NEW ISSUE Rating: S&P: "AA+"
BOOK-ENTRY-ONLY Moody's: "Aa2"
(See "MISCELLANEOUS-Rating")

In the opinion of Bond Counsel, based on existing law and assuming compliance with certain tax covenants of the City, interest on the Bonds will be excluded from gross income for federal income tax purposes and is not an item of tax preference in calculating the alternative minimum tax. For an explanation of certain tax consequences under federal law which may result from the ownership of the Bonds, see the discussion under the heading "LEGAL MATTERS - Tax Matters" herein. Under existing law, the Bonds and the income therefrom will be exempt from all state, county and municipal taxation in the State of Tennessee, except Tennessee franchise and excise taxes. (See "LEGAL MATTERS - Tax Matters" herein).

$28,295,000
CITY OF OAK RIDGE, TENNESSEE
General Obligation Refunding Bonds, Series 2019

Dated: September 13, 2019 Due: June 1 (as indicated below)

The $28,295,000 General Obligation Refunding Bonds, Series 2019 (the "Bonds") shall be issued by the City of Oak Ridge, Tennessee (the "City") as book-entry-only Bonds in denominations of $5,000 and authorized integral multiples thereof. The Bonds will be registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC") except as otherwise described herein. DTC will act as securities depository of the Bonds. So long as Cede & Co. is the registered owner of the Bonds, as the nominee for DTC, principal and interest with respect to the Bonds shall be payable to Cede & Co., as nominee for DTC, which will, in turn, remit such principal and interest to the DTC participants for subsequent disbursements to the beneficial owners of the Bonds. Individual purchases of the Bonds will be made in book-entry-only form, in denominations of $5,000 or integral multiples thereof and will bear interest at the annual rates as shown below. Interest on the Bonds is payable semi-annually from the date thereof commencing on December 1, 2019 and thereafter on each June 1 and December 1 by check or draft mailed to the owners thereof as shown on the books and records of Regions Bank, Nashville, Tennessee, the registration and paying agent (the "Registration Agent"). In the event of discontinuation of the book-entry system, principal of and interest on the Bonds are payable at the designated corporate trust office of the Registration Agent.

The Bonds shall be payable from unlimited ad valorem taxes to be levied on all taxable property within the corporate limits of the City. For the prompt payment of principal and interest on the Bonds, the full faith and credit of the City are irrevocably pledged. The respective portions of the Bonds (based on an allocation of Bonds and Bond proceeds as determined by the Municipality) that refinance improvements to the electric, water and sewer systems of the Municipality shall be additionally payable from but not secured by the respective revenues of such systems.

Bonds maturing June 1, 2029 and thereafter are subject to optional redemption prior to maturity on or after June 1, 2028.

Due (June 1)	Amount	Interest Rate	Yield	CUSIPs**	Due (June 1)	Amount	Interest Rate	Yield		CUSIPs**
2020	$ 2,730,000	5.00 %	0.95 %	671783UW6	2029	$ 2,620,000	4.00 %	1.30 %	c	671783VF2
2021	2,750,000	5.00	0.95	671783UX4	2030	2,645,000	3.00	1.70	c	671783VG0
2022	815,000	5.00	0.95	671783UY2	2033	755,000	2.00	2.10		671783VK1
2023	700,000	5.00	0.95	671783UZ9	2034	1,650,000	2.00	2.15		671783VL9
2024	470,000	5.00	0.96	671783VA3	2035	1,660,000	2.125	2.20		671783VM7
2025	1,035,000	5.00	1.00	671783VB1	2036	1,680,000	2.125	2.25		671783VN5
2026	1,095,000	5.00	1.05	671783VC9	2037	770,000	2.25	2.30		671783VP0
2027	1,210,000	5.00	1.13	671783VD7	2038	765,000	2.25	2.35		671783VQ8
2028	2,550,000	5.00	1.20	671783VE5						

$ 2,395,000 2.00% Term Bond Due June 1, 2032 @ 2.00% 671783VJ4

c=Yield to call on June 1, 2028

This cover page contains certain information for quick reference only. It is not a summary of this issue. Investors must read the entire OFFICIAL STATEMENT to obtain information essential to make an informed investment decision.

The Bonds are offered when, as and if issued by the City, subject to the approval of the legality thereof by Bass, Berry & Sims PLC, Knoxville, Tennessee, bond counsel, whose opinion will be delivered with the Bonds. Certain legal matters will be passed upon from Kenneth R. Krushenski, Esq., attorney to the City. It is expected that the Bonds will be available for delivery through the facilities of DTC, New York, New York, on or about September 13, 2019.

Cumberland Securities Company, Inc.
Municipal Advisor

August 15, 2019

This Official Statement speaks only as of its date, and the information contained herein is subject to change.

This Official Statement may contain forecasts, projections, and estimates that are based on current expectations but are not intended as representations of fact or guarantees of results. If and when included in this Official Statement, the words "expects," "forecasts," "projects," "intends," "anticipates," "estimates," and analogous expressions are intended to identify forward-looking statements as defined in the Securities Act of 1933, as amended, and any such statements inherently are subject to a variety of risks and uncertainties, which could cause actual results to differ materially from those contemplated in such forward-looking statements. These forward-looking statements speak only as of the date of this Official Statement. The Issuer disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statement contained herein to reflect any change in the Issuer's expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based.

This Official Statement and the Appendices hereto contain brief descriptions of, among other matters, the Issuer, the Bonds, the Resolution, the Disclosure Certificate (as defined herein), and the security and sources of payment for the Bonds. Such descriptions and information do not purport to be comprehensive or definitive. The summaries of various constitutional provisions and statutes, the Resolution, the Disclosure Certificate, and other documents are intended as summaries only and are qualified in their entirety by reference to such documents and laws, and references herein to the Bonds are qualified in their entirety to the forms thereof included in the Resolution.

The Bonds have not been registered under the Securities Act of 1933, as amended, and the Resolution has not been qualified under the Trust Indenture Act of 1939, in reliance on exemptions contained in such Acts. This Official Statement does not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Bonds by any person in any jurisdiction in which it is unlawful for such person to make such offer, solicitation, or sale.

No dealer, broker, salesman, or other person has been authorized by the Issuer or the Underwriter to give any information or to make any representations other than those contained in this Official Statement, and, if given or made, such other information or representations should not be relied upon as having been authorized by the Issuer or the Underwriter. Except where otherwise indicated, all information contained in this Official Statement has been provided by the Issuer. The information set forth herein has been obtained by the Issuer from sources which are believed to be reliable but is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of the Underwriter. The information contained herein is subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall under any circumstances create an implication that there has been no change in the affairs of the Issuer, or the other matters described herein since the date hereof or the earlier dates set forth herein as of which certain information contained herein is given.

In connection with this offering, the Underwriter may over-allot or effect transactions which stabilize or maintain the market prices of the Bonds at a level above that which might otherwise prevail in the open market. Such stabilizing, if commenced, may be discontinued at any time.

** These CUSIP numbers have been assigned by S&P CUSIP Service Bureau, a division of the McGraw-Hill Companies, Inc., and are included solely for the convenience of the Bond holders. The City is not responsible for the selection or use of these CUSIP numbers, nor is any representation made as to their correctness on the Bonds or as indicated herein.

CITY OF OAK RIDGE, TENNESSEE

MEMBERS OF CITY COUNCIL

Warren L. Gooch, *Mayor*
Rick Chinn, Jr., *Mayor Pro Tem*
Kelly Callison
Jim Dodson
Derrick Hammond
Charles J. Hope, Jr.
Ellen Smith

CITY OFFICIALS

Mark S. Watson
City Manager

Janice E. McGinnis
Finance Director

Beth Hickman
City Clerk

Kenneth R. Krushenski
City Attorney

UNDERWRITER

Robert W. Baird & Co., Incorporated
Red Bank, New Jersey

BOND REGISTRATION AND PAYING AGENT AND ESCROW AGENT

Regions Bank
Nashville, Tennessee

BOND COUNSEL

Bass, Berry & Sims PLC
Knoxville, Tennessee

MUNICIPAL ADVISOR

Cumberland Securities Company, Inc.

TABLE OF CONTENTS

APPENDIX B: SUPPLEMENTAL INFORMATION STATEMENT

SUMMARY STATEMENT

The information set forth below is provided for convenient reference and does not purport to be complete and is qualified in its entirety by the information and financial statements appearing elsewhere in this *Official Statement*. This Summary Statement shall not be reproduced, distributed or otherwise used except in conjunction with the remainder of this *Official Statement*.

Issuer ....City of Oak Ridge, Tennessee (the "City", "Municipality" or "Issuer"). See APPENDIX B contained herein.

The Bonds......................................$28,295,000 General Obligation Refunding Bonds, Series 2019 (the "Bonds").

Security..The Bonds shall be payable from unlimited ad valorem taxes to be levied on all taxable property within the corporate limits of the City. For the prompt payment of principal and interest on the Bonds, the full faith and credit of the Issuer are irrevocably pledged. The respective portions of the Bonds (based on an allocation of Bonds and Bond proceeds as determined by the Municipality) that refinances improvements to the electric, water and sewer systems of the Municipality shall be additionally payable from but not secured by the respective revenues of such systems.

Purpose ....The Bonds are being issued for the purpose of (i) refinancing, in whole or in part, certain Outstanding Bonds (as defined herein) of the City, as described herein; (ii) financing, in whole or in part, the equipping, improving, and renovating of certain school facilities and public buildings, including roof replacements; (iii) financing, in whole or in part, the cost of all legal, fiscal, administrative, architectural and engineering costs incident thereto, and the reimbursement of any expenses incurred therefor; (iv) reimbursement to the City for funds previously expended for any of the forgoing, and (v) payment of the costs related to the issuance and sale of Bonds. See the section entitled "SECURITIES OFFERED - Authority and Purpose" contained herein.

Optional Redemption ....The Bonds are subject to optional redemption prior to maturity on or after June 1, 2029 and thereafter are callable on June 1, 2028 at the redemption price of par plus accrued interest. See section entitled "SECURITIES OFFERED - Optional Redemption".

Tax Matters....................................In the opinion of Bond Counsel, based on existing law and assuming compliance with certain tax covenants of the City, interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference in calculating the alternative minimum tax. For an explanation of certain tax consequences under federal law which may result from the ownership of the Bonds, see the discussion under the heading "LEGAL MATTERS - Tax Matters" herein. Under existing law, the Bonds and the income therefrom will be exempt from all state, county and municipal taxation in the State of Tennessee, except Tennessee franchise and excise taxes. (See "LEGAL MATTERS - Tax Matters" herein).

Rating...S&P: "AA+", and Moody's: "Aa2". See the section entitled "MISCELLANEOUS - Rating" for more information.

Registration and Paying Agent .....Regions Bank, Nashville, Tennessee (the "Registration Agent").

Bond Counsel ....Bass, Berry & Sims PLC, Knoxville, Tennessee.

