROANOKE VALLEY RESOURCE AUTHORITY

October 27, 2017

To the Honorable Chairman, Members of the Board of Directors of the Roanoke Valley Resource Authority, and Citizens of the Cities of Roanoke and Salem, the County of Roanoke and the Town of Vinton, Virginia:

We are pleased to present the Comprehensive Annual Financial Report (CAFR) of the Roanoke Valley Resource Authority (Authority) for the fiscal year ended June 30, 2017. This audit was conducted in accordance with auditing standards generally accepted in the United States of America, the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and *Specifications for Audits of Authorities, Boards and Commissions,* issued by the Auditor of Public Accounts for the Commonwealth of Virginia.

This report consists of management's representations concerning the finances of the Authority. Consequently, management assumes full responsibility for both the accuracy of the data and the completeness and fairness of the presentations, including all disclosures. Management has established a comprehensive framework of internal control to provide a reasonable basis to make these representations. Because the cost of internal controls should not exceed anticipated benefits, the objective is to provide reasonable, rather than absolute, assurance that the financial statements are free of any material misstatements. To the best of our knowledge and belief, the enclosed financial data is accurate in all material respects and fairly presents the financial position, results of operations and cash flows of the Authority. All disclosures necessary to enable the reader to gain an understanding of the Authority's financial activities have been included.

The basic financial statements have been audited by our independent auditors, Robinson, Farmer, Cox Associates, who have issued an unmodified (clean) opinion on the financial statements of the Authority for the year ending June 30, 2017. The annual audit was conducted in accordance with professional standards which require that the independent auditors plan and perform the audit to obtain reasonable rather than absolute, assurance about whether the financial statements are free of material misstatement. The independent auditors' report is located at the front of the financial section of this report.

Management's Discussion and Analysis (MD&A) immediately follows the independent auditors' report and provides a narrative introduction, overview, and analysis of the basic financial statements. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it.

Profile of the Government

The Roanoke Valley Resource Authority (Authority) was established on October 23, 1991, as a tax exempt political subdivision within the Commonwealth of Virginia to acquire and construct a regional sanitary landfill and waste collection and transfer station with related treatment facilities. The charter members are the City of Roanoke, County of Roanoke, and the Town of Vinton. The Authority began its operations in 1993. The City of Salem joined July 1, 2016 and RVRA assumed ownership and operational control of Salem's transfer station on November 1, 2016.

The Authority's Board of Directors consists of nine members; five are appointed by Roanoke County, two are appointed by Roanoke City, one is appointed by Salem City, and one is appointed by the Town of Vinton. Each member is appointed for a four year term. Regular meetings of the Board of Directors are normally held monthly.

1020 Hollins Road, NE Roanoke, Virginia 24012-8011 (540) 857-5050 Fax (540) 857-5056
Web Site: www.rvra.net

The Authority is administered by a Chief Executive Officer (CEO). The CEO has the direct supervision of all employees of the Authority, the responsibility for the operation of the landfill facilities, and the establishment of guidelines for efficient and sound fiscal management.

Residents and businesses in the Roanoke City, the Roanoke County, Salem City and the Town of Vinton generate approximately 240,000 tons of wastes every year with approximately 225,000 tons landfilled. The remaining tonnages are recycled. Each locality collects its own trash using its own equipment. After collection, all but the City of Salem, refuse trucks deliver the trash to the Authority's Tinker Creek Transfer Station (TCTS) in the City of Roanoke. The City of Salem delivers its trash to the Authority's Salem Transfer Station (STS). Wastes received at the STS are currently transported by a contract over-the-road hauler, using RVRA's trailers, to the TCTS. At the TCTS, waste is loaded into specially designed rail cars and covered with watertight lock-down lids. Each rail car holds approximately 65 tons of waste, making them among the largest on the railroad. At the end of the day, all waste that has been collected and loaded into the rail cars is transported 33 miles on the Waste Line Express by Norfolk Southern to Smith Gap Station in the County. Upon arriving at the landfill, the rail cars are uncoupled and positioned for unloading the following day. The train then returns the same day with empty rail cars from the previous day's load.

Additional information on this process including a seven minute video may be gleaned by accessing the Authority's website at www.RVRA.net.

At Smith Gap Station the rail cars are unloaded using one of the largest rotary tippers in the world. The rail cars are rotated upside down to remove the waste. The unloading operation takes place inside the tipper building, where the waste is inspected and loaded into haul trucks for burial in a 1,200 acre, environmentally protected landfill disposal area that meets all state and federal regulations.

Budgetary and Accounting Controls

The Authority is required to prepare and submit an annual operating budget to the Charter Members for approval on or before April 1 of each year for the upcoming fiscal year (July 1 to June 30). The budget is prepared by staff of the Authority and serves as the foundation for the Authority's financial planning and control.

The Authority's accounting records are maintained on an accrual basis under which revenues are recognized when earned and expenses are recognized when incurred. Accounting functions are separated to the extent possible for a small sized staff. The County of Roanoke currently is the fiscal agent for the Authority. The accounting system the Authority is using belongs to the County and County staff has provided support and assistance to the Authority in its accounting operations.

Local Economy

The Authority draws from a regional labor force of approximately 300,000 within a radius of sixty miles. The Roanoke Valley as well as the surrounding communities, are fortunate that their economic indicators are more favorable compared to some of the neighboring localities and to the State, but there remain formidable challenges for the Roanoke Valley; not only in the delivery of local government and authority services, but also in maintaining our traditionally high standard of living and quality of life.

The Economic Development Department of each locality successfully utilizes provisions under the public/private partnership policy that allows businesses to receive assistance from them for qualifying facility expansions and relocations. The expected return on investment in new taxes and employment is a critical measure governing the use of public funds to assist businesses and industries.

Long-Term Financial Planning

The Authority annually reviews the adequacy of the Replacement Reserve Requirements under the current operating conditions, and in comparison with industry standards. The review is done in consultation with a professional engineer familiar with solid waste services, equipment, and facilities as utilized by the Authority. A professional consulting engineer, external to the Authority, reviews the plan every five years. The Authority has defined adequacy to mean that funds exist in amounts equivalent to or exceeding the anticipated expenditures during a period of the next five subsequent fiscal years. The Authority annually makes deposits to replacement reserves for funding future planned expenditures. These reserves allow the Authority to establish and project an orderly increase in tipping fees to prepare for future expenses along with annual operating costs. All funds have been determined to be adequate to address industry costs and planning, thus allowing the reserve funds to reflect future anticipated costs over the next five years.

The Authority has established a "Closure Fund" to cover its future closure and post-closure obligations. Maintenance of this fund enables the Authority to qualify for Financial Assurance using a "Corporate Financial Test," thereby eliminating the need for additional financial commitments from its member communities in the form of a "Local Government Financial Test" or the additional annual cost for a "Letter of Credit" assuring the closure obligations will be met.

Major Initiatives and Accomplishments for FY 2017

- During the year, the Roanoke Valley Resources Authority maintained financial and reserve policies providing for the establishment of and the planned funding level of maintenance and improvement reserve accounts for planned expenditures over a short and long-term planning period.

- The Authority continues to maintain an account for a "Closure Fund" to cover future closure and post-closure obligations. This fund enables the Authority to qualify for Financial Assurance by using a "Corporate Financial Test," thereby eliminating the need for additional financial commitments from its member communities in the form of a "Local Government Financial Test" or the additional annual cost for a "Letter of Credit" assuring the closure obligations will be met. The Authority continues to maintain adequate funds (cash) to cover anticipated costs required for closure and post closure care of both the Smith Gap and Rutrough Road landfills.

- The Authority continues to maintain and own sufficient land to provide long-term disposal capacity for its members in excess of 100 years which will be developed in phases or cells. The long-term disposal capacity provides the Authority with the flexibility it needs to properly evaluate emerging solid waste technologies and to allow sufficient timing to properly fund and to ultimately transition to one or more of these technologies if feasible.

- Since its inception, the Authority has developed five landfill cells in five construction phases to-date. Phase V is projected to provide disposal capacity into CY 2018. Construction of Phase VI is scheduled to be completed in late CY 2017 (FY 2018). Other than the initial Phase I, all funding associated with the construction of Phases II-VI has been cash-funded through an established and dedicated reserve account which continues to receive regular contributions from the Authority's tipping fees to cash-fund subsequent cell developments.

- Portions of the Smith Gap Landfill are nearing final construction grade and in accordance with the Authority's permit, are in the process of being closed. The Authority, in conjunction with its professional engineering consultant, presented an innovative closure design to the VDEQ for consideration as a Research Design and Development (RDD) project utilizing a newly engineered geosynthetic capping system. The revised cap will prove less costly to construct than the prescriptive capping system, while providing a permanent, more stable construction that would also provide a high level of environmental protection. The proposed project, as planned and approved, would be the first of its kind in the Commonwealth of Virginia and could serve as a model for subsequent cell closures at Smith Gap and throughout the State. The Authority received final approval from VDEQ in FY 2017 and has initiated construction. All funding associated with closure construction has been cash-funded through an established and dedicated reserve account which continues to receive regular contributions from the Authority's tipping fees to cash-fund subsequent cell closures. Closure construction is scheduled to be completed in late CY 2017 (FY 2018).

- The Authority simultaneous closure construction and the construction of Phase VI projects a savings on the combined construction activities through one contractor.

- As part of the original closure plan for the Smith Gap Landfill, the Authority installed an active gas collection and control system (GCCS) that began operations in April 2011. All funding for the closure plan, including the GCCS, is funded through an established reserve account which continues to receive regular contributions from tipping fees that will continue to fund subsequent cell closure costs. Although the Authority has no regulatory obligation to install and operate a GCCS at this time, the Authority's GCCS is currently collecting and preventing the annual emissions of approximately 60,000 tons of carbon dioxide equivalent (CO_2e) to the atmosphere, thereby greatly reducing greenhouse gas emissions. The Authority is a registered member of the California Climate Action Registry (CARs) which qualifies the Authority's destruction of greenhouse gases for emission credits which can be sold on the open market to help offset the initial cost of installing the GCCS. In FY 2015, the Authority received third party validation for approximately 93,000 tons of CO_2e emission credits which were sold, after expenses, for approximately $106,000; in FY 2016 the Authority's CO_2e emission credits sold, after expenses, for approximately $57,300; in FY 2017 the Authority's CO_2e emission credits sold, after expenses, for approximately $42,600 for total sale to-date of approximately $205,900. The Authority anticipates selling some or all of its ongoing and newly validated credits in FY 2018 and thereafter, creating a new, temporary annual revenue stream, albeit in projected lesser amounts each successive year they are available. This new revenue stream is projected to last for approximately 5 years when regulations will ultimately disqualify the Authority from generating emission credits.

- The Authority responded to a request for proposals by the City of Salem, VA for solid waste disposal management services which was accepted by the City on May 9, 2016. The Authority's proposal extended full membership status to the City of Salem effective July 1, 2016. In conjunction with Salem's new membership, the Authority received ownership and operational responsibilities for Salem's existing transfer station effective November 1, 2016. The new transfer station historically receives approximately 80,000 tons of municipal solid waste annually. The additional annual revenues from the added MSW tonnages exceed the associated annual operating and capital costs resulting in a positive impact on the Authority's current and future tipping fees. The addition of the new Salem Transfer Station will also provide a closer disposal point for approximately 25% of the Authority's Members' collection routes that will result in operational savings.

- The Authority issued $20M in financing proceeds in FY'17. The debt was issued in association with the Authority's "Facilities Modifications and Improvements Program" ("Program") that includes five distinct projects: the Connector Road Project; the Salem

Transfer Station Project; the Tinker Creek Transfer Station Project; the Smith Gap Regional Landfill Project; and the Rail Corridor Conversion Project. The debt service payments to fund the Program's capital costs will be covered from the additional tipping fee revenues being generated by the joinder of the City of Salem to the Authority in FY 2017 without any increase in the Authority's tipping fees.

- The Connector Road Project will ultimately construct a road that will serve as an alternative delivery system (vs. current rail-haul transportation of solid waste) and route for tractor trailers to access the Authority's Smith Gap Landfill directly from the interstate (I-81) in lieu of using public road system. The Connector Road, in and by itself, serves as an effective negotiating tool with the Authority's current service provider to ensure the Authority will not overpay for its transportation services. If utilized, the Connector Road, in conjunction with the Rail Corridor Conversion Project, will provide safe, efficient and effective routing for the Authority's service provider via tractor trailer-hauled solid waste. It will also enable the Authority to entertain the fullest use of one of its most valuable assets, the Smith Gap Landfill, by expanding the Authority's potential customer base which would increase landfill tonnages in order to maximize its economies of scale. Land to construct the Connector Road Project was acquired by the Authority in FY 2017. Construction is scheduled to begin in early FY 2018 with completion in late FY 2018.

- The Salem Transfer Station (STS) Project, Phase I, will construct two, new top-load hoppers to replace two compactor units. This conversion will provide a more efficient load-out of solid waste into trailers that will be hauled by tractors, initially to the Authority's Tinker Creek Transfer Station, where the waste will be loaded onto rail cars for transport to the Smith Gap Landfill. The new load-out system will allow acceptance of large, bulky wastes at the STS to better serve the Authority's customers. In the event the Authority transitions from rail-haul transportation to tractor-trailers, deliveries will go directly to the Smith Gap Landfill avoiding the double-handling of its wastes from STS. Additionally, truck deliveries would be a shorter distance to the landfill saving additional operating costs. The STS Project will also include the construction of a Residential Service Area (RSA). The new RSA removes residential traffic from the station's regular tipping floor which will greatly minimize the potential for accidents caused by the comingling of commercial & residential disposal vehicles. Additionally, removing the residential traffic from the tipping floor expedites the ingress and egress of municipal and commercial vehicles which resulting in operational savings for the Authority's members and customers. Phase I construction was initiated in FY 2017 and is projected to be completed in FY 2018.

- The Salem Transfer Station (STS) Project, Phase II, will construct a new entrance/exit that will provide more room for improved queuing capacity for an anticipated increase in traffic flow from the Authority's Members and its commercial customers. Phase II construction is scheduled to begin in early FY 2018 with completion in FY 2019.

- The Tinker Creek Transfer Station Project; the Smith Gap Regional Landfill Project; and the Rail Corridor Conversion Project are projects slated to begin construction in FY 2018 to provide necessary capital improvements for the Authority to transition from its rail-haul transportation system to a tractor trailer system. The Authority will continue to utilize its rail-haul system, at a minimum, until its current transportation contract expires on June 30, 2018, unless that contract is extended by the Authority. These projects provide a cost-effective transportation alternative to the Authority. Construction, if implemented, is scheduled for completion in FY 2019.

- The Authority joined forces with the Western Virginia Water Authority and the Roanoke County Recreation and Parks Department for the design and construction of a Joint Utility Project (JUP). The JUP will construct a water and sewer line contiguous to the Authority's

- Authority will construct a stand-alone lift station and force main that will connect to the JUP's sewer line, effectively terminating the Authority's need to pump and haul its leachate. This project has a 2.5 year ROI and will remove tanker trucks from public roads. The JUP construction began in FY 2017 and the Authority's portion is scheduled for completion in FY 2018.

Awards and Acknowledgements

The Government Finance Officers Association (GFOA) of the United States and Canada (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to RVRA for its comprehensive annual financial report for the fiscal year ended June 30, 2016. This was the eighth consecutive year that the Authority received this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized comprehensive annual financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current comprehensive annual financial report continues to meet the Certificate of Achievement Program's requirements and we are submitting it to the GFOA to determine its eligibility for another certificate.

We would like to express our appreciation and gratitude to the personnel at the Authority and in the Department of Finance at the County of Roanoke for their dedication and support in producing this report. Appreciation is also extended to the Authority's Board of Directors whose continuing leadership and support is essential to the financial health of the Authority.