Municipal Advisor.........................Cumberland Securities Company, Inc., Knoxville, Tennessee. See the section entitled "MISCELLANEOUS - Municipal Advisor; Related Parities; Others", herein.

Underwriter	Robert W. Baird & Co., Incorporated, Red Bank, New Jersey On April 1, 2019, Baird Financial Corporation, the parent company of Baird, acquired HL Financial Services, LLC, its subsidiaries, affiliates and assigns (collectively "Hilliard Lyons"). As a result of such common control, Baird, Hilliard Lyons and Hilliard Lyons Trust Company are now affiliated. It is expected that Hilliard Lyons will merge with and into Baird later in 2019.
Book-Entry-Only	The Bonds will be issued under the Book-Entry-Only System except as otherwise described herein. For additional information, see the section entitled "BASIC DOCUMENTATION – Book–Entry-Only System".
General	The Bonds are being issued in full compliance with applicable provisions of Title 9, Chapter 21, *Tennessee Code Annotated*, as supplemented and revised. See the section entitled SECURITIES OFFERED herein. The Bonds will be issued with CUSIP numbers and delivered through the facilities of the Depository Trust Company, New York, New York.
Disclosure	In accordance with Rule 15c2-12 promulgated under the Securities Exchange Act of 1934 as amended, the City will provide the Municipal Securities Rulemaking Board ("MSRB") through the operation of the Electronic Municipal Market Access system ("EMMA") and the State Information Depository ("SID") established in Tennessee, if any, annual financial statements and other pertinent credit information, including the Comprehensive Annual Financial Reports. For additional information, see the section entitled "MISCELLANEOUS - Continuing Disclosure" for additional information.
Other Information	The information in the *Official Statement* is deemed "final" within the meaning of Rule 15c2-12 promulgated under the Securities Exchange Act of 1934 as of the date which appears on the cover. For more information concerning the City, or the OFFICIAL STATEMENT, contact Mr. Warren L. Gooch, Mayor, P. O. Box 1, Oak Ridge, Tennessee 37831-0001, Telephone: (865) 425-3432; or the City's Municipal Advisor, Cumberland Securities Company, Inc., Telephone: (865) 988-2663.

GENERAL FUND BALANCES
Summary of Changes In Fund Balances
(In Thousands)
For the Fiscal Year Ended June 30

	2014	2015	2016	2017	2018
Beginning Fund Balance	$10,060,140	$9,473,710	$9,416,325	$10,347,792	$11,374,838
Revenues	38,974,825	38,795,748	42,414,400	41,497,965	41,624,300
Expenditures	22,748,714	22,725,477	24,084,268	21,211,302	21,801,297
Other Financing Sources:					
Transfers In	3,012,318	3,339,582	3,379,250	3,451,074	3,329,927
Transfers Out	(19,824,859)	(19,467,238)	(20,777,915)	(22,710,691)	(22,949,694)
Excess of Revenue/Other Sources Over (Under)	(586,430)	(57,385)	931,467	1,027,046	203,235
Ending Fund Balance	**$9,473,710**	**$9,416,325**	**$10,347,792**	**$11,374,838**	**$11,578,074**

Source: City of Oak Ridge Financial Statements with Report of Certified Public Accountants.

$28,295,000
CITY OF OAK RIDGE, TENNESSEE
General Obligation Refunding Bonds, Series 2019

SECURITIES OFFERED

AUTHORITY AND PURPOSE

This OFFICIAL STATEMENT which includes the Summary Statement hereof and appendices hereto is furnished in connection with the offering by the City of Oak Ridge, Tennessee (the "City", "Municipality" or "Issuer") of its $28,295,000 General Obligation Refunding Bonds, Series 2019 (the "Bonds").

The Bonds are authorized to be issued pursuant to the provisions of Title 9, Chapter 21, *Tennessee Code Annotated,* as amended, and other applicable provisions of the law and pursuant to resolutions (the "Resolution") adopted by the City Council of the City (the "City Council") on July 8, 2019 and on August 12, 2019.

The Bonds are being issued for the purposes of (i) refinancing, in whole or in part, certain Outstanding Bonds (as defined herein) of the City, as described herein; (ii) financing, in whole or in part, the equipping, improving, and renovating of certain school facilities and public buildings, including roof replacements; (iii) financing, in whole or in part, the cost of all legal, fiscal, administrative, architectural and engineering costs incident thereto, and the reimbursement of any expenses incurred therefor; (iv) reimbursement to the City for funds previously expended for any of the forgoing, and (v) payment of the costs related to the issuance and sale of Bonds.

REFUNDING PLAN

The City is proposing to refinance all or a portion of the City's outstanding General Obligation Refunding Bonds, Series 2009, dated February 3, 2009, maturing June 1, 2020 and thereafter (the "Series 2009") at par plus accrued interest and the City's outstanding General Obligation Bonds, Series 2009B (Federally Taxable Build America Bonds), dated November 24, 2009, maturing on June 1, 2023 and thereafter (the "Series 2009B Bonds", collectively with the Series 2009 Bonds, the "Outstanding Bonds") at par plus accrued interest.

As required by Title 9, Chapter 21, Part 9 of *Tennessee Code Annotated* as supplemented and revised, a plan of refunding (the "Plan") for the Outstanding Bonds was submitted to the Director of the Office of State and Local Finance for review, and a report was received thereon

DESCRIPTION OF THE BONDS

The Bonds will be initially dated and bear interest from Friday, September 13, 2019. Interest on the Bonds will be payable semi-annually on June 1 and December 1, commencing December 1, 2019. The Bonds are issuable in registered book-entry form only and in $5,000 denominations or integral multiples thereof as shall be requested by each respective registered owner.

The Bonds shall be signed by the Mayor and shall be attested by the City Clerk. No Bond shall be valid until it has been authenticated by the manual signature of an authorized representative of the Registration Agent and the date of authentication noted thereon.

SECURITY

The Bonds are payable from unlimited *ad valorem* taxes to be levied on all taxable property within the City. For the prompt payment of principal of and interest on the Bonds, the full faith and credit of the City are irrevocably pledged. The respective portions of the Bonds (based on an allocation of Bonds and Bond proceeds as determined by the Municipality) that refinance improvements to the electric, water and sewer systems of the Municipality shall be additionally payable from but not secured by the respective revenues of such systems.

The City, through its governing body, shall annually levy and collect a tax on all taxable property within the City, in addition to all other taxes authorized by law, sufficient to pay the principal of and interest on the Bonds when due. Principal and interest on the Bonds falling due at any time when there are insufficient funds from such tax shall be paid from the current funds of the City and reimbursement therefore shall be made out of taxes provided by the Resolution when the same shall have been collected.

The Bonds are not obligations of the State of Tennessee (the "State") or any political subdivision thereof other than the City.

OPTIONAL REDEMPTION

Bonds maturing June 1, 2029, and thereafter, shall be subject to optional redemption prior to maturity at the option of the City on June 1, 2028 and thereafter, as a whole or in part, at any time, at the redemption price of par plus accrued interest to the redemption date.

If less than all the Bonds shall be called for redemption, the maturities to be redeemed shall be designated by the City Council of the City, in its discretion. If less than all the principal amount of the Bonds of a maturity shall be called for redemption, the interests within the maturity to be redeemed shall be selected as follows:

(i) if the Bonds are being held under a Book-Entry System by DTC, or a successor Depository, the amount of the interest of each DTC Participant in the Bonds to be redeemed shall be determined by DTC, or such successor Depository, by lot or such other manner as DTC, or such successor Depository, shall determine; or

(ii) if the Bonds are not being held under a Book-Entry System by DTC, or a successor Depository, the Bonds within the maturity to be redeemed shall be selected by the Registration Agent by lot or such other random manner as the Registration Agent in its discretion shall determine.

MANDATORY REDEMPTION

The bidders have the option of creating term bonds pursuant to the Detailed Notice of Sale. If term bonds are created, then the following provisions will apply. Subject to the credit hereinafter provided, the City shall redeem Bonds maturing June 1, 2032 on the redemption dates set forth below opposite the maturity date, in aggregate principal amounts equal to the respective dollar amounts set forth below opposite the respective redemption dates at a price of par plus accrued interest thereon to the date of redemption. The Bonds to be so redeemed with a maturity shall be selected in the same manner as described above for optional redemption.

The dates of redemption and principal amount of Bonds to be redeemed on said dates are as follows:

Maturity	Redemption Date	Principal Amount of Bonds Redeemed
June 1, 2032	June 1, 2031	$1,640,000
	June 1, 2032*	$755,000

*Final Maturity

At its option, to be exercised on or before the forty-fifth (45) day next preceding any such redemption date, the City may (i) deliver to the Registration Agent for cancellation Bonds of the maturity to be redeemed, in any aggregate principal amount desired, and/or (ii) receive a credit in respect of its redemption obligation for any Bonds of the maturity to be redeemed which prior to said date have been purchased or redeemed (otherwise than through the operation of this section) and canceled by the Registration Agent and not theretofore applied as a credit against any redemption obligation. Each Bond so delivered or previously purchased or redeemed shall be credited by the Registration Agent at 100% of the principal amount thereof on the obligation of the City on such payment date and any excess shall be credited on future redemption obligations in chronological order, and the principal amount of Bonds to be redeemed by operation shall be accordingly reduced. The City shall on or before the forty-fifth (45) day next preceding each payment date furnish the Registration Agent with its certificate indicating whether or not and to what extent the provisions described above are to be availed of with respect to such payment and confirm that funds for the balance of the next succeeding prescribed payment will be paid on or before the next succeeding payment date.

NOTICE OF REDEMPTION

Notice of call for redemption, whether optional or mandatory, shall be given by the Registration Agent on behalf of the City not less than twenty (20) nor more than sixty (60) days prior to the date fixed for redemption by sending an appropriate notice to the registered owners of the Bonds to be redeemed by first-class mail, postage prepaid, at the addresses shown on the Bond registration records of the Registration Agent as of the date of the notice; but neither failure to mail such notice nor any defect in any such notice so mailed shall affect the sufficiency of the proceedings for redemption of any of the Bonds for which proper notice was given. The notice may state that it is conditioned upon the deposit of moneys in an amount equal to the amount necessary to effect the redemption with the Registration Agent no later than the redemption date ("Conditional Redemption"). As long as DTC, or a successor Depository, is the registered owner of the Bonds, all redemption notices shall be mailed by the Registration Agent to DTC, or such successor Depository, as the registered owner of the Bonds, as and when above provided, and neither the City nor the Registration Agent shall be responsible for mailing notices of redemption to DTC Participants or Beneficial Owners. Failure of DTC, or any successor Depository, to provide notice to any DTC Participant or Beneficial Owner will not affect the validity of such redemption. The Registration

Agent shall mail said notices as and when directed by the City pursuant to written instructions from an authorized representative of the City (other than for a mandatory sinking fund redemption, notices of which shall be given on the dates provided herein) given at least forty-five (45) days prior to the redemption date (unless a shorter notice period shall be satisfactory to the Registration Agent). From and after the redemption date, all Bonds called for redemption shall cease to bear interest if funds are available at the office of the Registration Agent for the payment thereof and if notice has been duly provided as set forth herein. In the case of a Conditional Redemption, the failure of the City to make funds available in part or in whole on or before the redemption date shall not constitute an event of default, and the Registration Agent shall give immediate notice to the Depository or the affected Bondholders that the redemption did not occur and that the Bonds called for redemption and not so paid remain outstanding.