Sincerely,

Daniel D. Miles
Chief Executive Officer

Rebecca E. Owens
Treasurer

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

Roanoke Valley Resource Authority

Virginia

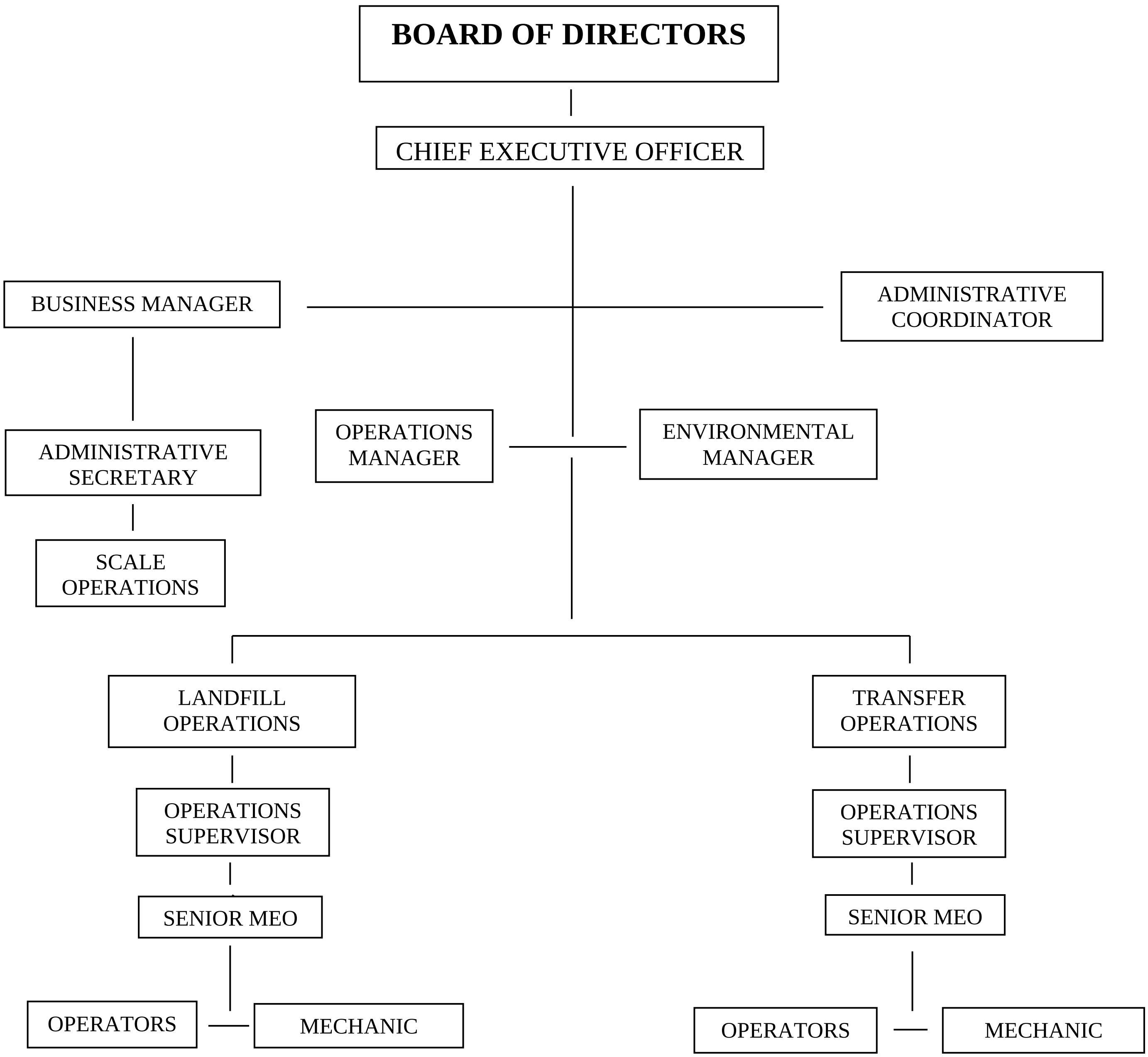
For its Comprehensive Annual
Financial Report
for the Fiscal Year Ended

June 30, 2016

Jeffrey R. Emer

Executive Director/CEO

ROANOKE VALLEY RESOURCE AUTHORITY
ORGANIZATIONAL CHART



ROANOKE VALLEY RESOURCE AUTHORITY

List of Appointed Officials
For The Year Ended June 30, 2017

(A Governmental organization established October 23, 1991
as a tax exempt political subdivision within the Commonwealth of Virginia)

BOARD MEMBERS

Anne Marie Green, Chairman

Michael B. Shockley, Vice Chair	Rebecca E. Owens, MBA, Treasurer
Bobby Edwards	Keith Garman
Thomas Gates	Joey Hiner
Dennis Nalley	Mike Tyler

OFFICIALS

Chief Executive Officer	Daniel D. Miles, P.E.
Operations Manager	Steven R. Barger, P.E.
Business Manager	Randall Remington
Administrative Secretary	Ollie Tyree
Administrative Coordinator	Peggy Bishop
Environmental/Safety Manager	Edward Hacker
General Counsel	Mark A. Williams, Esq.

FINANCIAL SECTION

Independent Auditors' Report

To the Members of the Board
Roanoke Valley Resource Authority
Roanoke, Virginia

Report on the Financial Statements

We have audited the accompanying financial statements of the business-type activities of the Roanoke Valley Resource Authority, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions,* issued by the Auditor of Public Accounts of the Commonwealth of Virginia. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

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

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the business-type activities of the Roanoke Valley Resource Authority, as of June 30, 2017, and the changes in financial position, and cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis and schedules related to pension and OPEB funding on pages 12-16 and 59-62 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Roanoke Valley Resource Authority's basic financial statements. The introductory section and statistical section, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The introductory and statistical sections have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 27, 2017, on our consideration of the Roanoke Valley Resource Authority's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Roanoke Valley Resource Authority's internal control over financial reporting and compliance.

Robinson, Farmer, Cox Associates

Blacksburg, Virginia
October 27, 2017

Roanoke Valley Resource Authority
Management's Discussion and Analysis
For the Year Ended June 30, 2017

The management discussion and analysis (MD&A) serves as an introduction to the financial statements of the Roanoke Valley Resource Authority (the Authority) for the year ended June 30, 2017. The MD&A represents management's examination and analysis of the Authority's financial condition and performance and should be read in conjunction with the Authority's basic financial statements which immediately follow this section. The Management's Discussion and Analysis (MD&A) is an element of the reporting model adopted by the Governmental Accounting Standards Board in their *Statement No. 34 Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments (GASB 34).*

Financial Highlights

- The total assets and deferred outflows of resources of the Authority exceeded its liabilities and deferred inflows of resources as of June 30, 2017 by $16,033,494 (Net Position). Of this amount, $(2,924,063) is classified as unrestricted net assets, indicating that no funds were available for discretionary purposes.
- During the year, the Authority's total revenues were $919,371 less than the $13,089,709 of expenses (before special items).
- The Authority had outstanding debt of $20,000,000 at June 30, 2017.

Overview of the Basic Financial Statements

The Authority's financial report includes three financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows. These statements are prepared in accordance with accounting principles generally accepted in the United States of America as promulgated by the Government Accounting Standards Board (GASB).

The financial statements provide information about the Authority as a whole using the accrual basis of accounting, which is the method used by most private-sector enterprises. In addition to the basic financial statements, the report includes Notes to the Basic Financial Statements and Required Supplemental Information.

- The **Statements of Net Position** reports assets and deferred outflows of resources, liabilities and deferred inflows of resources and the difference between them. The entire equity section is combined to report total Net Position and displayed in three broad components – net investment in capital assets; restricted assets; and unrestricted assets.

- The **Statement of Revenues, Expenses and Changes in Fund Position** present the results of the business activities over the course of the fiscal year and information about how the Net Position changed during the year. Revenues and expenses are categorized as either operating or non-operating based upon definitions provided by GASB's 33 and 34. Operating revenue consists of tipping fees and recycling fees. Nonoperating revenues consist of net increase in fair value of investments, interest income, gains on disposals of property and equipment and miscellaneous income.

One of the main goals of these two statements is to report the Authority's net position and changes that affected net position during the fiscal year. The change in the Authority's net position is one way to measure the Authority's financial health, or financial position. Increases and decreases in net position are indicators of whether the Authority's financial health is improving or deteriorating. These statements allow readers to answer the question: "Is the Authority's financial position, as a whole, better or worse as a result of the year's activities?"

- The **Statement of Cash Flows** presents changes in cash and cash equivalents, resulting from operational, financing, and investing activities. This statement presents cash receipts and cash disbursement information without consideration of the earning event, when an obligation arises, or depreciation of capital assets.

Notes to the basic financial statements - The notes to the basic financial statements provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found beginning on page 21 of this report.

Financial Analysis of the Authority as a Whole

The following comparative condensed Statement of Net Position provides an analysis of the change in financial position from the previous fiscal year.

Statement of Net Position

The following table reflects the condensed Summary of Net Position:

	FY 2017	FY 2016 (as restated)
Current and other assets	$ 31,605,016	$ 18,487,166
Capital assets, net	24,986,794	16,137,093
Total assets	56,591,810	34,624,259
Deferred outflows of resources	388,856	149,806
Current liabilities	2,990,046	668,560
Noncurrent liabilities	37,858,334	16,240,782
Total Liabilities	40,848,380	16,909,342
Deferred inflows of resources	98,792	277,002
Investment in capital assets	18,957,557	16,137,093
Unrestricted	(2,924,063)	1,450,628
Total net position	$ 16,033,494	$ 17,587,721

As noted earlier, net position may serve over time as a useful indicator of the Authority's financial position. In the case of the Authority, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by $16,033,494 at the close of fiscal year 2017. This is comparable to last year's Net Position of $17,587,721 (as restated).

A portion of the Authority's Net Position, 118.24%, reflects its investment in capital assets (e.g. land, buildings, and equipment); less any related debt used to acquire those assets that are outstanding. The Authority uses these capital assets to provide services to customers; consequently, these assets are not available for future spending. The Authority's investment in its capital assets is reported net of related debt, if applicable, and it should be noted that the resources needed to repay any debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

A portion of the Authority's Net Position, (18.24)%, represents resources that are not subject to restrictions on how they may be used. A negative balance indicates that no funds were available for discretionary purposes.

Statement of Revenues, Expenses and Changes in Net Position

The following table shows the revenue and expenses of the Authority:

	FY 2017	FY 2016 (as restated)
Revenues		
Charges for services	$ 12,011,736	$ 8,743,169
Nonoperating Revenues:		
Interest income	158,602	106,683
Total revenues	12,170,338	8,849,852
Expenses		
Operating expense		
Salaries and benefits	(2,467,151)	(1,903,883)
Landfill closure costs	(1,512,073)	(438,484)
Other operating expenses	(6,352,682)	(4,620,424)
Depreciation	(2,610,244)	(5,072,029)
Non-operating expenses:		
Interest expense	(22,876)	-
Bond issuance costs	(124,683)	-
Total expenses	(13,089,709)	(12,034,820)
Income before special items:	(919,371)	(3,184,968)
Special Items:		
Transfer of te City of Salem operations	1,613,859	-
Asset impairment loss	(2,248,715)	-
Total special items	(634,856)	-
Change in net position	(1,554,227)	(3,184,968)
Total net position at beginning of year	17,587,721	20,772,689
Total net position at end of year	$ 16,033,494	$ 17,587,721

The Authority's total revenues increased over the prior year by 37.5% to $12,170,338 due primarily to the addition of the City of Salem as a member of the Authority. Tipping fees were higher by 38.2% from the prior year. Interest income increased by 48.7% as a result of higher investment yields. The expenses for all programs and services increased by 40.0% in FY 2017, resulting primarily from the addition of the City of Salem.

Approximately 97.9% of the Authority's Fiscal Year 2017 revenue is from operating revenue consisting of tipping fees, and recycling income; 0.8% is miscellaneous consisting primarily of mulch sales; 1.3% from non-operating revenue consisting of interest income. Operational expenses for FY 2017 account for 98.9% of total expenses, with remaining expenses consisting of interest expense (0.2%) and bond issuance costs (0.9%).

Capital Assets

As of June 30, 2017, the Authority had invested $24,986,794 net of accumulated depreciation, in a variety of capital assets including land, landfill development costs, buildings, and equipment. The Authority's investment in capital assets for the current year was $14,727,349. The majority of this investment was composed of the following:

- A transfer of assets from the City of Salem
- The completion of the planned residential service area (adjacent to the Tinker Creek transfer facility)
- (1) Wood hog grinder
- (3) Excavators
- (35) Walking floor trailers
- (6) Vehicles
- (4) Tractors

Also included in this year's investment total is construction in progress related to the closure of seven (7) acres at the Smith Gap Landfill, as well as the construction of a new cell disposal area. This activity increased to a level of $1,204,791.

Additional information on the Authority's capital assets can be found in Note 3 in the notes to the basic financial statements on page 28. Capital assets net of accumulated depreciation are illustrated in the following table:

	FY 2017	FY 2016
Land	$ 4,508,691	$ 1,632,263
Landfill and Rail Access	36,770,591	36,770,591
Transfer Station	10,607,242	6,390,221
Equipment	16,251,313	10,747,347
Construction in progress	1,204,791	867,860
Subtotal	69,342,628	56,408,282
Accumulated depreciation	(44,355,834)	(40,271,189)
Totals	$ 24,986,794	$ 16,137,093

Long -Term Debt

At June 30, 2017, the Authority had $20,000,000 of bonded debt issues outstanding. This debt was used to support the development of additional capacity due to the addition of the City of Salem as a member of the Authority. Additional information related to long - term liabilities can be found in Note 4, page 29 in the notes to the basic financial statements.

Factors Influencing Future Budgets

Key factors that are expected to impact future budgets include:

- Uncertainty regarding the economy
- Projected increases in health insurance premiums and retirement contribution rates assessed by the Virginia Retirement System
- Expansion of the open landfill
- Estimated landfill closure costs
- Renewal and replacement needs; costs of plant and equipment
- Closed landfill groundwater monitoring and remediation costs
- Interest rates
- Issuance of debt
- Energy and fuel costs

Requests for Information

This financial report is designed to provide our citizens, taxpayers, customers, potential investors and creditors with a general overview of the Authority's finances and to demonstrate accountability for the resources it receives. If you have questions about this report or need additional financial information, contact the Executive Director, Roanoke Valley Resource Authority, 1020 Hollins Road, Roanoke, VA 24012, telephone (540-857-5055), or visit the Authority's web site at www.rvra.net.

Basic Financial Statements

ROANOKE VALLEY RESOURCE AUTHORITY
Statement of Net Position
June 30, 2017

ASSETS		
Current assets:		
Cash and cash equivalents	$	5,785,736
Investments (note 2)		283,153
Restricted cash and cash equivalents (note 1)		15,396,075
Accounts receivable		1,152,803
Interest receivable		37,850
Inventory		72,113
Total current assets	$	22,727,730
Noncurrent assets:		
Investments (note 2)	$	8,877,286
Non-depreciable capital assets (note 4)		5,713,482
Depreciable capital assets, net of accumulated depreciation (note 4)		19,273,312
Total noncurrent assets	$	33,864,080
Total assets	$	56,591,810
DEFERRED OUTFLOWS OF RESOURCES		
Pension contributions subsequent to measurement date	$	188,281
Items related to measurement of the net pension liability		200,575
Total deferred outflows of resources	$	388,856

The accompanying notes are an integral part of the basic financial statements.

ROANOKE VALLEY RESOURCE AUTHORITY

Statement of Net Position

June 30, 2017

LIABILITIES		
Current liabilities:		
Vouchers payable	$	1,773,119
Retainage payable		70,505
Accrued payroll		9,237
Accrued interest		77,339
Compensated absences, current portion (note 5)		100,821
Locality compensation payments payable, current portion (note 5)		215,433
Accrued landfill closure, current portion (note 8)		310,441
Revenue bonds payable (note 5)		433,151
Total current liabilities	$	2,990,046
Noncurrent liabilities:		
Compensated absences, net of current portion (note 5)	$	185,442
Net OPEB obligation (note 7)		116,004
Net pension liability (note 6)		1,433,391
Accrued landfill closure, net of current portion (note 8)		15,346,769
Locality compensation payments payable (note 5)		1,209,879
Revenue bonds payable, net (note 5)		19,566,849
Total noncurrent liabilities	$	37,858,334
Total liabilities	$	40,848,380
DEFERRED INFLOWS OF RESOURCES		
Items related to measurement of the net pension liability	$	98,792
Total deferred inflows of resources	$	98,792
NET POSITION		
Investment in capital assets	$	18,957,557
Unrestricted		(2,924,063)
Total net position	$	16,033,494

The accompanying notes are an integral part of the basic financial statements.

ROANOKE VALLEY RESOURCE AUTHORITY
Statement of Revenues, Expenses and Changes
in Net Position
For the Year Ended June 30, 2017

OPERATING REVENUES		
Tipping fees	$	11,868,531
Recycling revenue		50,922
Miscellaneous fees		92,283
Total operating revenues	$	12,011,736
OPERATING EXPENSES		
Salaries and benefits	$	2,467,151
Landfill closure and post closure costs (note 8)		1,512,073
Other operating expenses		6,352,682
Depreciation		2,610,244
Total operating expenses	$	12,942,150
Operating income (loss)	$	(930,414)
NONOPERATING REVENUES (EXPENSES)		
Interest income	$	158,602
Interest expense		(22,876)
Bond issuance costs		(124,683)
Total nonoperating revenues (expenses)	$	11,043
Income before special items	$	(919,371)
Special items:		
Transfer of the City of Salem operations	$	1,613,859
Asset impairment loss		(2,248,715)
Total special items	$	(634,856)
Change in net position	$	(1,554,227)
Total net position, beginning of year, as restated		17,587,721
Total net position, end of year	$	16,033,494

The accompanying notes are an integral part of the basic financial statements.

ROANOKE VALLEY RESOURCE AUTHORITY
Statement of Cash Flows
For Year Ended June 30, 2017

Cash Flows from Operating Activities		
Receipts from customers	$	11,776,088
Payments to suppliers		(6,830,958)
Payments to employees		(2,461,806)
Net cash provided by (used for) operating activities	$	2,483,324
Cash Flows from Capital and Related Financing Activities		
Purchase and construction of capital assets	$	(9,253,344)
Net proceeds from the sale of revenue bonds		19,875,317
Principal paid on locality compensation payments		(219,069)
Interest paid on revenue bonds		(164,784)
Net cash provided by (used for) capital and related financing activities	$	10,238,120
Cash Flows from Investing Activities		
Interest income	$	136,333
Proceeds from the sale and maturity of investments		(466,273)
Net cash provided by (used for) investing activities	$	(329,940)
Net increase (decrease) in cash and cash equivalents	$	12,391,504
Cash and cash equivalents at the beginning of the year		8,790,307
Cash and cash equivalents at the end of the year, including restricted amounts	$	21,181,811
Reconciliation of operating income (loss) to net cash provided by (used for) operating activities:		
Operating income (loss)	$	(930,414)
Adjustments to reconcile operating income(loss) to net cash provided by (used for) operating activities:		
Depreciation		2,610,244
Changes in assets, deferred outflows of resources, liabilities and deferred inflows of resources:		
Accounts receivable		(235,648)
Inventory		(2,156)
Deferred outflows of resources		(239,050)
Vouchers payable		638,562
Accrued payroll		(46,569)
Compensated absences		73,670
Landfill closure liability		397,391
Net OPEB obligation		6,509
Net pension liability		388,995
Deferred inflows of resources		(178,210)
Net cash provided by (used for) operating activities	$	2,483,324

Noncash items:

During the fiscal year, assets with a net book value of $31,587 were traded-in on new assets..
Issuances costs totaling $124,683 were directly deducted from bond proceeds.
Debt assumed by the Authority from Salem during the fiscal year totaled $1,644,381.
Assets transferred from the City of Salem totaled $3,275,835.

The accompanying notes are an integral part of the basic financial statements.

ROANOKE VALLEY RESOURCE AUTHORITY

Notes to the Financial Statements
as of June 30, 2017

Note 1—Summary of Significant Accounting Policies:

A. Description of Entity

The Roanoke Valley Resource Authority (the Authority) was established on October 23, 1991 as a tax exempt political subdivision within the Commonwealth of Virginia to acquire and construct a regional sanitary landfill and waste collection and transfer station with related treatment facilities. The charter members are the City of Roanoke (the City), County of Roanoke (the County) and the Town of Vinton (the Town).

Prior to October 23, 1991, the operations of the Authority were accounted for as an enterprise fund of the County of Roanoke. As of October 23, 1991, under agreement between the City, the County and the Town, the County transferred all existing assets and liabilities to the Authority.

Under terms of an agreement with the Roanoke Valley Solid Waste Management Board (the Management Board), certain assets and liabilities were transferred to the Authority, effective October 1, 1993. The terms of the agreement call for the Authority to monitor an old landfill site of the Roanoke Valley Regional Solid Waste Management Board during the postclosure care period.

B. Basis of Accounting

The Roanoke Valley Resource Authority operates as an enterprise fund, and its accounts are maintained on the accrual basis of accounting. Under this method, revenues are recognized when earned, and expenses are recorded as liabilities when incurred, without regard to receipt or payment of cash. The Authority accrues revenue for services rendered but not yet billed at the end of the fiscal year.

The Authority distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the Authority's principal ongoing operations. The principal operating revenues of the Authority are charges to customers for services. Operating expenses include the cost of services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

C. Deferred Outflows/Inflows or Resources

In addition to assets, the statement of financial position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents a consumption of net position that applies to a future period(s) and so will not be recognized as an outflow of resources (expense) until then. The Authority's deferred outflows of resources are comprised of contributions to the pension plans made during the current year and subsequent to the net pension liability measurement date and differences between expected and actual experience, changes in assumptions, the net difference between projected and actual earnings on pension plan investments.

Note 1—Summary of Significant Accounting Policies: (Continued)

C. Deferred Outflows/Inflows or Resources: (Continued)

In addition to liabilities, the statement of financial position will sometimes report a separate section for deferred inflows of resources. This separate financial statement element, deferred inflows of resources, represents an acquisition of net position that applies to a future period(s) and so will not be recognized as an inflow of resources (revenue) until that time. Certain items related to the measurement of the net pension liability are reported as deferred inflows of resources. These include differences between expected and actual experience and the net difference between projected and actual earnings on pension plan investments.

For more detailed information on deferred outflows and inflows of resources, please refer to the pension note.

D. Basic Financial Statements

Since the Authority is only engaged in business-type activities, it is required to present only the financial statements required for enterprise funds. For the Authority, the basic financial statements and required supplementary information consist of:

- Management's Discussion and Analysis
- Enterprise fund financial statements
  - Statement of Net Position
  - Statement of Revenues, Expenses, and Changes in Net Position
  - Statement of Cash Flows
  - Notes to Financial Statements
- Required Supplementary Information
  - Schedules of Pension and OPEB Funding Progress

E. Capital Assets

Capital assets are stated at cost or historical cost if purchased or constructed. Donated capital assets are recorded at acquisition value at the date of donation. Depreciation is computed using the straight line method over the estimated useful lives of the respective assets.

Maintenance, repairs and minor renewals are charged to expense as incurred, while major renewals and replacements are capitalized. Upon the sale or retirement of a capital asset, the cost and related accumulated depreciation, if applicable, are eliminated from the related accounts, and any resulting gain or loss is included in income.

The Authority defines capital assets as assets with an initial individual cost of more than $1,000 and an estimated useful life of at least one year. Assets are depreciated over their estimated useful lives. Equipment, furniture and fixtures are depreciated over three to ten years. Buildings and structures, including the transfer station, are depreciated over 35 years. Landfill and rail access assets are depreciated over fifteen to thirty-five years. Landfill cell development costs are depreciated over the expected life of the cell.

Note 1—Summary of Significant Accounting Policies: (Continued)

F. Interest on Indebtedness

Interest expense applicable to that portion of indebtedness, the proceeds of which are used to construct new facilities, is capitalized during the period of construction as part of the cost of such facilities. Other interest costs of the Authority are treated as nonoperating expenses. No interest was capitalized during the current or prior fiscal year.

G. Cash and Cash Equivalents

Cash and cash equivalents are considered to be cash on hand, demand deposits, and short-term investments with original maturities of three months or less from the date of acquisition.

H. Investments

Money market investments, participating interest-earning investment contracts (repurchase agreements) that have a remaining maturity at time of purchase of one year or less, nonparticipating interest-earning investment contracts (nonnegotiable certificates of deposit (CDs) and external investment pools are measured at amortized cost. All other investments are reported at fair value.

I. Budgets and Budgetary Accounting

A budget is prepared for information, fiscal planning purposes, and to provide the basis for setting user rates. None of the participating entities are required to approve the budget. The budget is adopted as a planning document and is not a legal control on expenses.

J. Accounts Receivable

Accounts receivable are recorded at the invoiced amount and do not bear interest. Primary customers consist of the City of Roanoke, County of Roanoke, Town of Vinton and their respective citizens, and local businesses. Management does not feel that an allowance of balances is necessary so the direct write off method of accounting for uncollectible accounts is used.

K. Inventory

Inventory is recorded using the first-in, first-out method (FIFO) and is valued at the lower of cost or market (net realizable value). Inventory consists of parts and supplies utilized in the daily operation of the landfill.

L. Use of Estimates

Management uses estimates and assumptions in preparing its financial statements. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent liabilities, and reported revenues and expenses. Actual results could differ from those estimates.

Note 1— Summary of Significant Accounting Policies: (Continued)

M. Net Position

Net position is the difference between assets and deferred outflows of resources and liabilities and deferred inflows of resources. Net position is divided into three components:

- Net investment in capital assets—consist of the historical cost of capital assets less accumulated depreciation and less any debt that remains outstanding that was used to finance those assets plus deferred outflows of resources less deferred inflows of resources related to those assets.

- Restricted —consist of assets that are restricted by the Authority's creditors (for example, through debt covenants), by the state enabling legislation (through restrictions on shared revenues), by grantors (both federal and state), and by other contributors.

- Unrestricted—all other net position is reported in this category.

N. Net Position Flow Assumption

Sometimes the Authority will fund outlays for a particular purpose from both restricted (e.g. restricted bond and grant proceeds) and unrestricted resources. In order to calculate the amounts to report as restricted – net position and unrestricted – net position in the financial statements, a flow assumption must be made about the order in which the resources are considered to be applied. It is the Authority's policy to consider restricted – net position to have been depleted before unrestricted – net position is applied.

O. Long-Term Obligations

Long-term obligations are reported as liabilities in the statement of net position at face value, net of any applicable premiums and discounts.

P. Compensated Absences

The liability for compensated absences consists of unpaid accumulated vacation and sick leave balances. The liability is based on the sick leave and the vacation leave accumulated at June 30. Limited vacation and sick leave may be accumulated until retirement or termination. Accumulated sick leave is paid at a fixed daily rate and accumulated vacation is paid at the employee's current wage upon retirement or termination.

Q. Accrued Landfill Closure

Accrued landfill closure represents the estimated liability for closure and postclosure costs for the landfill sites. This includes the cost of any equipment and facilities to be installed near or after the date of landfill closure for purposes of closure, the cost of landfill capping, and the cost of monitoring and maintaining the sites during the postclosure period. A total estimate of these expenses is made and updated on a periodic basis and expenses are charged to current period usage of the landfill site. Current cost of landfill closure and postclosure care is an estimate and subject to change resulting from inflation, deflation, technology, or changes in applicable laws or regulations.

Note 1—Summary of Significant Accounting Policies: (Continued)

R. Funding Requirements

The City, County and the Town are responsible for their pro rata share, based on population, of any year-end operating deficit or capital expenditures, if additional funding is required. The Authority is responsible for paying all outstanding debt.

S. Pensions

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 fiduciary net position of the Authority's Retirement Plans and the additions to/deductions from the Authority's Retirement Plans' net fiduciary position have been determined on the same basis as they were reported by the Virginia Retirement System (VRS) and the City of Roanoke Pension 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.

T. Restricted Assets

Deposits totaling $15,396,075 have been restricted by applicable bond agreements for the construction of landfill cell(s), an access road and related items.

Note 2—Deposits and Investments:

Deposits – The County of Roanoke maintains a cash and investment pool that is available for use by all County funds, component units and entities for which the County is the fiscal agent. The Authority participates in this pool and at June 30, 2017, the carrying value of the Authority's deposits with banks and savings institutions was $21,181,811. Deposits with banks are covered by Federal depository insurance and collateralized in accordance with the Virginia Security for Public Deposits Act, Section 2.2-4400 et. seq. of the Code of Virginia. Under the Act, banks and savings institutions holding public deposits in excess of the amount insured by the FDIC must pledge collateral to the Commonwealth of Virginia Treasury Board. Financial Institutions may choose between two collateralization methodologies and depending upon that choice, will pledge collateral that ranges in the amounts from 50% to 130% of excess deposits. Accordingly, all deposits are considered fully collateralized.

Investments – Statutes authorize local governments and other public bodies to invest in obligations of the United States or agencies thereof, obligations of the Commonwealth of Virginia or political subdivisions thereof, obligations of the International Bank for Reconstruction and Development (World Bank), the Asian Development Bank, the African Development Bank, "prime quality" commercial paper and certain corporate notes, bankers' acceptances, repurchase agreements, and the State Treasurer's Local Government Investment Pool (LGIP).

Information related to the County of Roanoke pooled account is presented in the audited financial statements of the County of Roanoke and can be obtained from the Director of Finance, County of Roanoke, 5204 Bernard Drive, Suite 300E, Roanoke, Virginia 24018; telephone 540-772-2020 or visit the County's web site at www.roanokecountyva.gov.

Note 2—Deposits and Investments: (Continued)

Custodial Credit Risk (Investments)

The Authority's investment policy provides that securities purchased for the Authority shall be held by the Authority Treasurer or by the Treasurer's custodian. If held by a custodian, the securities must be in the Authority's name or in the custodian's name and identifiable on the custodian's books as belonging to the Authority. Further, if held by a custodian, the custodian must be a third party, not a counterparty (buyer or seller) to the transaction. At June 30, 2017 all of the Authority's investments were held in accordance with this policy.

Credit Risk of Debt Securities

The Authority's investment policy for credit risk is consistent with the investments allowed by statute as detailed above.

The Authority's debt investments as of June 30, 2017 have not been rated as noted below.

Authority's Rated Debt Investments' Values

Rated Debt Investments		**Fair Quality Ratings** **Not rated**
Roanoke County Treasurer's Investment Pool	$	9,160,439
Total	$	9,160,439

The Roanoke County Investment Pool is not rated; however, underlying investments in the pool are rated. Those ratings along with additional information concerning the pool are presented in the Roanoke County, Virginia Comprehensive Annual Financial Report, a copy of which may be requested from: County of Roanoke, 5204 Bernard Drive, Suite 300E, Roanoke, Virginia 24018; telephone 540-772-2020 or by visiting the County's web site at www.roanokecountyva.gov.

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Note 2—Deposits and Investments: (Continued)

Interest Rate Risk

The Authority's policy with regard to interest rate risk requires that all investments mature within five years of their purchase date. The policy further requires maturity scheduling be timed to anticipated need and scheduled to coincide with projected cash flow needs. All funds shall be considered short-term except those reserved for capital projects. Investment maturities presented below are based on the maturity dates for individual investments held within the pool as allocated based on the Authority's percentage of funds invested in the pool.

	Investment Maturities (in years)		
Investment Type	**Fair Value**	**1 Year**	**1-5 Years**
Roanoke County Investment Pool	$ 9,160,439	$ 283,153	$ 8,877,286
Totals	$ 9,160,439	$ 283,153	$ 8,877,286

Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The Authority has measured fair value of the investments, as reported in Note 2, at the net asset value (NAV). As the Roanoke County Investment Pool is not SEC registered, regulatory oversight of the pool rests with the Roanoke County Board of Supervisors.

Redemption Restrictions

Currently, the County of Roanoke does not impose any redemption restrictions on the Authority.