(The remainder of this page left blank intentionally.)

BASIC DOCUMENTATION

REGISTRATION AGENT

The Registration Agent, Regions Bank, Nashville, Tennessee, its successor or the City will make all interest payments with respect to the Bonds on each interest payment date directly to Cede & Co., as nominee of DTC, the registered owner as shown on the Bond registration records maintained by the Registration Agent, except as described below.

So long as Cede & Co. is the Registered Owner of the Bonds, as nominee of DTC, references herein to the Bondholders, Holders or Registered Owners of the Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the Bonds. For additional information, see the following section.

BOOK-ENTRY-ONLY SYSTEM

The Registration Agent, its successor or the Issuer will make all interest payments with respect to the Bonds on each interest payment date directly to Cede & Co., as nominee of DTC, the registered owner as shown on the Bond registration records maintained by the Registration Agent as of the close of business on the fifteenth day of the month next preceding the interest payment date (the “Regular Record Date”) by check or draft mailed to such owner at its address shown on said Bond registration records, without, except for final payment, the presentation or surrender of such registered Bonds, and all such payments shall discharge the obligations of the Issuer in respect of such Bonds to the extent of the payments so made, except as described above. Payment of principal of the Bonds shall be made upon presentation and surrender of such Bonds to the Registration Agent as the same shall become due and payable.

So long as Cede & Co. is the Registered Owner of the Bonds, as nominee of DTC, references herein to the Bondholders, Holders or Registered Owners of the Bonds shall mean Cede & Co. and shall not mean the Beneficial Owners of the Bonds.

The Bonds, when issued, will be registered in the name of Cede & Co., DTC’s partnership nominee, except as described above. When the Bonds are issued, ownership interests will be available to purchasers only through a book entry system maintained by DTC (the “Book Entry Only System”). One fully registered bond certificate will be issued for each maturity, in the entire aggregate principal amount of the Bonds and will be deposited with DTC.

DTC and its Participants. DTC, the world’s largest securities depository, is a limited-purpose trust company organized under the New York Banking Law, a “banking organization” within the meaning of the New York Banking Law, a member of the Federal Reserve System, a “clearing corporation” within the meaning of the New York Uniform Commercial Code, and a “clearing agency” registered pursuant to the provisions of Section 17A of the Securities Exchange Act of 1934. DTC holds and provides asset servicing for over 3.5 million issues of U.S. and non-U.S. equity issues, corporate and municipal debt issues, and money market instruments (from over 100 countries) that DTC’s participants (“Direct Participants”) deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities, through electronic computerized book-entry transfers and pledges between Direct Participants’ accounts. This eliminates the need for physical movement of securities certificates. Direct Participants include both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, clearing corporations, and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation (“DTCC”). DTCC is the holding company for DTC, National

Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC system is also available to others such as both U.S. and non-U.S. securities brokers and dealers, banks, trust companies, and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants"). DTC has a S&P rating of AA+. The DTC Rules applicable to its Participants are on file with the U.S. Securities and Exchange Commission. More information about DTC can be found at www.dtcc.com.

Purchase of Ownership Interests. Purchases of Bonds under the DTC system must be made by or through Direct Participants, which will receive a credit for the Bonds on DTC's records. The ownership interest of each actual purchaser of each Security ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect Participants' records. Beneficial Owners will not receive written confirmation from DTC of their purchase. Beneficial Owners are, however, expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the Bonds are to be accomplished by entries made on the books of Direct and Indirect Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in Bonds, except in the event that use of the book-entry system for the Bonds is discontinued.

Payments of Principal and Interest. Principal and interest payments on the Bonds will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts, upon DTC's receipt of funds and corresponding detail information from the Registration Agent on the payable date in accordance with their respective holdings shown on DTC's records, unless DTC has reason to believe it will not receive payment on such date. Payments by Direct and Indirect Participants to beneficial owners will be governed by standing instructions and customary practices, as is the case with municipal securities held for the accounts of customers in bearer form or registered in "street name", and will be the responsibility of such Participant and not of DTC, the Issuer or the Registration Agent subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, principal, tender price and interest payments to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Registration Agent, disbursement of such payments to Direct Participants shall be the responsibility of DTC, and disbursement of such payments to the beneficial owners shall be the responsibility of Direct and Indirect Participants.

Notices. Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial Owners of Bonds may wish to take certain steps to augment the transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults, and proposed amendments to the Security documents. For example, Beneficial Owners of Bonds may wish to ascertain that the nominee holding the Bonds for their benefit has agreed to obtain and transmit notices to Beneficial Owners. In the alternative, Beneficial Owners may wish to provide their names and addresses to the Registration Agent and request that copies of notices be provided directly to them.

Redemption notices shall be sent to DTC. If less than all of the Bonds within a maturity are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such maturity to be redeemed. Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to the Bonds unless authorized by a Direct Participant in accordance with DTC's procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Issuer as soon as practicable after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the Bonds are credited on the record date (identified in a listing attached to the Omnibus Proxy).

NONE OF THE ISSUER, THE UNDERWRITER, THE BOND COUNSEL, THE MUNICIPAL ADVISOR OR THE REGISTRATION AGENT WILL HAVE ANY RESPONSIBILITY OR OBLIGATION TO SUCH PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES WITH RESPECT TO THE PAYMENT TO, OR THE PROVIDING OF NOTICE FOR, SUCH PARTICIPANTS OR THE PERSONS FOR WHOM THEY ACT AS NOMINEES.

Transfers of Bonds. To facilitate subsequent transfers, all Bonds deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. or such other name as may be requested by an authorized representative of DTC. The deposit of the Bonds with DTC and their registration in the name of Cede & Co. or such other nominee do not affect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the Bonds; DTC's records reflect only the identity of the Direct Participants to whose accounts such Bonds are credited, which may or may not be the Beneficial Owners. The Direct and Indirect Participants will remain responsible for keeping account of their holdings on behalf of their customers.

None of the Issuer, the Bond Counsel, the Registration Agent, the Municipal Advisor or the Underwriter will have any responsibility or obligation, legal or otherwise, to any party other than to the registered owners of any Bond on the registration books of the Registration Agent.

DISCONTINUANCE OF BOOK-ENTRY-ONLY SYSTEM

In the event that (i) DTC determines not to continue to act as securities depository for the Bonds or (ii) to the extent permitted by the rules of DTC, the City determines to discontinue the Book-Entry-Only System, the Book-Entry-Only System shall be discontinued. Upon the occurrence of the event described above, the City will attempt to locate another qualified securities depository, and if no qualified securities depository is available, Bond certificates will be printed and delivered to beneficial owners.

No Assurance Regarding DTC Practices. The foregoing information in this section concerning DTC and DTC's book-entry system has been obtained from sources that the City believes to be reliable, but the City, the Bond Counsel, the Registration Agent, the Municipal Advisor and the Underwriter do not take any responsibility for the accuracy thereof. So long as Cede & Co. is the registered owner of the Bonds as nominee of DTC, references herein to the holders or registered owners of the Bonds will mean Cede & Co. and will not mean the Beneficial Owners of the Bonds. None of the City, the Bond Counsel, the Registration Agent, the Municipal Advisor or the Underwriter will have any responsibility or obligation to the Participants, DTC or the persons for whom they act with respect to (i) the accuracy of any records maintained by DTC or by any Direct or Indirect Participant of DTC, (ii) payments or the providing of notice to Direct Participants, the Indirect Participants or the Beneficial Owners or (iii) any other action taken by DTC or its partnership nominee as owner of the Bonds.

For more information on the duties of the Registration Agent, please refer to the Resolution. Also, please see the section entitled "SECURITIES OFFERED – Redemption."

DISPOSITION OF BOND PROCEEDS

The proceeds of the sale of the Bonds shall be applied by the City as follows:

(a) an amount, which together with investment earnings thereon and other legally available funds of the City, if any, will be sufficient to pay principal of, premium, if any, and interest on the Outstanding Bonds until and through the redemption date therefor shall be transferred to the paying agent and/or trustee for the Outstanding Bonds to be held to the earliest optional redemption date and used for the payment and retirement of the Outstanding Bonds; and

(b) the remainder of the proceeds of the sale of the Bonds shall be deposited with a financial institution regulated by the Federal Deposit Insurance Corporation or similar federal agency in a special fund known as the Oak Ridge 2019 Construction Fund (the "Construction Fund"), or such other designation as shall be determined by the Mayor to be kept separate and apart from all other funds of the City. The City shall disburse funds in the Construction Fund to pay costs of issuance of the Bonds, including necessary legal, accounting and fiscal expenses, printing, engraving, advertising and similar expenses, administrative and clerical costs, Registration Agent fees, bond insurance premiums, if any, and other necessary miscellaneous expenses incurred in connection with the issuance and sale of the Bonds. Notwithstanding the foregoing, costs of issuance of the Bonds may be withheld from the good faith deposit or purchase price of the Bonds and paid to the Municipal Advisor to be used to pay costs of issuance of the Bonds. The remaining funds in the Construction Fund shall be disbursed solely to pay the costs of the Projects and to reimburse the City for any funds previously expended for costs of the Projects. Money in the Construction Fund shall be secured in the manner prescribed by applicable statutes relative to the securing of public or trust funds, if any, or, in the absence of such a statute, by a pledge of readily marketable securities having at all times a market value of not less than the amount in said Construction Fund. Money in the Construction Fund shall be invested in such investments as shall be permitted by applicable law.

DISCHARGE AND SATISFACTION OF BONDS

If the City shall pay and discharge the indebtedness evidenced by any of the Bonds in any one or more of the following ways:

1. By paying or causing to be paid, by deposit of sufficient funds as and when required with the Registration Agent, the principal of and interest on such Bonds as and when the same become due and payable;

2. By depositing or causing to be deposited with any trust company or financial institution whose deposits are insured by the Federal Deposit Insurance Corporation or similar federal agency and which has trust powers ("an Agent"; which Agent may be the Registration Agent) in trust or escrow, on or before the date of maturity or redemption, sufficient money or Defeasance Obligations, as hereafter defined, the principal of and interest on which, when due and payable, will provide sufficient moneys to pay or redeem such Bonds and to pay interest thereon when due until the maturity or redemption date (provided, if such Bonds are to be redeemed prior to maturity thereof, proper notice of such redemption shall have been given or adequate provision shall have been made for the giving or such notice); or

3. By delivering such Bonds to the Registration Agent for cancellation by it;

and if the City shall also pay or cause to be paid all other sums payable hereunder by the City with respect to such Bonds, or make adequate provision therefor, and by resolution of the Governing Body instruct any such escrow agent to pay amounts when and as required to the Registration Agent for the payment of principal of and interest on such Bonds when due, then and in that case the indebtedness evidenced by such Bonds shall be discharged and satisfied and all covenants, agreements and obligations of the City to the holders of such Bonds shall be fully discharged and satisfied and shall thereupon cease, terminate and become void.