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Note 3—Capital Assets:

Capital asset activity for the year ended June 30, 2017 was as follows:

	Balance July 1, 2016, as restated	Increases	Decreases	Balance June 30, 2017
Capital assets not being depreciated:				
Land	$ 1,632,263	$ 2,876,428	$ -	$ 4,508,691
Construction in Progress	867,860	1,324,033	987,102	1,204,791
Total capital assets not being depreciated	$ 2,500,123	$ 4,200,461	$ 987,102	$ 5,713,482
Capital assets being depreciated:				
Landfill and Rail Access	$ 36,770,591	$ -	$ -	$ 36,770,591
Transfer Station (Building and Structure)	6,394,725	4,212,517	-	10,607,242
Equipment	10,742,843	6,314,371	805,901	16,251,313
Total capital assets being depreciated	$ 53,908,159	$ 10,526,888	$ 805,901	$ 63,629,146
Accumulated depreciation:				
Landfill and Rail Access	$ (27,767,285)	$ (3,443,217)	$ -	$ (31,210,502)
Transfer Station (Building and Structure)	(4,483,247)	(273,740)	-	(4,756,987)
Equipment	(8,020,657)	(1,142,002)	(774,314)	(8,388,345)
Total accumulated depreciation	$ (40,271,189)	$ (4,858,959)	$ (774,314)	$ (44,355,834)
Total capital assets being depreciated, net	$ 13,636,970	$ 5,667,929	$ 31,587	$ 19,273,312
Total capital assets, net	$ 16,137,093	$ 9,868,390	$ 1,018,689	$ 24,986,794

Additions include accounts payable of $1,032,739 ($54,910 in prior year) at year end.
Additions include $3,275,835 of assets transferred from the City of Salem.
Assets with a net book value of $31,587 were traded in on the purchase of new assets during the year.
Capitalized interest totaled $201,652 during the fiscal year.
Increase in depreciation include an asset impairment of $2,248,715.

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Note 4—Long-Term Liabilities:

Changes in long-term liabilities for the year are as follows:

	Balance July 1, 2016	Additions	Reductions	Balance June 30, 2017	Due Within One Year
Revenue Bonds	$ -	$ 20,000,000	$ -	$ 20,000,000	$ 433,151
Locality Compensation Payments	-	1,644,381	(219,069)	1,425,312	215,433
Compensated Absences	212,593	111,575	(37,905)	286,263	100,821
Accrued Landfill Closure and Postclosure (Note 7)	15,259,819	1,098,110	(700,719)	15,657,210	310,441
Net OPEB Obligation	109,495	28,053	(21,544)	116,004	-
Net Pension Liability	1,044,396	702,522	(313,527)	1,433,391	-
	$ 16,626,303	$ 23,584,641	$ (1,292,764)	$ 38,918,180	$ 1,059,846

All liabilities are liquidated by operating funds.

Details of the Authority's outstanding long-term liabilities at June 30, 2017 are as follows:

Type	Interest Rates	Installment Amounts	Final Maturity Date	Amount of Original Issue	Balance Due	Amount Due Within One Year
Locality Compensation Payments:						
City of Salem 2011 Bond	2.14%	$189,981-$219,069 (a+)	10/1/2023	1,644,381	$ 1,425,312	$ 215,433
Revenue Bonds:						
Solid Waste Revenue Bond Series 2017A	2.50%	$42,925-$69,025 (a+)	7/15/2037	$ 1,100,000	$ 1,100,000	$ 42,925
Solid Waste Revenue Bond Series 2017B	2.65%(v)	$340,000-$565,000 (a+)	7/15/2037	8,900,000	8,900,000	-
Solid Waste Revenue Bond Series 2016	2.50%	$390,226-$627,504 (a+)	11/1/2036	10,000,000	10,000,000	390,226
Total Revenue Bonds					$ 20,000,000	$ 433,151
Other Long-Term Obligations:						
Compensated absences					$ 286,263	$ 100,821
Accrued landfill closure liability					15,657,210	310,441
Net pension liability-City of Roanoke					108,448	-
Net pension liability-County of Roanoke					1,324,943	-
Net OPEB obligation					116,004	-
Total Other Long-Term Obligations					$ 17,492,868	$ 411,262
Total Long-Term Obligations Payable					$ 38,918,180	$ 1,059,846

*Proceeds, payments, and resulting balances of this bond has been prorated between the Water and Water Pollution Control Fund based on usage.
(a+)-annual principal installments shown, does not include semi-annual interest installments
(sa)-semi-annual installments, includes interest as applicable
(sa+)-semi-annual principal installments shown, does not include semi-annual interest installments
(v) - Interest rate to be adjusted on July 15, 2027 to each five year Treasury rate plus 0.25%

Note 4—Long-Term Liabilities: (Continued)

Annual requirements to amortize long-term obligations and the related interest are as follows:

Year Ending June 30	Revenue Bonds		Locality Compensation Payments	
	Principal	Interest	Principal	Interest
2018	$ 433,151	$ 424,078	$ 215,433	$ 28,197
2019	784,117	492,465	211,797	23,625
2020	805,359	472,079	208,161	19,132
2021	826,888	451,143	204,525	14,716
2022	848,708	429,651	199,980	10,388
2023-2027	4,586,582	1,805,783	385,416	8,190
2028-2032	5,220,335	1,177,553	-	-
2033-2037	5,929,860	470,849	-	-
2038	565,000	7,486	-	-
Total	$ 20,000,000	$ 5,731,087	$ 1,425,312	$ 104,248

Note 5—Pension Plans:

Employees of the Roanoke Valley Resource Authority are eligible to participate in one of two pension plans: the Roanoke City Pension Plan or the Roanoke County Pension Plan. Upon creation of the Authority, employees that transferred from the City of Roanoke, Virginia were allowed to remain in the City's Pension Plan; however all other employees and new hires are required to participate in the Roanoke County Pension Plan as administered by the Virginia Retirement System (VRS). Both plans are cost sharing multiple employer plans.

The Roanoke County Pension Plan does not issue standalone financial statement; however the pension plan is included in the County of Roanoke, Virginia Comprehensive Annual Financial Report. That report, including required supplementary information, may be obtained from the Director of Finance, County of Roanoke, 5204 Bernard Drive, Suite 300E, Roanoke, Virginia 24018; telephone 540-772-2020 or visit the County's web site at www.roanokecountyva.gov.

The Roanoke City Pension Plan issues a publicly available comprehensive annual financial report that includes financial statements and required supplementary information. A copy of the most recent report may be obtained by writing to the City of Roanoke Retirement Office, Attention: Retirement Administrator, P.O. Box 1220, Roanoke, Virginia, 24006.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan

All full-time, salaried permanent employees of the Roanoke Valley Resource Authority, which do not participate in the City of Roanoke Pension Plan, are covered by the Roanoke County Pension Plan. This is a an agent multiple-employer plan administered by the Virginia Retirement System (the System) along with plans for other employer groups in the Commonwealth of Virginia. Members earn one month of service credit for each month they are employed and for which they and their employer pays contributions to VRS. Members are eligible to purchase prior service, based on specific criteria as defined in the Code of Virginia, as amended. Eligible prior service that may be purchased includes prior public service, active military service, certain periods of leave, and previously refunded service.

The System administers three different benefit structures for covered employees – Plan 1, Plan 2, and, Hybrid. Each of these benefit structures has different eligibility criteria. The specific information for each plan and the eligibility for covered groups within each plan are set out in the table below:

RETIREMENT PLAN PROVISIONS		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
About Plan 1 Plan 1 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.	**About Plan 2** Plan 2 is a defined benefit plan. The retirement benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. Employees are eligible for Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.	**About the Hybrid Retirement Plan** The Hybrid Retirement Plan combines the features of a defined benefit plan and a defined contribution plan. Most members hired on or after January 1, 2014 are in this plan, as well as Plan 1 and Plan 2 members who were eligible and opted into the plan during a special election window. (see "Eligible Members") • The defined benefit is based on a member's age, creditable service and average final compensation at retirement using a formula. • The benefit from the defined contribution component of the plan depends on the member and employer contributions made to the plan and the investment performance of those contributions.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

<table>
<tr><th colspan="3">RETIREMENT PLAN PROVISIONS (CONTINUED)</th></tr>
<tr><th>PLAN 1</th><th>PLAN 2</th><th>HYBRID RETIREMENT PLAN</th></tr>
<tr><td></td><td></td><td>• In addition to the monthly benefit payment payable from the defined benefit plan at retirement, a member may start receiving distributions from the balance in the defined contribution account, reflecting the contributions, investment gains or losses, and any required fees.</td></tr>
<tr><td>Eligible Members
Employees are in Plan 1 if their membership date is before July 1, 2010, and they were vested as of January 1, 2013.

Hybrid Opt-In Election
VRS non-hazardous duty covered Plan 1 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible Plan 1 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</td><td>Eligible Members
Employees are in Plan 2 if their membership date is on or after July 1, 2010, or their membership date is before July 1, 2010, and they were not vested as of January 1, 2013.

Hybrid Opt-In Election
Eligible Plan 2 members were allowed to make an irrevocable decision to opt into the Hybrid Retirement Plan during a special election window held January 1 through April 30, 2014.

The Hybrid Retirement Plan's effective date for eligible Plan 2 members who opted in was July 1, 2014.

If eligible deferred members returned to work during the election window, they were also eligible to opt into the Hybrid Retirement Plan.</td><td>Eligible Members
Employees are in the Hybrid Retirement Plan if their membership date is on or after January 1, 2014. This includes:
• Political subdivision employees*
• Members in Plan 1 or Plan 2 who elected to opt into the plan during the election window held January 1-April 30, 2014; the plan's effective date for opt-in members was July 1, 2014.

*Non-Eligible Members
Some employees are not eligible to participate in the Hybrid Retirement Plan. They include:
• Political subdivision employees who are covered by enhanced benefits for hazardous duty employees.</td></tr>
</table>

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Hybrid Opt-In Election (Cont.) Members who were eligible for an optional retirement plan (ORP) and had prior service under Plan 1 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 1 or ORP.	**Hybrid Opt-In Election (Cont.)** Members who were eligible for an optional retirement plan (ORP) and have prior service under Plan 2 were not eligible to elect the Hybrid Retirement Plan and remain as Plan 2 or ORP.	***Non-Eligible Members (Cont.)** Those employees eligible for an optional retirement plan (ORP) must elect the ORP plan or the Hybrid Retirement Plan. If these members have prior service under Plan 1 or Plan 2, they are not eligible to elect the Hybrid Retirement Plan and must select Plan 1 or Plan 2 (as applicable) or ORP.
Retirement Contributions Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Some political subdivisions elected to phase in the required 5% member contribution but all employees are paying the full 5% by July 1, 2016. Member contributions are tax-deferred until they are withdrawn as part of a retirement benefit or as a refund. The employer makes a separate actuarially determined contribution to VRS for all covered employees. VRS invests both member and employer contributions to provide funding for the future benefit payment.	**Retirement Contributions** Employees contribute 5% of their compensation each month to their member contribution account through a pre-tax salary reduction. Some political subdivisions elected to phase in the required 5% member contribution but all employees are paying the full 5% by July 1, 2016.	**Retirement Contributions** A member's retirement benefit is funded through mandatory and voluntary contributions made by the member and the employer to both the defined benefit and the defined contribution components of the plan. Mandatory contributions are based on a percentage of the employee's creditable compensation and are required from both the member and the employer. Additionally, members may choose to make voluntary contributions to the defined contribution component of the plan, and the employer is required to match those voluntary contributions according to specified percentages.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Creditable Service Creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit.	**Creditable Service** Same as Plan 1.	**Creditable Service** **Defined Benefit Component:** Under the defined benefit component of the plan, creditable service includes active service. Members earn creditable service for each month they are employed in a covered position. It also may include credit for prior service the member has purchased or additional creditable service the member was granted. A member's total creditable service is one of the factors used to determine their eligibility for retirement and to calculate their retirement benefit. It also may count toward eligibility for the health insurance credit in retirement, if the employer offers the health insurance credit. **Defined Contributions Component:** Under the defined contribution component, creditable service is used to determine vesting for the employer contribution portion of the plan.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

<table>
<tr><th colspan="3">RETIREMENT PLAN PROVISIONS (CONTINUED)</th></tr>
<tr><th>PLAN 1</th><th>PLAN 2</th><th>HYBRID RETIREMENT PLAN</th></tr>
<tr>
<td>Vesting
Vesting is the minimum length of service a member needs to qualify for a future retirement benefit. Members become vested when they have at least five years (60 months) of creditable service. Vesting means members are eligible to qualify for retirement if they meet the age and service requirements for their plan. Members also must be vested to receive a full refund of their member contribution account balance if they leave employment and request a refund.

Members are always 100% vested in the contributions that they make.</td>
<td>Vesting
Same as Plan 1.</td>
<td>Vesting
<u>Defined Benefit Component:</u>
Defined benefit vesting is the minimum length of service a member needs to qualify for a future retirement benefit.
Members are vested under the defined benefit component of the Hybrid Retirement Plan when they reach five years (60 months) of creditable service.
Plan 1 or Plan 2 members with at least five years (60 months) of creditable service who opted into the Hybrid Retirement Plan remain vested in the defined benefit component.

<u>Defined Contributions Component:</u>
Defined contribution vesting refers to the minimum length of service a member needs to be eligible to withdraw the employer contributions from the defined contribution component of the plan.

Members are always 100% vested in the contributions that they make.</td>
</tr>
</table>

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Vesting (Cont.)	**Vesting (Cont.)**	**Vesting (Cont.)** **<u>Defined Contributions Component:</u> (Cont.)** Upon retirement or leaving covered employment, a member is eligible to withdraw a percentage of employer contributions to the defined contribution component of the plan, based on service. • After two years, a member is 50% vested and may withdraw 50% of employer contributions. • After three years, a member is 75% vested and may withdraw 75% of employer contributions. • After four or more years, a member is 100% vested and may withdraw 100% of employer contributions. Distribution is not required by law until age 70½.
Calculating the Benefit The Basic Benefit is calculated based on a formula using the member's average final compensation, a retirement multiplier and total service credit at retirement. It is one of the benefit payout options available to a member at retirement.	**Calculating the Benefit** See definition under Plan 1.	**Calculating the Benefit** **<u>Defined Benefit Component:</u>** See definition under Plan 1

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Calculating the Benefit (Cont.) An early retirement reduction factor is applied to the Basic Benefit if the member retires with a reduced retirement benefit or selects a benefit payout option other than the Basic Benefit.	**Calculating the Benefit (Cont.)**	**Calculating the Benefit (Cont.)** **Defined Contribution Component:** The benefit is based on contributions made by the member and any matching contributions made by the employer, plus net investment earnings on those contributions.
Average Final Compensation A member's average final compensation is the average of the 36 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** A member's average final compensation is the average of their 60 consecutive months of highest compensation as a covered employee.	**Average Final Compensation** Same as Plan 2. It is used in the retirement formula for the defined benefit component of the plan.
Service Retirement Multiplier **VRS:** The retirement multiplier is a factor used in the formula to determine a final retirement benefit. The retirement multiplier for non-hazardous duty members is 1.70%. **Sheriffs and regional jail superintendents:** The retirement multiplier for sheriffs and regional jail superintendents is 1.85%. **Political subdivision hazardous duty employees:** The retirement multiplier of eligible political subdivision hazardous duty employees other than sheriffs and regional jail superintendents is 1.70% or 1.85% as elected by the employer.	**Service Retirement Multiplier** **VRS:** Same as Plan 1 for service earned, purchased or granted prior to January 1, 2013. For non-hazardous duty members the retirement multiplier is 1.65% for creditable service earned, purchased or granted on or after January 1, 2013. **Sheriffs and regional jail superintendents:** Same as Plan 1. **Political subdivision hazardous duty employees:** Same as Plan 1.	**Service Retirement Multiplier** **Defined Benefit Component:** **VRS:** The retirement multiplier for the defined benefit component is 1.00%. For members who opted into the Hybrid Retirement Plan from Plan 1 or Plan 2, the applicable multipliers for those plans will be used to calculate the retirement benefit for service credited in those plans. **Sheriffs and regional jail superintendents:** Not applicable. **Political subdivision hazardous duty employees:** Not applicable. **Defined Contribution Component:** Not applicable.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Normal Retirement Age **VRS:** Age 65. **Political subdivisions hazardous duty employees:** Age 60.	**Normal Retirement Age** **VRS:** Normal Social Security retirement age. **Political subdivisions hazardous duty employees:** Same as Plan 1.	**Normal Retirement Age** **Defined Benefit Component:** **VRS:** Same as Plan 2. **Political subdivisions hazardous duty employees:** Not applicable. **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Unreduced Retirement Eligibility **VRS:** Age 65 with at least five years (60 months) of creditable service or at age 50 with at least 30 years of creditable service. **Political subdivisions hazardous duty employees:** Age 60 with at least five years of creditable service or age 50 with at least 25 years of creditable service.	**Earliest Unreduced Retirement Eligibility** **VRS:** Normal Social Security retirement age with at least five years (60 months) of creditable service or when their age and service equal 90. **Political subdivisions hazardous duty employees:** Same as Plan 1.	**Earliest Unreduced Retirement Eligibility** **Defined Benefit Component:** **VRS:** Normal Social Security retirement age and have at least five years (60 months) of creditable service or when their age and service equal 90. **Political subdivisions hazardous duty employees:** Not applicable. **Defined Contribution Component:** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Earliest Reduced Retirement Eligibility **VRS:** Age 55 with at least five years (60 months) of creditable service or age 50 with at least 10 years of creditable service.	**Earliest Reduced Retirement Eligibility** **VRS:** Age 60 with at least five years (60 months) of creditable service.	**Earliest Reduced Retirement Eligibility** **Defined Benefit Component:** **VRS:** Members may retire with a reduced benefit as early as age 60 with at least five years (60 months) of creditable service.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Earliest Reduced Retirement Eligibility (Cont.) **Political subdivisions hazardous duty employees:** 50 with at least five years of creditable service.	**Earliest Reduced Retirement Eligibility (Cont.)** **Political subdivisions hazardous duty employees:** Same as Plan 1.	**Earliest Reduced Retirement Eligibility (Cont.)** **Political subdivisions hazardous duty employees:** Not applicable. **<u>Defined Contribution Component:</u>** Members are eligible to receive distributions upon leaving employment, subject to restrictions.
Cost-of-Living Adjustment (COLA) in Retirement The Cost-of-Living Adjustment (COLA) matches the first 3% increase in the Consumer Price Index for all Urban Consumers (CPI-U) and half of any additional increase (up to 4%) up to a maximum COLA of 5%. **<u>Eligibility:</u>** For members who retire with an unreduced benefit or with a reduced benefit with at least 20 years of creditable service, the COLA will go into effect on July 1 after one full calendar year from the retirement date. For members who retire with a reduced benefit and who have less than 20 years of creditable service, the COLA will go into effect on July 1 after one calendar year following the unreduced retirement eligibility date.	**Cost-of-Living Adjustment (COLA) in Retirement** The Cost-of-Living Adjustment (COLA) matches the first 2% increase in the CPI-U and half of any additional increase (up to 2%), for a maximum COLA of 3%. **<u>Eligibility:</u>** Same as Plan 1.	**Cost-of-Living Adjustment (COLA) in Retirement** **<u>Defined Benefit Component:</u>** Same as Plan 2. **<u>Defined Contribution Component:</u>** Not applicable. **<u>Eligibility:</u>** Same as Plan 1 and Plan 2.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