If the City shall pay and discharge the indebtedness evidenced by any of the Bonds in the manner provided in either clause (a) or clause (b) above, then the registered owners thereof shall thereafter be entitled only to payment out of the money or Defeasance Obligations (defined herein) deposited as aforesaid.

Except as otherwise provided in this section, neither Defeasance Obligations nor moneys deposited with the Registration Agent nor principal or interest payments on any such Defeasance Obligations shall be withdrawn or used for any purpose other than, and shall be held in trust for, the payment of the principal and interest on said Bonds; provided that any cash received from such principal or interest payments on such Defeasance Obligations deposited with the Registration Agent, (A) to the extent such cash will not be required at any time for such purpose, shall be paid over to the City as received by the Registration Agent and (B) to the extent such cash will be required for such purpose at a later date, shall, to the extent practicable, be reinvested in Defeasance Obligations maturing at times and in amounts sufficient to pay when due the principal and interest to become due on said Bonds on or prior to such redemption date or maturity date thereof, as the case may be, and interest earned from such reinvestments shall be paid over to the City, as received by the Registration Agent. For the purposes hereof, Defeasance Obligations shall mean direct obligations of, or obligations, the principal of and interest on which are guaranteed by, the United States of America on obligations of any agency or instrumentally of the United States, which obligations shall not be subject to redemption prior to their maturity other than at the option of the registered owner thereof.

REMEDIES OF BONDHOLDERS

Under Tennessee law, any Bondholder has the right, in addition to all other rights:

(1) By mandamus or other suit, action or proceeding in any court of competent jurisdiction to enforce its rights against the City, including, but not limited to, the right to require the City to assess, levy and collect taxes adequate to carry out any agreement as to, or pledge of, such taxes, fees, rents, tolls, or other charges, and to require the City to carry out any other covenants and agreements, or

(2) By action or suit in equity, to enjoin any acts or things which may be unlawful or a violation of the rights of such Bondholder.

LEGAL MATTERS

LITIGATION

There are no claims against the City, including claims in litigation, which, in the opinion of the City, would have a material adverse effect on the City's financial position. There are no suits threatened or pending challenging the legality or validity of the Bonds or the right of the City to sell or issue the Bonds.

TAX MATTERS

Federal

General. Bass, Berry & Sims PLC, Knoxville, Tennessee, is Bond Counsel for the Bonds. Their opinion under existing law, relying on certain statements by the City and assuming compliance by the City with certain covenants, is that interest on the Bonds:

- is excluded from a bondholder's federal gross income under the Internal Revenue Code of 1986, as amended, (the "Code"), and
- is not treated as an item of tax preference in calculating the alternative minimum tax.

The Code imposes requirements on the Bonds that the City must continue to meet after the Bonds are issued. These requirements generally involve the way that Bond proceeds must be invested and ultimately used. If the City does not meet these requirements, it is possible that a bondholder may have to include interest on the Bonds in its federal gross income on a retroactive basis to the date of issue. The City has covenanted to do everything necessary to meet these requirements of the Code.

A bondholder who is a particular kind of taxpayer may also have additional tax consequences from owning the Bonds. This is possible if a bondholder is:

- an S corporation,
- a United States branch of a foreign corporation,
- a financial institution,
- a property and casualty or a life insurance company,
- an individual receiving Social Security or railroad retirement benefits,
- an individual claiming the earned income credit or
- a borrower of money to purchase or carry the Bonds.

If a bondholder is in any of these categories, it should consult its tax advisor.

Bond Counsel is not responsible for updating its opinion in the future. It is possible that future events or changes in applicable law could change the tax treatment of the interest on the Bonds or affect the market price of the Bonds. See also the section "CHANGES IN FEDERAL AND STATE TAX LAW" below.

Bond Counsel expresses no opinion on the effect of any action taken or not taken in reliance upon an opinion of other counsel on the federal income tax treatment of interest on the Bonds, or under State, local or foreign tax law.

Bond Premium. If a bondholder purchases a Bond for a price that is more than the principal amount, generally the excess is "bond premium" on that Bond. The tax accounting treatment of bond premium is complex. It is amortized over time, and as it is amortized, a bondholder's tax basis in that Bond will be reduced. The holder of a Bond that is callable before its stated maturity date may be required to amortize the premium over a shorter period, resulting in a lower yield on such Bonds. A bondholder in certain circumstances may realize a taxable gain upon the sale of a Bond with bond premium, even though the Bond is sold for an amount less than or equal to the owner's original cost. If a bondholder owns any Bonds with bond premium, it should consult its tax advisor regarding the tax accounting treatment of bond premium.

Original Issue Discount. A Bond will have "original issue discount" if the price paid by the original purchaser of such Bond is less than the principal amount of such Bond. Bond Counsel's opinion is that any original issue discount on these Bonds as it accrues is excluded from a bondholder's federal gross income under the Internal Revenue Code. The tax accounting treatment of original issue discount is complex. It accrues on an actuarial basis and as it accrues a bondholder's tax basis in these Bonds will be increased. If a bondholder owns one of these Bonds, it should consult its tax advisor regarding the tax treatment of original issue discount

Information Reporting and Backup Withholding. Information reporting requirements apply to interest on tax-exempt obligations, including the Bonds. In general, such requirements are satisfied if the interest recipient completes, and provides the payor with a Form W-9, "Request for Taxpayer Identification Number and Certification," or if the recipient is one of a limited class of exempt recipients. A recipient not otherwise exempt from information reporting who fails to satisfy the information reporting requirements will be subject to "backup withholding," which means that the payor is required to deduct and withhold a tax from the interest payment, calculated in the manner set forth in the Code. For the foregoing purpose, a "payor" generally refers to the person or entity from whom a recipient receives its payments of interest or who collects such payments on behalf of the recipient.

If an owner purchasing a Bond through a brokerage account has executed a Form W-9 in connection with the establishment of such account, as generally can be expected, no backup withholding should occur. In any event, backup withholding does not affect the excludability of the interest on the Bonds from gross income for Federal income tax purposes. Any amounts withheld pursuant to backup withholding would be allowed as a refund or a credit against the owner's Federal income tax once the required information is furnished to the Internal Revenue Service.

State Taxes

Under existing law, the Bonds and the income therefrom are exempt from all present state, county and municipal taxes in Tennessee except (a) Tennessee excise taxes on interest on the Bonds during the period the Bonds are held or beneficially owned by any organization or entity, or other than a sole proprietorship or general partnership doing business in the State of Tennessee, and (b) Tennessee franchise taxes by reason of the inclusion of the book value of the Bonds in the Tennessee franchise tax base of any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee.

CHANGES IN FEDERAL AND STATE TAX LAW

From time to time, there are Presidential proposals, proposals of various federal committees, and legislative proposals in the Congress and in the states that, if enacted, could alter or amend the federal and state tax matters referred to herein or adversely affect the marketability or market value of the Bonds or otherwise prevent holders of the Bonds from realizing the full benefit of the tax exemption of interest on the Bonds. Further, such proposals may impact the marketability or market value of the Bonds simply by being proposed. It cannot be predicted whether or in what form any such proposal might be enacted or whether if enacted it would apply to bonds issued prior to enactment. In addition, regulatory actions are from time to time announced or proposed and litigation is threatened or commenced which, if implemented or concluded in a particular manner, could adversely affect the market value, marketability or tax status of the Bonds. It cannot be predicted whether any such regulatory action will be implemented, how any particular litigation or judicial action will be resolved, or whether the Bonds would be impacted thereby. Purchasers of the Bonds should consult their tax advisors regarding any pending or proposed legislation, regulatory initiatives or litigation. The opinions expressed by Bond Counsel are based upon existing legislation and regulations as interpreted by relevant judicial and regulatory authorities as of the date of issuance and delivery of the Bonds, and Bond Counsel has expressed no opinion as of any date subsequent thereto or with respect to any proposed or pending legislation, regulatory initiatives or litigation.

Prospective purchasers of the Bonds should consult their own tax advisors regarding the foregoing matters.

CLOSING CERTIFICATES

Upon delivery of the Bonds, the City will execute in a form satisfactory to Bond Counsel, certain closing certificates including the following: (i) a certificate as to the *Official Statement*, in final form, signed by the Mayor acting in his official capacity to the effect that to the best of his knowledge and belief, and after reasonable investigation, (a) neither the *Official Statement*, in final form, nor any amendment or supplement thereto, contains any untrue statements of material fact or omits to state any material fact necessary to make statements therein, in light of the circumstances in which they are made, misleading, (b) since the date of the *Official Statement*, in final form, no event has occurred which should have been set forth in such a memo or supplement, (c) there has been no material adverse change in the operation or the affairs of the City since the date of the *Official Statement,* in final form, and having attached thereto a copy of the *Official Statement*, in final form, and (d) there is no litigation of any nature pending or threatened seeking to restrain the issuance, sale, execution and delivery of the Bonds, or contesting the validity of the Bonds or any proceeding taken pursuant to which the Bonds were authorized; (ii) certificates as to the delivery and payment, signed by the Mayor acting in his official capacity, evidencing delivery of and payment for the Bonds; (iii) a signature identification and incumbency certificate, signed by the Mayor and City Clerk acting in their official capacities certifying as to the due execution of the Bonds; and, (iv) a Continuing Disclosure Certificate regarding certain covenants of the City concerning the preparation and distribution of certain annual financial information and notification of certain material events, if any.

APPROVAL OF LEGAL PROCEEDINGS

Certain legal matters relating to the authorization and the validity of the Bonds are subject to the approval of Bass, Berry & Sims PLC, Knoxville, Tennessee, bond counsel. Bond counsel has not prepared the *Preliminary Official Statement* or the *Official Statement*, in final form, or verified their accuracy, completeness or fairness. Accordingly, bond counsel expresses no opinion of any kind concerning the *Preliminary Official Statement* or *Official Statement*, in final form, except for the information in the section entitled "LEGAL MATTERS - Tax Matters." The opinion of Bond Counsel will be limited to matters relating to authorization and validity of the Bonds and to the tax-exemption of interest on the Bonds under present federal income tax laws, both as described above. The legal opinion will be delivered with the Bonds and the form of the opinion is included in APPENDIX A. For additional information, see the section entitled MISCELLANEOUS – "Competitive Public Sale", "Additional Information" and "Continuing Disclosure."

(The remainder of this page left blank intentionally.)

MISCELLANEOUS

RATING

S&P Global Ratings ("S&P") and Moody's Investor Services, Inc. ("Moody's") has given the Bonds the rating of AA+ and Aa2, respectively.