RETIREMENT PLAN PROVISIONS (CONTINUED)		
PLAN 1	**PLAN 2**	**HYBRID RETIREMENT PLAN**
Cost-of-Living Adjustment (COLA) in Retirement (Cont.) **<u>Exceptions to COLA Effective Dates:</u>** The COLA is effective July 1 following one full calendar year (January 1 to December 31) under any of the following circumstances: • The member is within five years of qualifying for an unreduced retirement benefit as of January 1, 2013. • The member retires on disability. • The member retires directly from short-term or long-term disability under the Virginia Sickness and Disability Program (VSDP). • The member is involuntarily separated from employment for causes other than job performance or misconduct and is eligible to retire under the Workforce Transition Act or the Transitional Benefits Program. • The member dies in service and the member's survivor or beneficiary is eligible for a monthly death-in-service benefit. The COLA will go into effect on July 1 following one full calendar year (January 1 to December 31) from the date the monthly benefit begins.	**Cost-of-Living Adjustment (COLA) in Retirement (Cont.)** **<u>Exceptions to COLA Effective Dates:</u>** Same as Plan 1.	**Cost-of-Living Adjustment (COLA) in Retirement (Cont.)** **<u>Exceptions to COLA Effective Dates:</u>** Same as Plan 1 and Plan 2.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

<table>
<tr><th colspan="3">RETIREMENT PLAN PROVISIONS (CONTINUED)</th></tr>
<tr><th>PLAN 1</th><th>PLAN 2</th><th>HYBRID RETIREMENT PLAN</th></tr>
<tr>
<td>Disability Coverage
Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.7% on all service, regardless of when it was earned, purchased or granted.

VSDP members are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.</td>
<td>Disability Coverage
Members who are eligible to be considered for disability retirement and retire on disability, the retirement multiplier is 1.65% on all service, regardless of when it was earned, purchased or granted.

VSDP members are subject to a one-year waiting period before becoming eligible for non-work related disability benefits.</td>
<td>Disability Coverage
Employees of political subdivisions (including Plan 1 and Plan 2 opt-ins) participate in the Virginia Local Disability Program (VLDP) unless their local governing body provides an employer-paid comparable program for its members.

Hybrid members (including Plan 1 and Plan 2 opt-ins) covered under VLDP are subject to a one-year waiting period before becoming eligible for non-work-related disability benefits.</td>
</tr>
<tr>
<td>Purchase of Prior Service
Members may be eligible to purchase service from previous public employment, active duty military service, an eligible period of leave or VRS refunded service as creditable service in their plan. Prior creditable service counts toward vesting, eligibility for retirement and the health insurance credit. Only active members are eligible to purchase prior service. When buying service, members must purchase their most recent period of service first. Members also may be eligible to purchase periods of leave without pay.</td>
<td>Purchase of Prior Service
Same as Plan 1.</td>
<td>Purchase of Prior Service
<u>Defined Benefit Component:</u>
Same as Plan 1, with the following exceptions:
• Hybrid Retirement Plan members are ineligible for ported service.
• The cost for purchasing refunded service is the highest of 4% of creditable compensation or average final compensation.
• Plan members have one year from their date of hire or return from leave to purchase all but refunded prior service at approximate normal cost. After that one-year period, the rate for most categories of service will change to actuarial cost.

<u>Defined Contribution Component:</u>
Not applicable.</td>
</tr>
</table>

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke County Plan (Continued)

Information about the VRS Political Subdivision Retirement Plan is also available in the separately issued VRS 2016 Comprehensive Annual Financial Report (CAFR). A copy of the 2016 VRS CAFR may be downloaded from the VRS website at http://www.varetire.org/Pdf/Publications/2016-annual-report.pdf, or by writing to the System's Chief Financial Officer at P.O. Box 2500, Richmond, VA 23218-2500.

Plan Contributions – Roanoke County Plan

The contribution requirement for active employees is governed by §51.1-145 of the Code of Virginia, as amended, but may be impacted as a result of funding options provided to political subdivisions by the Virginia General Assembly. Employees are required to contribute 5.00% of their compensation toward their retirement. Prior to July 1, 2012, all or part of the 5.00% member contribution may have been assumed by the employer. Beginning July 1, 2012 new employees were required to pay the 5% member contribution. In addition, for existing employees, employers were required to begin making the employee pay the 5.00% member contribution. This could be phased in over a period of up to 5 years and the employer is required to provide a salary increase equal to the amount of the increase in the employee-paid member contribution.

The Roanoke Valley Resource Authority's contractually required contribution rate for the year ended June 30, 2017 was 12.42% of covered employee compensation. This rate was based on an actuarially determined rate from an actuarial valuation as of June 30, 2015.

This rate, when combined with employee contributions, was expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Roanoke Valley Resource Authority were $181,460 and $142,146 for the years ended June 30, 2017 and June 30, 2016, respectively.

Net Pension Liability – Roanoke County Plan

At June 30, 2017, the Authority reported a liability of $1,324,942 for its proportionate share of the net pension liability. The Roanoke Valley Resource Authority's net pension liability was measured as of June 30, 2016 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation performed as of June 30, 2015, using updated actuarial assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2016. The Authority's proportionate share of same was calculated using the average creditable compensation for the 2015 and 2016 fiscal years as a basis for allocation. At June 30, 2015 and 2016, the Authority's proportion was 2.7704% and 2.8980%, respectively.

Note 5—Pension Plans: (Continued)

Actuarial Assumptions - Roanoke County Plan

The total pension liability for employees in the Roanoke Valley Resource Authority's Retirement Plan was based on an actuarial valuation as of June 30, 2015, using the Entry Age Normal actuarial cost method and the following assumptions, applied to all periods included in the measurement and rolled forward to the measurement date of June 30, 2016.

Inflation	2.5%
Salary increases, including inflation	3.5% – 5.35%
Investment rate of return	7.0%, net of pension plan investment expense, including inflation*

* Administrative expenses as a percent of the fair value of assets for the last experience study were found to be approximately 0.06% of the fair value of assets for all of the VRS plans. This would provide an assumed investment return rate for GASB purposes of slightly more than the assumed 7.0%. However, since the difference was minimal, and a more conservative 7.0% investment return assumption provided a projected plan net position that exceeded the projected benefit payments, the long-term expected rate of return on investments was assumed to be 7.0% to simplify preparation of pension liabilities.

Mortality rates: 14% of deaths are assumed to be service related

Largest 10
- Pre-Retirement:
  - RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females set back 2 years
- Post-Retirement:
  - RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with males set forward 1 year
- Post-Disablement:
  - RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement

All Others (Non 10 Largest)
- Pre-Retirement:
  - RP-2000 Employee Mortality Table Projected with Scale AA to 2020 with males set forward 4 years and females set back 2 years
- Post-Retirement:
  - RP-2000 Combined Mortality Table Projected with Scale AA to 2020 with males set forward 1 year
- Post-Disablement:
  - RP-2000 Disability Life Mortality Table Projected to 2020 with males set back 3 years and no provision for future mortality improvement

Note 5—Pension Plans: (Continued)

Actuarial Assumptions - Roanoke County Plan (Continued)

The actuarial assumptions used in the June 30, 2015 valuation were based on the results of an actuarial experience study for the period from July 1, 2008 through June 30, 2012. Changes to the actuarial assumptions as a result of the experience study are as follows:

Largest 10 – Non-LEOS:
- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

All Others (Non 10 Largest) – Non-LEOS:
- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

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Note 5—Pension Plans: (Continued)

Actuarial Assumptions - Roanoke County Plan (Continued)

Long-Term Expected Rate of Return

The long-term expected rate of return on pension System investments was determined using a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected returns, net of pension System 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. The target asset allocation and best estimate of arithmetic real rates of return for each major asset class are summarized in the following table:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
U.S. Equity	19.50%	6.46%	1.26%
Developed Non U.S. Equity	16.50%	6.28%	1.04%
Emerging Market Equity	6.00%	10.00%	0.60%
Fixed Income	15.00%	0.09%	0.01%
Emerging Debt	3.00%	3.51%	0.11%
Rate Sensitive Credit	4.50%	3.51%	0.16%
Non Rate Sensitive Credit	4.50%	5.00%	0.23%
Convertibles	3.00%	4.81%	0.14%
Public Real Estate	2.25%	6.12%	0.14%
Private Real Estate	12.75%	7.10%	0.91%
Private Equity	12.00%	10.41%	1.25%
Cash	1.00%	-1.50%	-0.02%
Total	100.00%		5.83%
		Inflation	2.50%
		*Expected arithmetic nominal return	8.33%

* Using stochastic projection results provides an expected range of real rates of return over various time horizons. Looking at one year results produces an expected real return of 8.33% but also has a high standard deviation, which means there is high volatility. Over larger time horizons the volatility declines significantly and provides a median return of 7.44%, including expected inflation of 2.50%.

Note 5—Pension Plans: (Continued)

Actuarial Assumptions - Roanoke County Plan (Continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.00%. The projection of cash flows used to determine the discount rate assumed that System member contributions will be made per the VRS Statutes and the employer contributions will be made in accordance with the VRS funding policy at rates equal to the difference between actuarially determined contribution rates adopted by the VRS Board of Trustees and the member rate. Through the fiscal year ending June 30, 2018, the rate contributed by the employer for the Roanoke Valley Resource Authority Retirement Plan will be subject to the portion of the VRS Board-certified rates that are funded by the Virginia General Assembly. From July 1, 2018 on, participating employers are assumed to contribute 100% of the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore the long-term expected rate of return was applied to all periods of projected benefit payments to determine the total pension liability.

Plan Description – Roanoke City Plan

Former City employees of the Authority participate in the City of Roanoke, Virginia Pension Plan. The Pension Plan is a cost-sharing multiple-employer defined benefit plan established by City Council and is included in the City's basic financial statements as a Pension Trust Fund. The Pension Plan was established by City Ordinance No. 8559 dated May 27, 1946, effective July 1, 1946. Provisions of the pension plan are subject to amendment by City Council. The City is the major contributor of employer contributions to the Pension Plan. City Council appoints members of the Pension Plan Board of Trustees to administer the Pension Plan. The Pension Plan is not subject to the provisions of the Employee Retirement Income Security Act (ERISA) of 1974.

Effective July 1, 1984, the Pension Plan changed its name from the Employees' Retirement System of the City of Roanoke, Virginia (ERS) to City of Roanoke Pension Plan. This change provided for an Employees' Supplemental Retirement System (ESRS) which modified certain benefits as defined by the ERS. All employees covered under the provisions of the ERS at June 30, 1984, could elect to remain with the ERS or be covered under the provisions of the ESRS. Coverage under the ESRS was mandatory for all employees hired or rehired on or after July 1, 1984. On November 28, 1994, June 1, 1998, November 2, 1998, and June 5, 2000, City Council authorized the Pension Plan to offer members of the ERS an opportunity to transfer to the ESRS. The option was available from February 1, 1995 to May 16, 1995, July 1, 1998 through August 31, 1998, December 1, 1998 through December 31, 1998, and July 1, 2000 through July 31, 2000. Both the ERS and the ESRS share a common trust fund from which all benefits are paid without distinction as to the source of funds and are administered by the Board of Trustees. The Pension Plan provides retirement benefits as well as death and disability benefits.

Employees who are members of the ERS with 30 years of service or age 60 (normal retirement age) are entitled to an annual benefit equal to 1/70 (1.429%) of their average final salary compensation (highest consecutive 12 months), excluding overtime, for each year of service. Employees may retire with 20 years of service and receive a reduced retirement benefit. For employees who are married at their retirement date, a joint and survivor annuity is payable monthly. There is no mandatory retirement age.

Note 5—Pension Plans: (Continued)

Plan Description – Roanoke City Plan (Continued)

Employees who are members of the ESRS with 5 years or more of credited service and age 65 or over, general employees who have attained age 50 with age plus service equal to 80 and police officers and firefighters who have attained age 45 with age plus service equal to 70, are entitled to an annual retirement benefit, payable monthly for life in an amount equal to 2.1 percent of their final average compensation for each year of credited service up to a maximum of 63 percent. Final average compensation is the employee's average salary, excluding overtime, over the 36 consecutive months of credited service rendering the highest average. Employees with 5 years of credited service may retire at age 55 and receive a reduced retirement benefit. Employees may elect to receive their retirement benefits in the form of a single life annuity or a joint and survivor annuity payable monthly from retirement. If employees under age 65 terminate before rendering five years of service they forfeit the right to receive any Pension Plan benefits. There is no mandatory retirement age.

Employees hired on or after July 1, 2014 participate in a new ESRS tier of benefits. These employees who have attained age 55 with age plus service equal to 85 and police officers and firefighters who have attained age 50 with age plus service equal to 75, are entitled to an annual retirement benefit, payable monthly for life in an amount equal to 2.0 percent of their final average compensation for each year of credited service up to a maximum of 63 percent. Final average compensation is the employee's average salary, excluding overtime, over the 60 consecutive months of credited service rendering the highest average. Employees with 15 years of credited service may retire at age 55 and receive a reduced retirement benefit. Employees may elect to receive their retirement benefits in the form of a single life annuity or a joint and survivor annuity payable monthly from retirement. If employees under age 65 terminate before rendering five years of service they forfeit the right to receive any Pension Plan benefits. There is no mandatory retirement age. The Hybrid Plan includes the same new eligibility provisions and 1.0 percent benefits multiplier and includes a defined contribution component that is funded with a 5.0 percent employee contribution. Employees direct the investment of their defined contribution fund and the Board does not have investment responsibility nor do they have custody of the assets in the plan.