There is no assurance that such rating will continue for any given period of time or that the ratings may not be suspended, lowered or withdrawn entirely by S&P and Moody's, if circumstances so warrant. Due to the ongoing uncertainty regarding the economy of the United States of America, including, without limitation, matters such as the future political uncertainty regarding the United States debt limit, obligations issued by state and local governments, such as the Bonds, could be subject to a rating downgrade. Additionally, if a significant default or other financial crisis should occur in the affairs of the United States or of any of its agencies or political subdivisions, then such event could also adversely affect the market for and ratings, liquidity, and market value of outstanding debt obligations, including the Bonds. Any such downward change in or withdrawal of the rating may have an adverse effect on the secondary market price of the Bonds.

Any explanation of the significance of the ratings may be obtained only from S&P and Moody's.

COMPETITIVE PUBLIC SALE

The Bonds were offered for sale at competitive public bidding on Thursday, August 15, 2019. Details concerning the public sale were provided to potential bidders and others in the *Preliminary Official Statement* that was dated August 8, 2019.

The successful bidder for the Bonds was an account led by Robert W. Baird & Co., Incorporated, Red Bank, New Jersey (the "Underwriters") who contracted with the City, subject to the conditions set forth in the Official Notice of Sale and Bid Form to purchase the Bonds at a purchase price of $31,052,656.20 (consisting of the par amount of the Bonds, plus an original issue premium of $2,956,395.75 and less an underwriter's discount of $198,739.55) or 109.746090% of par plus accrued interest, if any, to the date of delivery.

MUNICIPAL ADVISOR; RELATED PARTIES; OTHER

Municipal Advisor. Cumberland Securities Company, Inc., Knoxville, Tennessee, has served as Municipal Advisor (the "Municipal Advisor") to the City for purposes of assisting with the development and implementation of a bond structure in connection with the issuance of the Bonds. The Municipal Advisor has not been engaged by the City to compile, create, or interpret any information in the PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT relating to the City, including without limitation any of the City's financial and operating data, whether historical or projected. Any information contained in the PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT concerning the City, any of its affiliated or constractors and any outside parties has not been independently verified by the Municipal Advisor, and inclusion of such information is not, and should not be construed as, a representation by the Municiapal Advisor as to its accuracy or completeness or otherwise. The Municipal Advisor is not a public accounting firm and has not been engaged by the City to review or audit any information in the PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT in accordance with accounting standards.

Regions Bank. Regions Bank (the "Bank") is a wholly-owned subsidiary of Regions Financial Corporation. The Bank provides, among other services, commercial banking, investments and corporate trust services to private parties and to State and local jurisdictions, including serving as registration, paying agent or filing agent related to debt offerings. The Bank will receive compensation for its role in serving as Registration and Paying Agent for the Bonds. In instances where the Bank serves the City in other normal commercial banking capacities, it will be compensated separately for such services.

Official Statements. Certain information relative to the location, economy and finances of the Issuer is found in the *Preliminary Official Statement*, in final form and the *Official Statement*, in final form. Except where otherwise indicated, all information contained in this Official Statement has been provided by the Issuer. The information set forth herein has been obtained by the Issuer from sources which are believed to be reliable but is not guaranteed as to accuracy or completeness by, and is not to be construed as a representation of, the Municipal Advisor or the Underwriter. The information contained herein is subject to change without notice, and neither the delivery of this Official Statement nor any sale made hereunder shall under any circumstances create an implication that there has been no change in the affairs of the Issuer, or the other matters described herein since the date hereof or the earlier dates set forth herein as of which certain information contained herein is given.

Cumberland Securities Company, Inc. distributed the *Preliminary Official Statement*, in final form, and the *Official Statement*, in final form on behalf of the City and will be compensated and/or reimbursed for such distribution and other such services.

Bond Counsel. From time to time, Bass, Berry & Sims PLC has represented the Bank on legal matters unrelated to the City and may do so again in the future.

Other. Among other services, Cumberland Securities Company, Inc. and the Bank may also assist local jurisdictions in the investment of idle funds and may serve in various other capacities, including Cumberland Securities Company's role as serving as the City's Dissemination Agent. If the City chooses to use one or more of these other services provided by Cumberland Securities Company, Inc. and/or the Bank, then Cumberland Securities Company, Inc. and/or the Bank may be entitled to separate compensation for the performance of such services.

DEBT RECORD

There is no record of default on principal or interest payments of the Issuer. Additionally, no agreements or legal proceedings of the Issuer relating to securities have been declared invalid or unenforceable.

ADDITIONAL DEBT

The City has authorized an additional $45 million in debt that is projected to be issued over the next 24 months to fund the construction of a new water treatment facility. The City also has ongoing capital needs and may or may not issue other additional debt in the future.

CONTINUING DISCLOSURE

The City will at the time the Bonds are delivered execute a Continuing Disclosure Certificate under which it will covenant for the benefit of holders and beneficial owners of the Bonds to provide certain financial information and operating data relating to the City by not later than twelve months after the end of each fiscal year commencing with the fiscal year ending June 30, 2019 (the "Annual Reports"), and to provide notice of the occurrence of certain significant events not later than ten business days after the occurrence of the events and notice of failure to provide any required financial information of the City. The issuer will provide notice in a timely manner to the MSRB of a failure by the City to provide the annual financial information on or before the date specified in the continuing disclosure agreement. The Annual Reports (and audited financial statements if filed separately) and notices described above will be filed by the City with the Municipal Securities Rulemaking Board ("MSRB") at www.emma.msrb.org and with any State Information Depository which may be established in Tennessee (the "SID"). The specific nature of the information to be contained in the Annual Reports or the notices of events is summarized below. These covenants have been made in order to assist the Underwriters in complying with Securities Exchange Act Rule 15c2-12(b), as it may be amended from time to time (the "Rule 15c2-12").

Five-Year History of Filing. In the past five years, the City has filed its Annual Reports on time at www.emma@msrb.org under the base CUSIP Number 671783 which is the base CUSIP Number for the City. However, the City inadvertently failed to also file such Annual Reports for fiscal year ending June 30, 2012 under the CUSIP Numbers of the Local Government Public Improvement Bonds, Series B-9-A (City of Oak Ridge), dated February 25, 2005 (the "Series B-9-A Bonds"); and Local Government Public Improvement Bonds, Series B-11-A (City of Oak Ridge), dated December 21, 2006 (the "Series B-11-A Bonds") for which the City was an obligated person. The City did file the Annual Reports for fiscal year ending June 30, 2012 for the Series B-9-A Bonds and Series B-11-A Bonds on May 2, 2014, however, the Annual Reports were available under the City's base CUSIP which were filed on time on May 17, 2013. The City filed the Annual Reports for fiscal year ending June 30, 2013 through June 30, 2016 on time for both the City's base CUSIP and the Series B-9-A Bonds and Series B-11-A Bonds CUSIPS. Additionally, the Series B-9-A Bonds were redeemed by the City on December 21, 2015 and on January 4, 2016, and the Series B-11-A Bonds were redeemed by the City on June 1, 2016.

In the past five years, the Issuer has failed to file the required information and Annual Reports for the Electric Revenue Refunding Bonds, Series 2003 (the "Electric Bonds") due to an error on the part of the dissemination agent due to the above Electric Bonds having a separate base CUSIP (671785) from the rest of the Issuer's debt. Fiscal Years June 30, 2012 through June 30, 2016 were filed on October 23, 2017. However, all of the Issuer's required information and annual reports for fiscal Years June 30, 2012 through June 30, 2016 were filed on time to the Issuer's base CUSIP of 671783. Additionally, the Electric Bonds were redeemed by the City on June 1, 2016.

While it is believed that all appropriate filings were made with respect to the ratings of the City's outstanding bond issues, some of which were insured by the various municipal bond insurance companies, no absolute assurance can be made that all such rating changes of the bonds or various insurance companies which insured some transaction were made or made in a timely manner as required by Rule 15c2-12.

The City does not deem any of the foregoing omissions to be material, and therefore, in the judgment of the City, for the past five years, the City has complied in all material respects with its existing continuing disclosure agreements in accordance with Rule 15c2-12.

Content of Annual Report. The City's Annual Report shall contain or incorporate by reference the General Purpose Financial Statements of the City for the fiscal year, prepared in accordance with generally accepted auditing standards, provided, however, if the City's audited financial statements are not available by the time the Annual Report is required to be filed, the Annual Report shall contain unaudited financial statements in a format similar to the financial statements contained herein, and the audited financial statements shall be filed when available. The Annual Report shall also include in a similar format the following information included in APPENDIX B entitled "SUPPLEMENTAL INFORMATION STATEMENT."

1. Summary of bonded indebtedness as of the end of such fiscal year as shown on page B-19;

2. The indebtedness and debt ratios as of the end of such fiscal year, together with information about the property tax base as shown on pages B-20 and B-21;

3. Information about the Bonded Debt Service Requirements – General Obligation Fund as of the end of such fiscal year as shown on page B-22;

4. Information about Bonded Debt Service Requirements– Water and Sewer System as of the end of such fiscal year as shown on page B-23;

5. Information about Bonded Debt Service Requirements– Revenue Supported Bonds Electric System as of the end of such fiscal year as shown on page B-24;

6. The fund balances, net assets and retained earnings for the fiscal year as shown on page B-26;

7. Summary of Revenues, Expenditures and Changes in Fund Balances - General Fund for the fiscal year as shown on page B-27;

8. Summary of Revenues, Expenditures and Changes in Fund Balances - Electric Fund for the fiscal year as shown on page B-28;

9. The estimated assessed value of property in the City for the tax year ending in such fiscal year and the total estimated appraised value of all taxable property for such year as shown on page B-35;

10. Property tax rates and tax collections of the City for the tax year ending in such fiscal year as well as the uncollected balance for such fiscal year as shown on page B-35; and

11. The ten largest taxpayers as shown on page B-36.

Any or all of the items listed above may be incorporated by reference from other documents, including OFFICIAL STATEMENTS in final form for debt issues of the City or related public entities, which have been submitted to each of the MSRB or the U.S. Securities and Exchange Commission. If the document incorporated by reference is an OFFICIAL STATEMENT, in final form, it will be available from the MSRB. The City shall clearly identify each such other document so incorporated by reference.

Reporting of Significant Events. The City will file notice regarding material events with the MSRB and the SID, if any, as follows:

1. Upon the occurrence of a Listed Event (as defined in (3) below), the City shall in a timely manner, but in no event more than ten (10) business days after the occurrence of such event, file a notice of such occurrence with the MSRB and SID, if any.

2. For Listed Events where notice is only required upon a determination that such event would be material under applicable Federal securities laws, the City shall determine the materiality of such event as soon as possible after learning of its occurrence.

3. The following are the Listed Events:

   a. Principal and interest payment delinquencies;

   b. Non-payment related defaults, if material;

   c. Unscheduled draws on debt service reserves reflecting financial difficulties;

   d. Unscheduled draws on credit enhancements reflecting financial difficulties;

   e. Substitution of credit or liquidity providers, or their failure to perform;

   f. Adverse tax opinions, the issuance by the Internal Revenue Service of proposed or final determinations of taxability, Notices of Proposed Issue (IRS Form 5701-TEB) or other material notices or determinations with respect to the tax status of the Bonds or other material events affecting the tax status of the Bonds;

   g. Modifications to rights of Bondholders, if material;

   h. Bond calls, if material, and tender offers;

   i. Defeasances;

   j. Release, substitution, or sale of property securing repayment of the securities, if material;

   k. Rating changes;

   l. Bankruptcy, insolvency, receivership or similar event of the obligated person;

   m. The consummation of a merger, consolidation or acquisition involving an obligated person or the sale of all or substantially all of the assets of the obligated person, other than in the ordinary course of business, the entry into a definitive agreement to undertake such an action or the termination of a definitive agreement relating to any such actions, other than pursuant to its terms, if material;

   n. Appointment of a successor or additional trustee or the change of name of a trustee, if material;

   o. Incurrence of a financial obligation (which includes a debt obligation, a derivative instrument entered into connection with, or pledged as security or as a source of payment for, an existing or planned debt obligation, or a guarantee of debt obligation or derivative instrument but does not include municipal securities as to which a final official statement has been provided to the MSRB consistent with Rule 15c2-12) of the City, if material, or agreement as to covenants, events of default, remedies, priority rights, or other similar terms of a financial obligation of the City, any of which affect security holders, if material; and

p. Default, event of acceleration, termination event, modification of terms, or other similar events under the terms of a financial obligation (as described above) of the City, any of which reflect financial difficulties.

Termination of Reporting Obligation. The City's obligations under the Disclosure Certificate shall terminate upon the legal defeasance, prior redemption or payment in full of all of the Bonds.

Amendment; Waiver. Notwithstanding any other provision of the Disclosure Certificate, the City may amend the Disclosure Certificate, and any provision of the Disclosure Certificate may be waived, provided that the following conditions are satisfied:

(a) If the amendment or waiver relates to the provisions concerning the Annual Report and Reporting of Significant Events it may only be made in connection with a change in circumstances that arises from a change in legal requirements, change in law, or change in the identity, nature or status of an obligated person with respect to the Bonds, or the type of business conducted;

(b) The undertaking, as amended or taking into account such waiver, would, in the opinion of nationally recognized bond counsel, have complied with the requirements of the Rule at the time of the original issuance of the Bonds, after taking into account any amendments or interpretations of the Rule, as well as any change in circumstances; and

(c) The amendment or waiver either (i) is approved by the Holders of the Bonds, or (ii) does not, in the opinion of nationally recognized bond counsel, materially impair the interests of the Holders or beneficial owners of the Bonds.

In the event of any amendment or waiver of a provision of the Disclosure Certificate, the City shall describe such amendment in the next Annual Report, and shall include, as applicable, a narrative explanation of the reason for the amendment or waiver and its impact on the type (or, in the case of a change of accounting principles, on the presentation) of financial information or operating data being presented by the City. In addition, if the amendment relates to the accounting principles to be followed in preparing financial statements, (i) notice of such change shall be given, and (ii) the Annual Report for the year in which the change is made should present a comparison (in narrative form and also, if feasible, in quantitative form) between the financial statements as prepared on the basis of the new accounting principles and those prepared on the basis of the former accounting principles.

Default. In the event of a failure of the City to comply with any provision of the Disclosure Certificate, any Bondholder or any beneficial owner may take such actions as may be necessary and appropriate, including seeking mandate or specific performance by court order, to cause the City to comply with its obligations under the Disclosure Certificate. A default under the Disclosure Certificate shall not be deemed an event of default, if any, under the Resolution, and the sole remedy under the Disclosure Certificate in the event of any failure of the City to comply with the Disclosure Certificate shall be an action to compel performance.

ADDITIONAL INFORMATION

Use of the words "shall," "must," or "will" in the PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT in summaries of documents or laws to describe future events or continuing obligations is not intended as a representation that such event will occur or obligation will be fulfilled but only that the document or law contemplates or requires such event to occur or obligation to be fulfilled.

Any statements made in the PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT involving estimates or matters of opinion, whether or not so expressly stated, are set forth as such and not as representations of fact, and no representation is made that any of the estimates or matters of opinion will be realized. Neither the PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT nor any statement which may have been made orally or in writing is to be construed as a contract with the owners of the Bonds.

The references, excerpts and summaries contained herein of certain provisions of the laws of the State of Tennessee, and any documents referred to herein, do not purport to be complete statements of the provisions of such laws or documents, and reference should be made to the complete provisions thereof for a full and complete statement of all matters of fact relating to the Bonds, the security for the payment of the Bonds, and the rights of the holders thereof.

The PRELIMINARY OFFICIAL STATEMENT and OFFICIAL STATEMENT, in final form, and any advertisement of the Bonds, is not to be construed as a contract or agreement between the City and the purchasers of any of the Bonds. Any statements or information printed in this PRELIMINARY OFFICIAL STATEMENT or the OFFICIAL STATEMENT, in final form, involving matters of opinions or of estimates, whether or not expressly so identified, is intended merely as such and not as representation of fact.

The City has deemed this PRELIMINARY OFFICIAL STATEMENT as “final” as of its date within the meaning of Rule 15c2-12.

(The remainder of this page left blank intentionally.)

CERTIFICATION OF ISSUER

On behalf of the City, we hereby certify that to the best of our knowledge and belief, the information contained herein as of this date is true and correct in all material respects, and does not contain an untrue statement of material fact or omit to state a material fact required to be stated where necessary to make the statement made, in light of the circumstance under which they were made, not misleading.

/s/ Warren L. Gooch
Mayor

ATTEST:

/s/ Beth Hickman
City Clerk

FORM OF LEGAL OPINION

LAW OFFICES OF
BASS, BERRY & SIMS PLC
900 SOUTH GAY STREET, SUITE 1700
KNOXVILLE, TENNESSEE 37902

Ladies and Gentlemen:

We have acted as bond counsel in connection with the issuance by the City of Oak Ridge, Tennessee (the "Issuer") of the $28,295,000 General Obligation Bonds, Series 2019 (the "Bonds") dated September 13, 2019. We have examined the law and such certified proceedings and other papers as we deemed necessary to render this opinion.

As to questions of fact material to our opinion, we have relied upon the certified proceedings and other certifications of public officials furnished to us without undertaking to verify such facts by independent investigation.

Based on our examination, we are of the opinion, as of the date hereof, as follows:

1. The Bonds have been duly authorized, executed and issued in accordance with the constitution and laws of the State of Tennessee and constitute valid and binding obligations of the Issuer.

2. The resolution of the City Council of the Issuer authorizing the Bonds has been duly and lawfully adopted, is in full force and effect and is a valid and binding agreement of the Issuer enforceable in accordance with its terms.

3. The Bonds constitute general obligations of the Issuer to which the Issuer has validly and irrevocably pledged its full faith and credit. The principal of and interest on the Bonds are payable from unlimited ad valorem taxes to be levied on all taxable property within the corporate limits of the Issuer. The respective portions of the Bonds (based on an allocation of Bonds and Bond proceeds as determined by the Issuer) that refinance improvements to the electric, water and sewer systems of the Municipality shall be additionally payable from but not secured by the respective revenues of such systems.

4. Interest on the Bonds is excluded from gross income for federal income tax purposes and is not an item of tax preference for purposes of the federal alternative minimum tax. The opinion set forth in the preceding sentence is subject to the condition that the Issuer comply with all requirements of the Internal Revenue Code of 1986, as amended, that must be satisfied subsequent to the issuance of the Bonds in order that interest thereon be, or continue to be, excluded from gross income for federal income tax purposes. Failure to comply with certain of such requirements could cause interest on the Bonds to be so included in gross income retroactive to the date of issuance of the Bonds. The Issuer has covenanted to comply with all such requirements. Except as set forth in this Paragraph 4, we express no opinion regarding the federal tax consequences arising with respect to the Bonds.

5. Under existing law, the Bonds and the income therefrom are exempt from all present state, county and municipal taxes in Tennessee except (a) Tennessee excise taxes on all or a portion of the interest on any of the Bonds during the period such Bonds are held or beneficially owned by any organization or entity, other than a sole proprietorship or general partnership, doing business in the State of Tennessee, and (b) Tennessee franchise taxes by reason of the inclusion of the book value of the Bonds in the Tennessee franchise tax base of any organization or entity, other than a sole proprietorship or general partnership doing business in the State of Tennessee.

It is to be understood that the rights of the owners of the Bonds and the enforceability of the Bonds and the resolutions authorizing the Bonds may be subject to bankruptcy, insolvency, reorganization, moratorium and other similar laws affecting creditors' rights heretofore or hereafter enacted and that their enforcement may be subject to the exercise of judicial discretion in accordance with general principles of equity.

We express no opinion herein as to the accuracy, adequacy or completeness of the Official Statement relating to the Bonds.

This opinion is given as of the date hereof, and we assume no obligation to update or supplement this opinion to reflect any facts or circumstances that may hereafter come to our attention or any changes in law that may hereafter occur.

Yours truly,

26889530.2

APPENDIX B

SUPPLEMENTAL INFORMATION STATEMENT

GENERAL INFORMATION

LOCATION

The City of Oak Ridge, Tennessee (the "City") is located in the eastern portion of the scenic Tennessee River Valley between the Cumberland Mountains and the Southern Appalachians. Most of Oak Ridge is contained in a southern portion of Anderson County (the "County"). It is approximately 22 miles northwest of Knoxville. Scott, Campbell and Union Counties all border Anderson County to the north. Knox County borders Anderson County to the east. Morgan and Roane Counties border Anderson County to the west.

A portion of the City of Oak Ridge is also located in Roane County. This portion includes facilities run by the U.S. Department of Energy (the "DOE"): the Oak Ridge National Laboratory (the "ORNL") and the Y-12 National Security Complex (the "Y-12"). These facilities were built during World War II and produced uranium 235 for the first atomic bomb. The project was known as the "The Manhattan Project"

The City has considerable acreage of meadow and wooded hills within the 18 square miles of its residential and commercial area. Atlanta, Chattanooga, Nashville, Louisville, Lexington and Asheville are with 200 miles, connected by interstate highways. The Great Smoky Mountain National Park, the most visited of all the national parks, is within a 90-minute drive.

GENERAL

The City is part of the Knoxville Metropolitan Statistical Area (the "MSA") that had a population of 837,571 according to the 2010 US Census. The MSA includes Knox, Anderson, Blount, Campbell, Grainger, Loudon, Morgan, Roane and Union Counties.

The City is also part of the Knoxville-Sevierville-Harriman Combined Statistical Area (the "CSA"). According to the 2010 Census, the CSA had a population of 1,056,442. The CSA includes Roane, Anderson, Blount, Knox, Loudon, Union, Grainger, Hamblen, Jefferson, Campbell, Cocke and Sevier Counties. The City of Knoxville is the largest city in the CSA with a population of 178,874 according to the 2010 Census. The population of Anderson County is estimated to be 75,129 persons per the U.S. Bureau of the Census in 2010. The population of the City of Oak Ridge in 2010, according to the U.S. Bureau of the Census, was 29,330.