Effective July 1, 2000, an additional monthly supplement equal to the greater of (a) $159; or (b) 75% of the amount the City contributes toward the cost of a single active employee's health insurance shall be paid for eligible retirees until the month in which the retiree attains age 65. Any member of the City of Roanoke Pension Plan who was an employee of one of the participating employers of the Plan (not including employees of the City of Roanoke School Board) and who retired after earning 20 or more years of creditable service but prior to attaining the age of 65 is eligible for this supplement. This supplement is not available to retirees receiving the early retiree incentive plan supplement. This supplement was not available for those employees hired after June 30, 2013.

Note 5—Pension Plans: (Continued)

Plan Contributions – Roanoke City Plan

Employees hired after June 30, 2014 are required to contribute 5.00% of annual compensation. All other employees were not required to contribute 5.00% until July 1, 2015. Employer and employee contributions to the Pension Plan are based on a percentage of the annual compensation of the active members. The Authority's contribution rate (exclusive of the 5.00% employee contribution rate) for the fiscal year ended June 30, 2017 was 15.64% of annual covered payroll, actuarially determined as an amount that, when combined with employee contributions, is expected to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. Contributions to the pension plan from the Roanoke Valley Resource Authority were $6,821 and $7,416 for the years ended June 30, 2017 and June 30, 2016, respectively.

Net Pension Liability – Roanoke City Plan

At June 30, 2017, the Authority reported a liability of $108,449 for its proportionate share of the net pension liability. The net pension liability was measured as of June 30, 2016 and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. The Authority's proportion of the net pension liability was based on a projection of the Authority's long-term share of contributions to the pension plan relative to projected contributions of all participates, as actuarially determined. At June 30, 2016, the Authority's proportion was 0.0639%, which was an increase of 1.10% from its proportion measured as of June 30, 2015.

Actuarial Assumptions - Roanoke City Plan

The total pension liability in the June 30, 2016 actuarial valuation was determined using the following assumptions, applied to all periods included in the measurement:

Inflation	2.75 percent
Salary increases	2.75 percent, plus 0.5% for national productivity plus merit (age-based)
Investment rate of return	7.75 percent, net of pension plan investment expense, Including inflation

Mortality rates were based on the RP-2000 Combined Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on Scale AA.

Actuarial assumptions are based on the last experience study performed as of June 30, 2013. The Plan did not perform a 2016 actuarial experience study. City Code requires that the Plan have an experience study performed every 5 years. The experience study covers a 5 year period. The Plan has an actuarial valuation performed annually.

Note 5—Pension Plans: (Continued)

Actuarial Assumptions - Roanoke City Plan (Continued)

Discount rate – The discount rate used to measure the total pension liability was 7.75 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that contributions from entities will be made at contractually required rates, actuarially determined. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Investment Rate of Return **-** The long-term expected rate of return on pension plan investments was determined using projected long-term rates of returns developed for each asset class. The expected long-term rate of return for each asset class as weighted by the Investment Policy target asset allocation was used, to derive the overall expected rate of return for the portfolio. The following table reflected the long-term expected rate of return based upon the defined target allocation for each asset class as defined in the Statement of Investment Policy:

Asset Class (Strategy)	Target Allocation	Arithmetic Long-Term Expected Rate of Return	Weighted Average Long-Term Expected Rate of Return
Equity			
US Equity	48.50%	10.00%	4.85%
International Equity	22.00%	11.00%	2.42%
Real Estate	6.00%	7.00%	0.42%
Fixed Income			
US Fixed Income	23.50%	5.00%	1.18%
Total	100.00%		8.87%

Note 5—Pension Plans: (Continued)

Sensitivity of the Net Pension Liability (Asset) to Changes in the Discount Rate

The following presents the net pension liability of the Roanoke Valley Resource Authority using the discount rate of 7.00% for the Roanoke County Pension Plan and 7.75% for the Roanoke City Pension Plan, as well as what the Roanoke Valley Resource Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (6.00% and 6.75%, respectively) or one percentage point higher (8.00% and 8.75%, respectively) than the current rates:

		Rate	
	(6.00%)	**(7.00%)**	**(8.00%)**
Roanoke County Pension Plan Net Pension Liability (Asset)	2,215,099	1,324,942	584,572
	(6.75%)	**(7.75%)**	**(8.75%)**
Roanoke City Pension Plan Net Pension Liability (Asset)	146,514	108,449	76,314

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (City and County Plans)

For the year ended June 30, 2017, the Roanoke Valley Resource Authority recognized pension expense of $160,885. At June 30, 2017, the Roanoke Valley Resource Authority reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	County Plan		City Plan	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 3,535	$ 45,595	$ -	$ 9,344
Change in proportion and differences between contributions and proportionate share of same	35,108	-	-	43,853
Change in assumptions	-	-	401	-
Net difference between projected and actual earnings on pension plan investments	144,076	-	17,455	-
Employer contributions subsequent to the measurement date	181,460	-	6,821	-
Total	$ 364,179	$ 45,595	$ 24,677	$ 53,197

Note 5—Pension Plans: (Continued)

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions (City and County Plans) (Continued)

$188,281 reported as deferred outflows of resources related to pensions resulting from the Roanoke Valley Resource Authority's contributions subsequent to the measurement date will be recognized as a reduction of the Net Pension Liability in the year ended June 30, 2018. Other amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense as follows:

Year ended June 30	County Plan	County Plan
2018	$ (10,177)	$ (15,367)
2019	(9,481)	(15,367)
2020	90,889	(9,251)
2021	65,893	4,644
Thereafter	-	-
Total	$ 137,124	$ (35,341)

Note 6—Other Postemployment Benefits:

A. Plan Description

The Authority administers a single-employer healthcare plan ("the Plan"). The Plan provides for participation by eligible retirees and their dependents in the health insurance programs available to employees. The Plan will provide retiring employees the option to continue health insurance offered by the Authority. Employees are eligible for the program after ten (10) years of service to the Authority. The benefits, employee contributions, and the employer contributions are governed by the Authority's Board and can be amended through Board action. The Plan does not issue publicly available financial reports.

B. Funding Policy

The contribution requirement of the plan members and the Authority are established and may be amended by the Authority. The Authority currently pays for post-retirement health care benefits on a pay-as-you-go basis. The Authority has 30 active employees who are eligible for the program. Retirees are responsible for the payment of 100% of the health care insurance rates shown below. The rates were as follows for the 2017 fiscal year:

	KC 200 Plan		KC 1000 Plan	
Participants	Monthly Premium	RVRA Contribution	Monthly Premium	RVRA Contribution
Employee	$ 542.42	$ 379.84	$ 454.04	$ 337.96
Employee / Spouse	1,182.36	613.14	989.06	506.46
Employee / One Minor	793.34	404.84	643.36	293.16
Family	1,395.92	740.32	1,176.30	628.67

Note 6—Other Postemployment Benefits: (Continued)

C. Annual OPEB Cost and Net OPEB Obligation

The Authority is required to compute the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with the parameters of GASB Statement 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal costs each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years.

The following table shows the components of the Authority's annual OPEB costs for the year, the amount actually contributed to the plan, and the changes in the net OPEB obligations:

Annual required contribution	$ 28,568
Interest on net OPEB obligation	4,661
Adjustment to annual required contribution	(5,176)
Annual OPEB cost (expense)	28,053
Contributions made	(21,544)
Increase in net OPEB obligation	6,509
Net OPEB obligation - beginning of year	109,495
Net OPEB obligation - ending of year	$ 116,004

The Authority's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for 2017 and the two preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost (ARC)	Percentage of Annual OPEB Cost Contributed	Net OPEB Obligation
6/30/2015	$ 29,599	79.72%	$ 107,429
6/30/2016	28,422	92.73%	116,519
6/30/2017	28,053	76.80%	116,004

D. Funded Status and Funding Progress

The funded status of the Plan as of June 30, 2017 (the year of the most recent actuarial valuation), was as follows:

Actuarial accrued liability (AAL)	$ 240,435
Actuarial value of plan assets	$ -
Unfunded actuarial accrued liability (UAAL)	$ (240,435)
Funded ratio (actuarial value of plan assets/AAL)	0.00%
Covered payroll (active plan members)	$ 1,258,150
UAAL as a percentage of covered payroll	-19.11%

Note 6—Other Postemployment Benefits: (Continued)

E. Actuarial Methods and Assumptions

Actuarial valuations of an ongoing plan involve estimates of the value of reported amounts and assumptions about the probability of occurrence of events far in the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan 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, presented as required supplementary information following the notes to the financial statements, will present multiyear trend information, as it becomes available, about whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Projections of benefits for financial reporting purposes are based on the substantive plan and include the types of benefits provided at the time of each valuation and the historical pattern of sharing of benefit costs between the 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. In the June 30, 2017 actuarial valuation, the Projected Unit Credit actuarial cost method was used. Under this method, future benefits are projected for life and their present value is determined. The present value is divided into equal parts, which are earned over the period from the date of hire to the full eligibility date. The actuarial assumptions for the Authority include:

	Assumptions
Amortization period	30 years
Investment rate of return	4% (includes inflation at 2.5%)
Health Care Cost Trend Rate	8% graded to 5.00% over 6 years
Payroll growth	3.00%

The UAAL is being amortized as a level dollar amount over the remaining amortization period, which at June 30, 2017, was 30 years. Amortizations are open ended in that they begin anew at each valuation date.

Note 7—Accrued Landfill Closure:

The Authority currently has responsibility for closure and postclosure care related to two landfill sites and two transfer stations. The landfills include the old landfill site formerly owned by the Roanoke Valley Regional Solid Waste Management Board closed in 1994 and the new Smith Gap landfill placed in service during 1994. The new landfill has a permitted life of approximately 50 years and remaining life of approximately 37 years. State and Federal laws and regulations require that the Authority place a final cover on its landfills when closed and perform certain maintenance and monitoring functions for a minimum of thirty years after closure.

Note 7—Accrued Landfill Closure: (Continued)

Closure costs will be paid as closure occurs and postclosure care costs will be paid only near or after the date that the landfills stop accepting waste. The Authority reports a portion of these closure and postclosure care costs as an operating expense in each period based on the landfill capacity of the existing cells used to date (96%) of the constructed cells at June 30, 2017 for the Smith Gap landfill and includes anticipated effects of changes in regulations and cost estimates. The total liability recorded at June 30, 2017, is $15,657,210 and includes $3,104,411 designated for the old landfill site; $12,306,969 designated for the new Smith Gap landfill; and $245,830 for transfer stations. Total closure and postclosure cost for all opened landfill cells is estimated at $16,304,945, of which 96% has been recognized as noted above based on usage. As such, $647,735 or 4.0% of the total estimated liability will be recognized in future periods as the usage percentage increases. For the year ending June 30, 2017, the Authority's liability for closure and postclosure care increased as a result of a change in estimated closure costs and usage.

The Authority will periodically update these closure and postclosure cost estimates and, as necessary, make revisions to reflect any significant changes in estimates due to inflation or deflation, technology, or changes in applicable laws and regulations.

Closure and postclosure care requirements are mandated under the United States Environmental Protection Agency (EPA) rule, "Solid Waste Disposal Facility Criteria", and are subject to periodic revisions by the EPA.

Federal and state regulations require owners of municipal solid waste landfills to demonstrate financial responsibility for closure care, postclosure care and corrective costs arising from the operations of such facilities. The Authority has demonstrated financial assurance requirements for closure and postclosure care through the submission of a Local Government Financial Test to the Virginia Department of Environmental Quality in accordance with Section 9VAC20-70 of the Virginia Administrative Code.

Note 8—Commitments, Contingencies, and Other Information:

Under terms of a transportation contract, a rail carrier will haul waste for a predetermined transportation charge to be adjusted on an annual basis. The contract will expire June 30, 2018, and the Authority has the option to renew the contract for an additional five year period; however, the Authority is expected to allow the contract to lapse and cease the use of rail service to transport waste. Expenditures under this contract were approximately $2,194,605 for the year ended June 30, 2017.

From time to time the Authority is involved in litigation in the normal course of operations. It is the opinion of the Authority's management that any adverse outcomes related to litigation would not have a material impact on the financial position or results of operations of the Authority as of and for the year ended June 30, 2017.

The Authority has entered into the following construction contracts as of June 30, 2017:

Contract Purpose	Contractor	Original Contract	Spent to Date	Remaining Contract
Landfill Expansion	T&K Construction	$ 3,773,824	$ 952,980	$ 2,820,844

Note 9—Arbitrage Rebate Compliance:

As of June 30, 2017 and for the year then ended, the Authority was not liable for any amounts due under current rules governing arbitrage earnings.

Note 10—Risk Management:

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees and others; and natural disasters. The Authority participates with other localities in the Virginia Municipal Group Self Insurance public entity risk pool and the Virginia Association of Counties Risk Pool for certain coverage noted below. Each member of these risk pools jointly and severally agrees to assume, pay and discharge any liability. The Authority pays the risk pools contributions and assessments based upon classifications and rates into designated cash reserve funds out of which expenses of the pools, claims and awards are to be paid. In the event of a loss, deficit, or depletion of all available funds and/or excess insurance, each pool may assess all members in the proportion to which the premium of each bears to the total premiums of all members in the year in which such deficit occurs. The Authority carries insurance coverage for all other risk of loss. Settled claims have not exceeded coverage in the current or prior three fiscal years.

Worker's Compensation – Worker's Compensation Insurance is provided through the Virginia Municipal Group Self Insurance Association. During 2016-17, the total premiums paid were $44,078. Benefits are those afforded through the State of Virginia as outlined in the Code of Virginia Section 65.2-100; premiums are based upon covered payroll, job rates and claims experience.

General Liability and Other - The Authority carries general liability, machinery, property and other insurance through policies administered by the Virginia Association of Counties Risk Pool. General liability and business automobile have a $1,000,000 combined single limit. Machinery coverage and property insurance are covered as per statement of values. Public officials' liability with a $1,000,000 limit is covered through a policy with the Commonwealth of Virginia. Total premiums paid for year ended June 30, 2017 were $31,066.

Healthcare - Healthcare insurance coverage is provided to Authority employees through Roanoke County's self-insured health insurance program. The Authority's employees pay a monthly amount based upon estimates from the claims processor that should cover administrative expenses, stop loss insurance premiums, and claims. An excess coverage insurance policy covers each individual's pooled claims in excess of $200,000. The Authority has no claims payable as of June 30, 2017.

Note 11—Related Party Transactions:

The following table summarizes approximate tipping fees received and accounts receivable from charter members as of and for the year ended June 30, 2017:

	Tipping Fees 2017	Accounts Receivable 2017
City of Roanoke	$ 2,032,300	$ 232,448
County of Roanoke	1,945,901	183,398
Town of Salem	555,795	78,789
Town of Vinton	164,361	15,905
	$ 4,698,357	$ 510,540

Note 12-Subsequent Event:

The Authority expects to reduce reliance on the rail carrier that currently transports waste to the Smith Gap Landfill. During the fiscal year, the Authority issued $20 million in debt that will be used toward engineering, capital and construction costs related to a facilities modification and improvement project. A portion of these funds will be used to construct road access to the Smyth Gap Landfill to replace the current rail access.

Note 13-Restatement of Previously Issued Financial Statements

During the current year, the Authority reviewed the estimated useful lives of landfill cells and determined that these assets were being depreciated over period(s) in excess of their estimated lives. Accordingly, the Authority has restated previously issued financial statements as noted below:

Net position, as previously reported	$	20,380,656
Restatement to reduce the carry value of assets		(2,792,935)
Net position, as restated	$	17,587,721

Note 14— Special Item - Transfer of Operations:

On July 1, 2016, the Authority entered into an agreement with the City of Salem, Virginia (Salem) to transfer the operations of Salem's Solid Waste Department to the Authority. As a result of the transfer, the Authority recognized the following assets, liabilities, and net position:

Transferred Assets (Net):		
Capital assets	$	3,275,835
Transferred Liabilities:		
Accrued interest payable - current	$	17,595
Bonds payable		1,644,381
Total transferred liabilities	$	1,661,976
Net Postion of Transferred Operations:		
Net investment in capital assets	$	1,631,454
Unrestricted		(17,595)
Total transferred net position	$	1,613,859

Note 15—Special Item – Asset Impairment Loss:

During the fiscal year, the Authority determined that they would no longer be able to use rail access (constructed by the Authority) to access the Smith Gap Landfill beyond June 30, 2023 due to cost increases proposed by their carrier (Norfolk and Southern). As a result, the Authority has recognized a special charge of $2,248,715 in the financial statements to reduce the carrying value of rail assets to their remaining service utility of $3,914,040.