TRANSPORTATION

The City and County have access to several transportation facilities. Four state highways, Route 95, 61, 58, and 62, intersect in the County, and access to Interstates 75 and 40 is also available. The County is served by the CSX Railroad, Norfolk Southern Railroad, and L & N Railroad, bus lines and numerous truck lines.

Commercial air service is provided by McGhee Tyson Airport, a major commercial and freight air terminal at Alcoa, Tennessee about 25 miles away. The nearest general aviation airport is located at Jacksboro, Tennessee, approximately 15 miles away from the County. There is also an airstrip at Oliver Springs, 5 miles outside Oak Ridge. The City has proposed a new general aviation airport in the East Tennessee Technology Park in Oak Ridge (please see "RECENT DEVELOPMENTS" for more information).

Oak Ridge borders the Clinch River's navigable waterway for 42 miles along the shores of Watts Bar and Melton Hill Lakes. These TVA waterways connect to the Tennessee River. Channelization of the Tennessee River to a 9-foot minimum navigable depth from its junction with the Ohio River at Paducah, Kentucky to Knoxville, Tennessee gives the County the benefits of year round, low cost water transportation and a port on the nation's 10,000 mile-inland waterway system. This system formed largely by the Mississippi River and its tributaries, effectively links the County with the Great Lakes to the north and the Gulf of Mexico to the south.

EDUCATION

There are three school systems located within the County. *Anderson County School System* has a very extensive school system made up of 17 schools countywide. Anderson County had a fall 2017 enrollment of about 6,307 students for 422 teachers. The *Oak Ridge City School System* operates seven schools covering pre-school through 12. The fall 2017 enrollment was about 4,441 students with 310 teachers. In addition to the City system, a parochial school also exists within the County covering grades one through eight with an enrollment of approximately 200 students. The *Clinton City School System* operates three elementary schools. The fall 2017 enrollment was about 940 students with 61 teachers.

Source: Tennessee Department of Education.

Oak Ridge Associated Universities (the "ORAU") is a consortium of 100 colleges and universities and a contractor for the DOE located in Oak Ridge, Tennessee. Founded in 1946, ORAU works with its member institutions that include the University of Tennessee and its satellite campuses. The purposes are to help their students and faculty gain access to federal research facilities throughout the country. ORAU has contracted with the U.S. Nuclear Regulatory Commission since 1992 for radiation training and managing the Radiation Emergency Center / Training Site in Oak Ridge and the Technical Training Center in Chattanooga. Through the Oak Ridge Institute for Science and Education, the DOE facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. A pioneer in technology transfer, with historic contributions in nuclear medicine and health physics, ORAU today conducts specialized training in nuclear related areas of energy, health and the environment. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science - and engineering - related disciplines. ORAU currently does about $100 million in work annually that falls outside the contract for managing the Oak Ridge Institute for Science and Education.

Source: Oak Ridge Associated Universities, University of Tennessee at Chattanooga.

University of Tennessee, Knoxville (the "UT" or "UTK"). UTK is one of the oldest land-grant universities in the nation. There are over 230 buildings on a 600-acre campus. Blount College, UTK's forerunner, was established in Knoxville in 1794, two years before Tennessee became a state. With a fall 2018 enrollment of 28,894 students, UTK is the largest campus in the University of Tennessee System (the "System"). According to the U.S. News and World Report, UTK ranked 52nd among the nation's best public universities in 2019.

The System is a statewide institution governed by a 26-member Board of Trustees appointed by the governor of Tennessee. Institutions of the System are UTK, UT Health Science Center in Memphis, UT Chattanooga, UT Martin, UT Space Institute in Tullahoma, and UT Institute for Public Service in Knoxville. In addition to the primary campus, the Agricultural Campus houses the UT Institute of Agriculture, a statewide administrative unit that includes the College of Veterinary Medicine, the College of Agricultural Sciences and Natural Resources, the Agricultural Extension Service and the Agricultural Experiment Stations.

UTK is a major research institution, attracting more than $130 million in externally sponsored programs annually. The Division of Aeromedical Services is one of the country's most respected and comprehensive aeromedical programs. UTK is a co-manager with UT-Battelle, LLC of the nearby Oak Ridge National Lab (the "ORNL"). UT-Battelle, LLC was established in 2000 as a private not-for-profit company for the sole purpose of managing and operating the ORNL for the U.S. Department of Energy (the "DOE"). Formed as a 50-50 limited liability partnership between the UTK and Battelle Memorial Institute, UT-Battelle, LLC is the legal entity responsible for delivering the DOE's research mission at ORNL. Faculty and students experience unparalleled research and learning opportunities at the DOE's largest science and energy lab.

UTK conducts externally-funded research totaling more than $300 million annually, including some $17 million annually in research sponsored by ORNL. Areas of joint research with ORNL include the Bioenergy Science Center's work on cellulosic ethanol; the Center for Computational Sciences' partnership with the National Science Foundation; and the Science Alliance, with divisions in biological, chemical, physical, and mathematical/computer science. UT/ORNL Joint Institutes and Centers include Biological Sciences, Computational Sciences, Neutron Sciences, Heavy Ion Research and the National Transportation Center.

To meet the growing demand for pharmacists, a second UT College of Pharmacy building opened on the Knoxville campus in fall 2007 and enrolled an additional 225 students. The three-story building is adjacent to the Health Science Center's Graduate School of Medicine. The UT College of Pharmacy will extend its reach across the state by adding Clinical Education Centers in Chattanooga, Jackson, Kingsport and Nashville.

The System and its statewide campuses bring in over $2 billion in annual income to the State and support more than 50,000 jobs. UTK also generates an estimated $237.6 million in state and local tax revenue per year. Students and visitors attending athletic events at each campus spent approximately $348 million, accounting for $147.3 million in income and 4,879 jobs.

Source: University of Tennessee, UT-Battelle and the News Sentinel.

Roane State Community College (the "RSCC"). RSCC, which began operation in 1971 in Harriman, Tennessee, is a two-year higher education institution which serves a fifteen county area. Fall 2017 enrollment was 5,776 students. Designed for students who plan to transfer to senior institutions, RSCC academic transfer curricula include two years of instruction in the humanities, mathematics, natural sciences, and social sciences.

RSCC's 138-acre main campus is centrally located in Roane County where a wide variety of programs are offered. RSCC has nine locations across East Tennessee – the Roane County flagship campus; an Oak Ridge campus; campuses in Campbell, Cumberland, Fentress, Loudon, Morgan and Scott Counties; and a center for health science education in west Knoxville.

Source: Roane State Community College.

The Tennessee College of Applied Technology at Harriman. The Tennessee College of Applied Technology at Harriman (the "TCAT-H") is part of a statewide system of 26 vocational-technical schools. The TCAT-H meets a Tennessee mandate that no resident is more than 50 miles from a vocational-technical school. The institution's primary purpose is to meet the occupational and technical training needs of the citizens including employees of existing and prospective businesses and industries in the region. The TCAT-H serves the eastern region of the state including Anderson, Loudon, Meigs, Morgan, Rhea, and Roane Counties. The TCAT-H began operations in 1970, and the main campus is located in Roane County. Fall 2016 enrollment was 513 students.

Source: Tennessee College of Applied Technology at Harriman.

MEDICAL

Oak Ridge residents have access to two hospitals, Methodist Medical Center and Roane Medical Center, which are both affiliated with Covenant Health. Covenant Health, headquartered in nearby Knoxville, has nine acute-care hospitals, inpatient and outpatient cancer care, behavioral and rehabilitation centers, home health, outpatient surgery and diagnostic centers, physician offices and more. More than 10,000 people are employed by Covenant Health and its member organizations, with nearly 1,500 affiliated physicians. Covenant Health is a comprehensive health system established in 1996.

Methodist Medical Center of Oak Ridge, a 301-bed acute care facility in Oak Ridge, is one of the first hospitals in East Tennessee to offer cutting-edge treatments that benefit people with life-threatening aneurysms; severely damaged knee, hip and shoulder joints; sudden heart failure; and nonhealing wounds. The hospital offers over 30 specialties, from open heart to neurosurgery and boasts one of the highest percentages of board certified physicians in the area. It is a full-service regional medical facility. Methodist Medical Center dates back to 1942 and became part of Covenant Health in 1996.

Source: Covenant Health and Methodist Medical Center.

Roane Medical Center is a 105-bed facility located in Harriman. There is a large medical staff of about 140 physicians and nurses. The facility provides a full array of inpatient and outpatient services, including a six-bed critical care unit with intensive/pulmonologist coverage, extensive imaging center including MRI, CT, nuclear imaging, and a Heart Care Center staffed by board certified physicians. The hospital also has a full service ER with 24-hour emergency medicine physician coverage. In 2008 it joined Covenant Health (based in Knoxville) as the sixth acute care facility in the health system.

Source: Roane Medical Center.

SCIENCE AND ENERGY

History

The City of Oak Ridge has a unique history. This area was selected by the United States government in 1942 as the location for its production plants for uranium 235, a component of the first atomic bomb. The original town site was built during World War II to house and furnish necessary facilities for the employees of the uranium plants. This project (known as the "Manhattan Project") was transferred to the Atomic Energy Commission in 1947, and the community was operated by contractors under the control of the Atomic Energy Commission. In 1955, the Atomic Energy Commission sold the homes and land to the residents. In 1959, the residents voted in favor of incorporation under a modified city manager-council form of government.

Since the 1940's, the nuclear industry has been the largest employer for the City of Oak Ridge and Roane and Anderson Counties when a weapons fabrication division was built by the U.S. Corps of Engineers. As part of the secret World War II "Manhattan Project", the early task of the plant was the separation of fissionable uranium-235 from the more stable uranium-238 by an electro-magnetic process to be utilized in the world's first atomic bomb. Some 80,000 workers were hired for emergency construction of the laboratories and offices on the 56,000-acre site. At the peak of production during the war, 23,000 employees kept the separation units working at a cost of $500 million for the entire project.

Today, the DOE occupies approximately 33,000 acres and almost 1,200 buildings within the Oak Ridge city limits, and employs over 13,000 in engineering, skilled and semi-skilled crafts, technical and administrative support. Since October 1999, DOE has contracted with the University of Tennessee and Battelle to manage the ORNL. UT-Battelle began management of the lab on June 1, 2000. Consolidated Nuclear Security, a Bechtel-led contractor team, took over management of the Y-12 nuclear weapons plant effective July 1, 2014 (BWXT, Inc. was the appointed contractor for the Y-12 Plant). DOE awarded its environmental cleanup contract to Bechtel Jacobs from 1997 to 2011. URS-CH2M Oak Ridge took over the cleanup contract in 2011.