Note 16-Upcoming Pronouncements:

The Authority will implement provisions of the following standards in subsequent periods.

Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pension,* improves accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). This Statement replaces the requirements of Statements No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions*, as amended, and No. 57, *OPEB Measurements by Agent Employers and Agent Multiple Employer Plans*, for OPEB. Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*, establishes new accounting and financial reporting requirements for OPEB plans. This Statement is effective for fiscal years beginning after June 15, 2017.

Statement No. 81, Irrevocable Split-Interest Agreements, improves accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement. The requirements of this Statement are effective for financial statements for periods beginning after December 15, 2016, and should be applied retroactively.

Statement No. 83, Certain Asset Retirement Obligations, addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this Statement. This Statement establishes criteria for determining the timing and pattern of recognition of a liability and a corresponding deferred outflow of resources for AROs. The requirements of this Statement are effective for reporting periods beginning after June 15, 2018.

Statement No. 84, Fiduciary Activities, establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities. This Statement describes four fiduciary funds that should be reported, if applicable: (1) pension (and other employee benefit) trust funds, (2) investment trust funds, (3) private-purpose trust funds, and (4) custodial funds. This Statement also provides for recognition of a liability to the beneficiaries in a fiduciary fund when an event has occurred that compels the government to disburse fiduciary resources. The requirements of this Statement are effective for reporting periods beginning after December 15, 2018.

Statement No. 86, Certain Debt Extinguishment Issues, improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources—resources other than the proceeds of refunding debt—are placed in an irrevocable trust for the sole purpose of extinguishing debt. This Statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to financial statements for debt that is defeased in substance. The requirements of this Statement are effective for reporting periods beginning after June 15, 2017.

Note 16-Upcoming Pronouncements: (Continued)

Statement No. 87, Leases, increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities. The requirements of this Statement are effective for reporting periods beginning after December 15, 2019.

Management is currently evaluating the impact these standards will have on the financial statements when adopted.

Required Supplementary Information

Roanoke Valley Resource Authority
Schedule of OPEB Funding Progress
For the Year Ended June 30, 2017

OPEB Healthcare Plan:

Actuarial Valuation Date	Actuarial Value of Assets	Actuarial Accrued Liability (AAL)	Unfunded Actuarial Accrued Liability	Funded Ratio	Covered Payroll	UAAL as a Percent of Covered Payroll
June 30, 2011	-	426,392	426,392	0.00%	1,215,681	35.07%
June 30, 2013	-	343,350	343,350	0.00%	1,276,475	26.90%
June 30, 2015	-	304,939	304,939	0.00%	1,326,850	22.98%
June 30, 2017	-	240,435	240,435	0.00%	1,258,150	19.11%

Roanoke Valley Resource Authority
Schedule of the Authority's Proportionate Share of the Net Pension Liability
For the Years Ended June 30, 2015 through June 30, 2017

Roanoke County, Virginia's Pension Plan (a cost-sharing multiple employer plan administered by the VRS)

Date	Proportion of the Net Pension Liability (NPL)	Proportionate Share of the NPL	Covered Employee Payroll	Proportionate Share of the NPL as a Percentage of Covered Payroll (3)/(4)	Pension Plan's Fiduciary Net Position as a Percentage of Total Pension Liability
(1)	(2)	(3)	(4)	(5)	(6)
2016	2.8980%	$ 1,324,942	$ 1,288,689	102.81%	80.43%
2015	2.7704%	970,264	1,262,032	76.88%	84.31%
2014	2.7738%	923,522	1,251,332	73.80%	84.61%

Roanoke City, Virginia's Pension Plan (a cost-sharing multiple employer plan administered by the City of Roanoke, Va)

Date	Proportion of the Net Pension Liability (NPL)	Proportionate Share of the NPL	Covered Employee Payroll	Proportionate Share of the NPL as a Percentage of Covered Payroll (3)/(4)	Pension Plan's Fiduciary Net Position as a Percentage of Total Pension Liability
(1)	(2)	(3)	(4)	(5)	(6)
2016	0.0639%	$ 108,449	$ 47,417	228.71%	68.70%
2015	0.0529%	74,132	36,001	205.92%	73.81%
2014	0.0978%	114,803	68,643	167.25%	77.23%

Schedule is intended to show information for 10 years. Since 2015 is the first year for this presentation, no other data is available. However, additional years will be included as they become available.

Roanoke Valley Resource Authority
Schedule of Employer Contributions
For the Years Ended June 30, 2008 through June 30, 2017

Roanoke County, Virginia's Pension Plan (a cost-sharing multiple employer plan administered by the VRS)

Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contributions Deficiency (Excess) (1) - (2) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (2)/(4) (5)
2017	$ 142,146	$ 142,146	$ -	$ 1,262,032	11.26%
2016	132,238	132,238	-	1,178,061	11.23%
2015	112,745	112,745	-	1,251,332	9.01%
2014	112,591	112,591	-	1,249,623	9.01%
2013	114,847	114,847	-	1,274,661	9.01%
2012	149,643	149,643	-	994,306	15.05%
2011	152,302	152,302	-	1,011,973	15.05%
2010	142,990	142,990	-	1,019,173	14.03%
2009	140,388	140,388	-	1,000,627	14.03%
2008	119,457	119,457	-	888,817	13.44%

Roanoke City, Virginia's Pension Plan (a cost-sharing multiple employer plan administered by the City of Roanoke, Va)

Actuarial Valuation Date	Contractually Required Contribution (1)	Contributions in Relation to Contractually Required Contribution (2)	Contributions Deficiency (Excess) (1) - (2) (3)	Employer's Covered Payroll (4)	Contributions as a % of Covered Payroll (2)/(4) (5)
2017	$ 7,416	$ 7,416	$ -	$ 47,417	15.64%
2016	8,003	8,003	-	36,001	22.23%
2015	12,608	12,608	-	68,643	18.37%
2014	11,793	11,756	-	75,359	15.60%
2013	18,645	18,693	-	103,620	18.04%
2012	17,822	17,072	-	106,834	15.98%
2011	17,352	17,072	-	110,713	15.42%
2010	17,018	17,072	-	110,713	15.42%
2009	16,179	17,072	-	108,531	15.73%
2008	14,901	14,901	-	98,617	15.11%

Changes of benefit terms – There have been no actuarially material changes to the System benefit provisions since the prior actuarial valuation. The 2014 valuation includes Hybrid Retirement Plan members for the first time. The hybrid plan applies to most new employees hired on or after January 1, 2014 and not covered by enhanced hazardous duty benefits. Because this is a fairly new benefit and the number of participants was relatively small, the impact on the liabilities as of the measurement date of June 30, 2015 are not material.

Changes of assumptions – For the Roanoke County Retirement Plan, the following changes in actuarial assumptions were made effective June 30, 2013 based on the most recent experience study of the System for the four-year period ending June 30, 2012:

Largest 10 – Non-LEOS:
- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

Largest 10 – LEOS:
- Update mortality table
- Decrease in male rates of disability

All Others (Non 10 Largest) – Non-LEOS:
- Update mortality table
- Decrease in rates of service retirement
- Decrease in rates of disability retirement
- Reduce rates of salary increase by 0.25% per year

All Others (Non 10 Largest) – LEOS:
- Update mortality table
- Adjustments to rates of service retirement for females
- Increase in rates of withdrawal
- Decrease in male and female rates of disability

STATISTICAL SECTION

Statistical Section

This part of the Roanoke Valley Resource Authority's comprehensive annual financial report presents detailed information as a context for understanding what the information in the financial statements, note disclosures, and required supplementary information says about the Authority's overall financial health.

Contents

Financial Trends

Page

These schedules contain trend information to help the reader understand how the Authority's financial performance and well-being have changed over time. 63-64

Revenue Capacity

These schedules contain information to help the reader assess the factors affecting the Authority's ability to generate its operating revenue. 65-70

Debt Capacity

These schedules contain information to help the reader assess the affordability of the Authority's current levels of outstanding debt and the Authority's ability to issue additional debt in the future. 71-72

Demographic and Economic Information

These schedules offer demographic and economic indicators to help the reader understand the environment within which the Authority's financial activities take place and to help make comparisons over time and with other authorities. 73-74

Operating Information

These schedules contain information about the Authority's operations and resources to help the reader understand how the Authority's financial information relates to the services the Authority provides and the activities it performs. 75-76

Table 1

Roanoke Valley Resource Authority
Net Position by Component
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

	Fiscal Year									
	2017	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Net investment in capital assets	$ 18,957,557	$ 16,137,093	$ 20,016,507	20,859,509	22,126,898	$ 23,579,296	$ 24,601,591	$ 17,072,072	$ 16,599,546	$ 13,808,939
Restricted	-	-	-	-	-	-	1,091,000	5,560,294	5,571,982	6,650,882
Unrestricted	(2,924,063)	1,450,628	756,182	2,159,326	2,087,537	3,028,633	965,985	5,120,125	6,625,374	11,900,616
Total primary government net position	$ 16,033,494	$ 17,587,721	$ 20,772,689	23,018,835	$ 24,214,435	$ 26,607,929	$ 26,658,576	$ 27,752,491	$ 28,796,902	$ 32,360,437

The Authority implemented provisions of GASB Statements 63 and 65 during the 2013 fiscal year, and applied all changes required thereof retroactively to statistical information, as necessary.

The Authority implemented provisions of GASB Statement 68 during the 2015 fiscal year and restated beginning net position accordingly. Information relative to GASB Statement 68 was not available for prior fiscal years and therefore provisions of this statement were not applied retroactively in this table.

Source: RVRA audited financial statements

Table 2

Roanoke Valley Resource Authority
Changes in Net Position
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

Fiscal Year	Operating Revenues	Operating Expenses	Operating Income (Loss)	Total Nonoperating Revenues/ (Expenses)	Income/(Loss) before Special Items	Special Items	Change in Net Position
2017	$ 12,011,736	$ 12,942,150	$ (930,414)	$ 11,043	$ (919,371)	$ (634,856)	$ (1,554,227)
2016	8,743,169	12,034,820	(3,291,651)	106,683	(3,184,968)	-	(3,184,968)
2015	8,434,037	9,455,022	(1,020,985)	69,368	(951,617)	-	(951,617)
2014	8,125,576	9,680,144	(1,554,568)	358,968	(1,195,600)	-	(1,195,600)
2013	7,890,905	10,327,241	(2,436,336)	42,842	(2,393,494)	-	(2,393,494)
2012	7,561,367	7,660,234	(98,867)	48,220	(50,647)	-	(50,647)
2011	7,677,198	8,514,962	(837,764)	(256,151)	(1,093,915)	-	(1,093,915)
2010	8,067,614	8,942,409	(874,795)	(169,616)	(1,044,411)	-	(1,044,411)
2009	7,872,891	11,364,306	(3,491,415)	(72,120)	(3,563,535)	-	(3,563,535)
2008	8,410,747	5,718,711	2,692,036	772,514	3,464,550	-	3,464,550

The Authority implemented provisions of GASB Statements 63 and 65 during the 2013 fiscal year, and applied all changes required thereof retroactively to statistical information, as necessary.

The Authority implemented provisions of GASB Statement 68 during the 2015 fiscal year and restated beginning net position accordingly. Information relative to GASB Statement 68 was not available for prior fiscal years and therefore provisions of this statement were not applied retroactively in this table.

Source: RVRA audited financial statements

Table 3

Roanoke Valley Resource Authority
Operating Revenue by Source
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

Fiscal Year	Municipal Revenue	Commercial Revenue	Private Revenue	Recycling Revenue	Residential Homeowner Revenue	Miscellaneous Revenue	Total Revenues
2017	$ 4,698,363	$ 4,987,383	$ 1,758,711	$ 50,922	$ 424,074	$ 92,283	$ 12,011,736
2016	4,035,795	2,760,585	1,372,023	38,775	420,724	115,267	8,743,169
2015	3,928,363	2,578,463	1,315,017	33,491	438,105	140,598	8,434,037
2014	3,962,910	2,221,222	1,499,014	39,970	390,324	12,136	8,125,576
2013	4,061,632	2,050,320	1,351,256	41,062	386,635	-	7,890,905
2012	3,885,701	1,876,495	1,204,215	47,524	397,427	150,005	7,561,367
2011	3,927,059	1,932,618	1,315,910	64,570	433,503	3,538	7,677,198
2010	4,080,939	2,108,682	1,376,333	64,307	436,117	1,236	8,067,614
2009	4,203,257	1,827,458	1,352,746	49,509	436,707	3,215	7,872,892
2008	4,253,118	1,994,092	1,689,071	19,376	433,874	21,216	8,410,747

Source: RVRA audited financial statements

Table 4

Roanoke Valley Resource Authority
Operating Expenses
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

	Fiscal Year									
	2017	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Salaries and Benefits	$ 2,467,151	$ 1,903,883	$ 1,859,968	$ 1,912,552	$ 1,869,179	$ 1,772,108	$ 1,794,891	$ 1,717,528	$ 1,647,211	$ 1,440,854
Landfill Closure and Postclosure	1,512,073	438,484	222,415	1,217,034	2,298,948	(164,307)	512,817	1,560,459	3,813,828	(924,452)
Other operating expenses	6,352,682	4,620,424	5,164,825	4,436,385	4,048,933	3,897,231	3,856,292	3,362,015	3,932,881	3,512,724
Depreciation	2,610,244	2,279,094	2,207,814	2,114,173	2,110,181	2,155,202	2,350,962	2,302,407	1,970,386	1,689,585
Total Operating Expenses	$ 12,942,150	$ 9,241,885	$ 9,455,022	$ 9,680,144	$ 10,327,241	$ 7,660,234	$ 8,514,962	$ 8,942,409	$ 11,364,306	$ 5,718,711

Source: RVRA audited financial statements

Table 5

Roanoke Valley Resource Authority
Nonoperating Revenues and Expenses
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

Fiscal Year	Interest Revenue	Net increase (Decrease) In Fair Value of Investments	Gain on Sale of Assets	Interest and Fiscal Charges	Total Non-Operating Income (Expenses)
2017	$ 158,602	$ -	$ -	$ (147,559)	$ 11,043
2016	106,683	-	-	-	106,683
2015	69,368	-	-	-	69,368
2014	46,812	-	312,156	-	358,968
2013	42,842	-	-	-	42,842
2012	48,220	-	-	-	48,220
2011	95,016	(1,532)	5,270	(354,905)	(256,151)
2010	233,266	(11,490)	68,980	(460,372)	(169,616)
2009	530,440	(15,003)	-	(587,557)	(72,120)
2008	1,256,134	44,604	174,103	(702,327)	772,514

Source: RVRA audited financial statements

Table 6

Roanoke Valley Resource Authority
Annual Tonnage Received
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

Fiscal Year	Municipal Tonnage	Commercial Tonnage	Private Tonnage	Residential Tonnage	Total Tonnage
2017	96,459	84,839	29,708	10,158	221,164
2016	84,167	46,854	23,553	9,329	163,903
2015	82,865	44,417	22,916	8,541	158,739
2014	85,773	39,022	26,758	9,020	160,573
2013	92,824	37,399	24,508	10,076	164,807
2012	87,373	34,518	21,142	9,473	152,506
2011	88,183	35,312	23,592	8,796	155,883
2010	91,473	38,637	24,687	9,119	163,916
2009	92,935	34,294	25,649	9,579	162,457
2008	98,386	34,824	31,158	9,114	173,482

Source: RVRA reports provided by staff

Table 7

Roanoke Valley Resource Authority
Principal Customers
(unaudited)
(accrual basis of accounting)

	FY 2017		FY 2008	
	Revenue Amount	Percentage of Total	Revenue Amount	Percentage of Total
City of Roanoke	$ 2,032,303	16.92%	$ 2,212,317	26.81%
County of Roanoke	1,945,903	21.57%	1,862,576	22.99%
Waste Management Inc	1,508,163	10.62%	N/A	-
First Piedmont Corporation	884,269	7.36%	N/A	-
County Waste	720,043	5.99%	N/A	
City of Salem	555,796	4.63%	N/A	-
Tidy Services	531,642	4.43%	N/A	-
Residential Disposal Program	424,074	3.53%	433,874	4.64%
Advanced Disposal	334,724	2.79%	N/A	-
Town of Vinton	164,361	1.37%	178,225	2.10%
Subtotal largest customers	9,101,278	75.77%	4,686,992	56.54%
Balance From other Customers	2,910,458	24.23%	3,723,755	43.46%
Grand Totals	$ 12,011,736	100.00%	$ 8,410,747	100.00%

Source: RVRA reports provided by staff

Table 8

Roanoke Valley Resource Authority
Disposal Fees Per Ton
Last Ten Fiscal Years
(unaudited)
(accrual basis of accounting)

Fiscal Year	Municipal Rate	Commercial Rate	Private Rate	Residential Rate
2017	$ 49.50	$ 59.50	$ 59.50	$ 49.50
2016	49.00	59.00	59.00	49.00
2015	48.00	58.00	58.00	48.00
2014	47.00	57.00	57.00	57.00
2013	45.00	55.00	55.00	45.00
2012	45.00	55.00	55.00	45.00
2011	45.00	55.00	55.00	45.00
2010	45.00	55.00	55.00	45.00
2009	45.00	55.00	55.00	45.00
2008	45.00	55.00	55.00	45.00

Source RVRA Budget Book

Table 9

Roanoke Valley Resource Authority
Ratios of Outstanding Debt by Type
Last Ten Fiscal Years
(Unaudited)

		Roanoke County		Roanoke City		Vinton		City of Salem*	
Fiscal Year	Revenue Bonds	Per Capita	As a Share of Personal Income	Per Capita	As a Share of Personal Income	Per Capita	As a Share Of Personal Income	Per Capita	As a Share Of Personal Income
2017	20,000,000	213	0.35%	201	0.49%	2,444	0.35%	783	0.35%
2016	-	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2015	-	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2014	-	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2013	-	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2012	-	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2011	-	-	0.00%	-	0.00%	-	0.00%	-	0.00%
2010	7,675,145	85	0.16%	84	0.21%	976	0.16%	-	0.00%
2009	9,952,124	111	0.24%	108	0.32%	1,279	0.24%	-	0.00%
2008	12,100,357	134	0.29%	131	0.39%	1,539	0.29%	-	0.00%

Source: Comprehensive Annual Financial Reports from Roanoke County, Roanoke City and Vinton
Population and Personal Income data from the Bureau of Economic Analysis
Audited financial statements Roanoke Valley Resource Authority

Note: The Authority did not have any revenue bonds outstanding as of June 30, 2011 through June 30, 2016.

* The City of Salem joined the RVRA in FY2017

Table 10

Roanoke Valley Resource Authority
Pledged Revenue Coverage
Last Ten Fiscal Years
(Unaudited)

Fiscal Year	Operating Revenues	Investment Income	Miscellaneous Income	Transfer from Reserves	Gross Revenues	Less: Operating Expenses (excluding depreciation)	Debt Service: Principal	Debt Service: Interest	Debt Service: Total Debt Service	Debt Service: Less: 100/110% Debt Service	Net Available Revenues
2017	$ 12,011,736	$ 158,602	$ -	$ -	$ 12,170,338	$ 10,331,906	$ 219,069	$ -	$ 219,069	$ 219,069	$ 1,619,363
2016*	8,743,169	106,683	-	-	8,849,852	6,962,791	-	-	-	-	1,887,061
2015*	8,434,037	69,368	-	-	8,503,405	7,247,208	-	-	-	-	1,256,197
2014*	8,125,576	46,812	-	-	8,172,388	7,565,971	-	-	-	-	606,417
2013*	7,890,905	42,842	-	-	7,933,747	8,217,060	-	-	-	-	(283,313)
2012*	7,411,362	48,220	150,005	-	7,609,587	5,505,032	-	-	-	-	2,104,555
2011	7,673,660	95,016	8,808	9,784,603	17,562,087	6,164,000	7,775,000	352,604	8,127,604	8,940,364	2,457,723
2010	8,067,614	233,266	68,980	1,982,603	10,352,463	6,640,002	2,355,000	409,146	2,764,146	3,040,561	671,900
2009	7,820,167	530,440	52,724	892,020	9,295,351	5,580,092	2,250,000	509,940	2,759,940	3,035,934	679,325
2008	8,389,531	1,256,134	195,319	926,499	10,767,483	4,943,288	2,155,000	600,504	2,755,504	3,031,054	2,793,141

Note: The revenue covenant was 110% of debt service prior to 2012 and 100% of debt service in 2017.
*The Authority did not have any debt outstanding from 2012 through 2016.

Source: RVRA financial and budget records.

Table 11

Roanoke Valley Resource Authority
Demographic Information
Last Ten Fiscal Years
(Unaudited)

	Roanoke County				Roanoke City			
Fiscal Year	Population	Personal Income *	Per Capita Income	Unemployment Rate	Population	Personal Income	Per Capita Income	Unemployment Rate
2008	90,420	4,750,916,000	41,019	2.8%	93,734	3,645,705,000	38,370	3.9%
2009	90,867	4,561,791,000	39,315	4.6%	94,482	3,636,678,000	37,929	7.7%
2010	91,011	4,672,291,000	39,315	6.3%	97,032	3,747,025,000	38,713	7.4%
2011	92,376	4,561,791,000	40,688	5.7%	97,061	3,576,942,000	36,948	6.9%
2012	92,687	4,672,000,000	42,288	5.6%	97,206	3,827,065,000	39,100	6.5%
2013	93,256	4,789,030,000	42,288	5.8%	98,641	3,799,698,000	38,453	6.4%
2014	92,703	4,984,547,000	42,288	5.2%	98,913	3,915,935,000	39,385	5.7%
2015	93,569	5,159,100,000	42,288	4.2%	99,320	3,915,935,000	39,385	5.6%
2016	93,775	5,435,865,000	45,577	3.5%	99,681	3,915,935,000	39,385	4.1%
2017	93,924	5,758,037,000	48,047	3.6%	99,644	4,090,520,000	40,947	4.5%

	Vinton				City of Salem*			
Fiscal Year	Population	Personal Income	Per Capita Income	Unemployment Rate	Population	Personal Income	Per Capita Income	Unemployment Rate
2008	7,905	4,750,916,000	41,019	2.8%	-	-	-	-
2009	7,876	4,561,791,000	39,315	4.6%	-	-	-	-
2010	7,814	4,672,291,000	39,315	6.3%	-	-	-	-
2011	8,098	4,561,791,000	39,315	5.7%	-	-	-	-
2012	8,130	4,672,000,000	39,866	5.7%	-	-	-	-
2013	8,092	4,789,030,000	40,688	5.9%	-	-	-	-
2014	8,151	4,984,547,000	42,288	5.5%	-	-	-	-
2015	8,151	5,159,100,000	43,418	4.5%	-	-	-	-
2016	8,151	5,435,865,000	43,418	3.6%	-	-	-	-
2017	8,185	5,758,037,000	48,047	3.7%	25,549	5,758,037,000	48,047	4.1%

Source: Comprehensive Annual Financial Reports from Roanoke County, Roanoke City and Vinton
Population and Personal Income data from the Bureau of Economic Analysis

* City of Salem joined RVRA in October 2017

Table 12

COUNTY OF ROANOKE, VIRGINIA
Principal Employers
(unaudited)
Fiscal Years 2017 and 2008

	2017			2008		
Employer	Rank	Ownership	Number of Employees	Rank	Ownership	Number of Employees
Roanoke County Schools	1	Local Govt.	2000+	1	Local Govt.	1,000+
Wells Fargo Operations Center (Wachovia division)	2	Private	1,500+	2	Private	1,000+
County of Roanoke	3	Local Govt.	500-999	4	Local Govt.	1,000+
Kroger	4	Private	500-999	5	Private	500-999
Friendship Manor	5	Private	500-999	6	Private	500-999
Richfield Recovery & Care Center	6	Private	500-999	-	-	-
Allstate Insurance Company	7	Private	500-999	3	Private	1,000+
Wal-mart	8	Private	250-499	-	-	-
ITT Exelis-Harris Corporation	9	Private	250-499	-	-	-
Integrity Windows & Doors	10	Private	250-499	-	-	-
Advance Auto	-	-	-	7	Private	500-999
Hanover Direct, Inc.	-	-	-	8	Private	250-499
Verizon Virginia, Inc.	-	-	-	9	Private	250-499
Bright Personnel and Business	-	-	-	10	Private	250-499

Source: Roanoke County Economic Development Department

Roanoke Valley Resource Authority
Number of Employees by Identifiable Activity
Last Ten Fiscal Years
(unaudited)

Table 13

	Fiscal Year									
	2017	**2016**	**2015**	**2014**	**2013**	**2012**	**2011**	**2010**	**2009**	**2008**
Administration										
General Management	3	3	3	3	3	3	3	3	3	2
Finance	1	1	1	1	1	1	1	1	1	1
Administrative Coordinator	1	1	1	1	1	1	1	2	2	2
Business Supervisor	1	1	1	1	1	1	2	-	-	-
Operating										
Supervisors	3	2	2	2	2	2	2	2	2	2
Scale Operators	3	1	1	1	1	1	1	2	2	2
Equipment Operators	24	18	18	16	17	17	16	14	14	15
Building and General Maintenance	1	1	1	1	1	1	1	1	1	1
Equipment Mechanic	1	1	1	1	1	1	1	1	1	1
Laborer	0	0	0	0	0	0	1	3	3	2
Total Employees	38	29	29	27	28	28	29	29	29	28

Source: RVRA Budget Book

Table 14

Roanoke Valley Resource Authority
Operating and Capital Indicators
Last Ten Fiscal Years
(Unaudited)

	2017	2016	2015	2014	2013	2012	2011	2010	2009	2008	2007
Waste Received in tons	221,164	163,903	158,739	160,573	164,807	152,506	155,883	163,917	162,457	173,482	184,858
Materials Recycled in tons (equals total above)											
Wood	10,304	11,344	8,463	11,407	18,720	11,837	10,551	11,294	11,899	15,031	13,743
Metal	371	262	182	187	170	228	314	416	408	469	613
Tires	418	299	259	315	238	256	252	405	780	807	743
Other (batteries, cardboard, glass, newspapers)	46	43	40	47	27	44	2	39	1,877	21	14,983
Landfilled	210,025	151,955	149,795	148,617	145,652	140,141	144,764	151,763	147,494	157,154	154,776
Percent Recycled	5.03%	7.30%	5.63%	7.45%	11.62%	8.11%	7.13%	7.41%	9.21%	9.41%	16.27%
Residential Waste Disposal											
Tonnage	10,158	9,329	8,541	9,020	10,076	9,472	8,796	9,119	9,579	9,114	8,550
Tires (Count)	1,715	1,971	1,505	1,397	1,451	1,893	1,667	1,801	1,521	1,571	619
Transactions	41,132	37,911	34,500	36,441	40,600	37,284	35,157	36,850	38,493	38,599	37,385
Disposal Fees	$ 424,074	$ 420,724	$ 438,101	$ 390,324	$ 386,633	$ 398,057	$ 432,871	436,144	$ 436,929	$ 429,668	$ 406,253
Disposal Fees											
Municipal Rate	$ 49.5	$ 49.5	$ 49.0	$ 47.0	$ 45.0	$ 45.0	$ 45.0	45.0	$ 45.0	$ 45.0	$ 45.0
Commercial Rate	$ 59.5	$ 59.5	$ 59.0	$ 57.0	$ 55.0	$ 55.0	$ 55.0	55.0	$ 55.0	$ 55.0	$ 55.0
Private Rate	$ 59.5	$ 59.5	$ 59.0	$ 57.0	$ 55.0	$ 55.0	$ 55.0	55.0	$ 55.0	$ 55.0	$ 55.0
Residential Rate	$ 49.5	$ 49.5	$ 49.0	$ 47.0	$ 45.0	$ 45.0	$ 45.0	45.0	$ 45.0	$ 45.0	$ 45.0
Wood Waste Rate	$ 35.0	$ 35.0	$ 35.0	$ 35.0	$ 35.0	$ 35.0	$ 35.0	35.0	$ 35.0	$ 35.0	$ 35.0
Railcar Waste Transported in tons											
Railcars	2,979	2,361	2,172	2,258	2,231	2,142	2,216	2,409	2,469	2,719	2,747
Tonnage	196,743	150,597	148,908	146,309	145,448	139,066	144,428	151,911	147,980	157,783	155,594
Average	66.04	63.79	68.56	64.80	65.19	64.92	65.18	63.06	59.94	58.03	56.64
Shipping Cost	$ 2,194,605	$ 1,734,373	$ 1,864,514	$ 1,935,012	$ 1,797,827	$ 1,857,047	$ 1,687,991	1,606,684	$ 2,000,222	$ 1,777,545	$ 1,793,728
Capital Indicators											
Number of Permitted Sites	4	3	3	3	3	3	3	3	3	3	3
Number of Open Permitted Sites	3	2	2	2	2	2	2	2	2	2	2
Number of Collection sites	3	2	2	2	2	2	2	2	2	2	2

Source: Roanoke Valley Resource Authority records

COMPLIANCE SECTION

Independent Auditors' Report on Internal Control over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with *Government Auditing Standards*

To the Members of the Board
Roanoke Valley Resource Authority
Roanoke, Virginia

We have audited, in accordance with the auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards,* issued by the Comptroller General of the United States; and the *Specifications for Audits of Authorities, Boards, and Commissions,* issued by the Auditor of Public Accounts of the Commonwealth of Virginia, the financial statements of the business-type activities of the Roanoke Valley Resource Authority, as of and for the year ended June 30, 2017, and the related notes to the financial statements, which collectively comprise the Roanoke Valley Resource Authority's basic financial statements and have issued our report thereon dated October 27, 2017.

Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the Roanoke Valley Resource Authority's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Roanoke Valley Resource Authority's internal control. Accordingly, we do not express an opinion on the effectiveness of the Roanoke Valley Resource Authority's internal control.

Our consideration of internal control was for the limited purpose described in the preceding paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. However, as described in the accompanying schedule of findings and responses, we identified certain deficiencies in internal control that we consider to be material weaknesses and significant deficiencies.

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 *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. We consider the deficiencies described (item 2017-002) in the accompanying schedule of findings and responses to be a material weakness.

Internal Control over Financial Reporting (continued)

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. We consider the deficiencies described in the accompanying schedule of findings and responses (item 2017-001) to be a significant deficiency

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Roanoke Valley Resource Authority's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Roanoke Valley Resource Authority's Response to Findings

The Roanoke Valley Resource Authority's response to the findings identified in our audit is described in the accompanying schedule of findings and questioned responses. The Roanoke Valley Resource Authority's response was not subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we express no opinion on it.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Robinson, Farmer, Cox Associates

Blacksburg, Virginia
October 27, 2017

Section I - Summary of Auditors' Results

Financial Statements

Type of auditors' report issued:	Unmodified
Internal control over financial reporting:	
Material weakness(es) identified?	Yes
Significant deficiency(ies) identified?	Yes
Noncompliance material to financial statements noted?	No

Section II - Financial Statement Findings

2017-001

Condition:	The Authority lacks proper segregation of duties over billing and collections.
Criteria:	A key concept of internal controls is the segregation of duties. No one employee should have access to both accounting records and related assets.
Cause:	The Authority's limited number of staff does not allow them to properly segregate duties.
Effect:	There is more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected by the entity's internal controls over financial reporting.
Management's Response:	Limited number of staff has precluded the Roanoke Valley Resource Authority from segregating key duties related to billings and collections. Currently, the Authority does not plan on hiring additional personnel to address the aforementioned condition as same is not considered cost-effective.

2017-002

Criteria:	Per Statement on Auditing Standards 115, an auditee should have controls in place to prepare financial statements in accordance with current reporting standards.
Condition:	In the current year, largely due to staff turnover and consistency, adjustments were missed related to capital assets.
Effect of Condition:	There is more than a remote likelihood that a material misstatement of the financial statements will not be prevented or detected and corrected by the entity's internal controls over financial reporting.
Recommendation:	Upon completion of the Authority's fixed asset depreciation schedule, we recommend that the Authority's accountants meet with management at the Authority and go over useful lives in the depreciation schedule and the possible impairment of capital assets.
Management's Response:	Staff agrees with the auditors' recommendation and in the future will meet with management to review capital asset activity prior to the beginning of audit fieldwork.