Research

The extensive energy research and development conducted by private and public agencies make Oak Ridge one of the world's great research centers. The presence of the University of Tennessee, the ORNL, Oak Ridge Associated Universities and the Tennessee Valley Authority (the "TVA") makes Oak Ridge a prime location for research facilities, as well as technology-based and conventional manufacturing industries. Science is a worldwide business, and the facilities at DOE in Oak Ridge have attracted a large number of technical people and their families. ORNL campus also houses visiting scientists and researchers that come to work at the world-class facility in an $8.9 million Guest House (built in 2010) with 47 units.

<u>BioEnergy Sciences Center (the "BESC")</u>. BESC is one of only three sites in the country operated by one of the DOE's new bioenergy research centers. It opened in ORNL in 2007. BESC works to accelerate research in the development of cellulosic ethanol and other biofuels, and make biofuel production cost competitive on a national scale. The new site received $135 million in federal funding. The University of Tennessee serves as one of the academic partners, providing specialized instrumentation, plant breeding technologies and new microbe discovery. Energy crops like switchgrass, which can be grown on marginal crop land, can produce affordable, domestic

renewable fuel without raising food or feed costs. The BESC is dedicated to studying how to economically break down the cellulose in those sources to convert it into usable sugars for ethanol production.

Oak Ridge National Lab. ORNL is a multi-program science and technology laboratory managed for the DOE by UT-Battelle, LLC. Scientists and engineers at ORNL conduct basic and applied research and development to create scientific knowledge and technological solutions that strengthen the nation's leadership in key areas of science; increase the availability of clean, abundant energy; restore and protect the environment; and contribute to national security. ORNL also performs other work for DOE, including isotope production, information management, and technical program management, and provides research and technical assistance to other organizations. The laboratory is a program of DOE's Oak Ridge Field Office.

ORNL also boasts having the Spallation Neutron Source accelerator project (described below) and several supercomputers for scientific purposes. These unique projects bring about 3,000 scientists to visit each year for varying periods of time, and numerous small industries to be spun off from the experiments and findings. Each job created is expected to have an impact on housing, retail banking, automobile and transportation, hotels, restaurants, hospitals, and business services.

The world's most powerful neutron science project is the *Spallation Neutron Source* (the "SNS") at ORNL. The giant research complex, spread across 75 acres on Chestnut Ridge a couple of miles from the main ORNL campus, is the world's top source of neutrons for experiments. The SNS is an accelerator-based neutron source built in Roane County by DOE. The SNS provides the most intense pulsed neutron beams in the world for scientific research and industrial development. At a total cost of $1.4 billion, construction began in 1999 and was completed in 2006. In 2009, SNS reached full power when it set the world record in producing beam power three times more powerful than the previous world record. More neutrons are produced with a higher beam power.

Neutron-scattering research has a lot to do with everyday lives. For example, things like jets; credit cards; pocket calculators; compact discs, computer disks, and magnetic recording tapes; shatter-proof windshields; adjustable seats; and satellite weather information for forecasts have all been improved by neutron-scattering research. Neutron research also helps researchers improve materials used in high-temperature superconductors, powerful lightweight magnets, aluminum bridge decks, and stronger, lighter plastic products. The medical field will also be impacted with new drugs and medicines expected from experiments at the SNS.

ORNL is also completing a series of upgrades at the *High Flux Isotope Reactor*. This ORNL facility is sometimes referred to as the lab's "other" billion-dollar machine. It is the world's most powerful research reactor, and it is used to perform experiments similar to - but different from - those to be done at the Spallation Neutron Source.

ORNL's *Supercomputers* are housed in a 170,000-square-foot facility that includes 449 staff and 40,000 square feet of space for computer systems and data storage. The facility will house or has housed five supercomputers - the "Summit", currently ranked the fastest supercomputer in the world as of June 2018, the new exascale computer "Frontier" that has yet to be completed, the "Titan", the "Kraken", and the now dismantled "Jaguar". "Summit", built by IBM, is the third computer at Oak Ridge to be ranked number one. The "Titan" was the world's fastest at its

November 2012 debut, and the "Jaguar" while in operation held the title twice in November 2009 and June 2010. The machines work on breakthrough discoveries in biology, fusion energy, climate prediction, nanoscience and many other fields that will fundamentally change both science and its impact across society.

The "Summit" supercomputer cost an estimated $200 million to build and is used for a wide range of scientific applications including combustion science, climate change, energy storage and nuclear power. "Summit" also serves as an artificial intelligence and deep learning computer, capable of analyzing massive amounts of data and automating critical steps of the discovery process.

The "Summit" was operational in 2018 and is eight times faster than the "Titan". "Summit" is able to make over 140 quadrillion calculations per second, measured as 140 petaflops. Due to all the energy and heat produced by the calculations, "Summit" produces more heat per square centimeter than tiles on the bottom of a spaceship re-entering Earth's atmosphere. Therefore, "Summit" is cooled by water pumped through plates that sit on top of the computer's chips. In all, "Summit" uses up to 15 megawatts, equivalent to the power 9,000 to 18,000 homes would consume, depending on the time of day. At peak, "Titan" uses about 9 megawatts.

The uncompleted "Frontier" exascale computer ORNL hopes to have built by 2021 will be 50 times faster than the "Summit". This exascale computer will replace the "Titan".

The National Oceanic and Atmospheric Administration (the "NOAA") sponsors the "Titan", funded with Recovery Act money. NOAA awarded Cray and ORNL a $47 million contract to provide the supercomputer "Titan" to work on climate research. The Cray supercomputer, the "Titan", was online in late 2012 after several years of development to replace the "Jaguar" supercomputer at ORNL. When the "Titan" was listed as the world's fastest computer in late 2012 it marked the fourth time a computer from ORNL has achieved that distinction since 1953. The "Titan's" purpose is to support research in energy, climate change, efficient engines and materials science. "Titan" is capable of a peak performance of about 27-petaflops. That speed is about 10 times the capability of the first "Jaguar", which at one time was the world's fastest computer. The total cost of the "Titan" was estimated to be about $100 million, but about $20 million was saved by reusing much of the "Jaguar" structure.

The DOE and the National Science Foundation (the "NSF") sponsor the supercomputer "Kraken" which came online in 2009. The NSF awarded the University of Tennessee (the "UT"), ORNL and other institutions a $65 million grant to build "Kraken" to work on a range of scientific challenges, such as climate change and new medicines. UT's "Kraken" is housed with the ORNL's "Titan".

Through interagency agreements, DOE's Oak Ridge facilities have launched a highly successful "work for others" program. Local firms contract with numerous federal agencies to provide services and products. The value of these contracts have grown from approximately $50 million in 1983 to $270 million in recent years.

Tennessee Valley Authority (the "TVA"). TVA provides support, technology, expertise, and financial resources to existing businesses and industries in its service area, including Knox County, to help them grow and be more efficient and profitable. These resources include technical assistance, low-interest loans, and other tools needed by businesses for successful operation.

University of Tennessee. The University of Tennessee's flagship campus in Knoxville is home to a wide array of vigorous programs doing research on issues vital to the community, the state, the nation, and the world. The university has collaborative relationships with public and private agencies including ORNL, Battelle Memorial Institute (forming UT-Battelle), St. Jude Children's Research Hospital, the Memphis Bioworks Foundation, and the Boston-Baskin Cancer group (forming UT Cancer Institute).

National Institute for Mathematical and Biological Synthesis (NIMBioS) is a first-of-its-kind institute dedicated to combining mathematics and biology to solve problems in both scientific fields. The center was funded by a 2008 $16 million award from the National Science Foundation and is located at the University of Tennessee. A unique aspect of NIMBioS will be its partnership with the Great Smoky Mountains National Park. The park and its Twin Creeks Science Center play a key role in the institute's work, with the park serving as a testing ground for many of the ideas that come from NIMBioS. Partners in NIMBioS include the US Department of Agriculture and the US Department of Homeland Security, IBM and ESRI, a developer of software and technology related to geographic information systems. It draws over 600 researchers each year to Knoxville.

Source: City of Oak Ridge, ORNL, Y-12 National Security Complex and the Knoxville News Sentinel.

Nuclear

Integrated Facilities Disposition Program. The DOE has approved a massive $18 billion Oak Ridge cleanup campaign. The cleanup program would demolish more than 400 contaminated building at ORNL and the Y-12 nuclear weapons plan. The program would also focus on mitigating polluted ground water at the sites and other actions to reduce environmental damage. The work began in 2011 and could take up to 45 years to complete.

In 2015, $424 million was set aside for the environmental cleanup activities in Oak Ridge.

The 2009 stimulus act passed by Congress gave the DOE Oak Ridge's office $1.9 billion for environmental cleanup projects. The stimulus money sent directly for projects in Oak Ridge, $1.2 billion, saved or created about 3,863 new jobs through sub-contracting construction-type jobs as well as technical and specialty positions associated with handling radioactive materials and evaluating environmental risks. The clean-up money was divided among four sites: $239 million to ORNL, $292 million to Y-12, $144 million to East Tennessee Technology Park and $80 million to the Transuranic Waste Processing Center. At Y-12 alone, seven cleanup projects created 2,000 jobs, demolished about 150,000 square feet of old buildings and got rid of about 74,000 cubic meters of waste.

A former gaseous diffusion building was torn down by the DOE as part of its program to convert the former K-25 site for use by private industry. The K-25 Building was part of a series of mammoth buildings to enrich uranium for weapons and fuel for nuclear power plants. The building went into operation in 1951 and was shut down in 1987. The building in size equated to 6 1/2 football fields under one roof. Demolition was completed at the end of 2007. The gigantic K-25 building, a mile-long U-shaped structure that processed the uranium in WWII, was demolished in

2010.

Y-12 National Security Complex. The Y-12 National Security Complex is another large federal plant in Oak Ridge. The ongoing functions of the Y-12 plant are to support the DOE's weapons design labs, recover U-235 from spent nuclear weapons and provide support to other government agencies.

Y-12 has been undergoing a major modernization program. Y-12 is a key facility in the U.S. Nuclear Weapons Complex and is responsible for ensuring the safety, reliability, and security of the nuclear weapons stockpile and serves as the nation's primary repository of highly enriched uranium. Y-12 houses the country's stockpile of bomb-grade uranium, builds uranium bomb parts and dismantles nuclear weapon systems as needed to support a much smaller nuclear arsenal. The National Nuclear Security Administration (the "NNSA") is planning to transform the nuclear weapons complex to be smaller, more efficient and more cost effective. The goal is by 2020 to have only two facilities where there used to be 700 buildings.

Contractors have already demolished dozens of World War II era buildings at Y-12, about a million square feet since 2001, to reduce the surveillance and maintenance costs, and to support the new programs. Some new office buildings already have been built, including the Jack Case Center that holds about a third of the workforce, or around 1,500 employees. This $58 million, 420,000-square-foot office building was completed in the summer of 2007. A new 137,000-square-foot visitor's center and auditorium, for about $18 million, was also completed in 2007.

Outfall 200, a water treatment plant designed to capture Y-12 mercury runoff, began site preparation in 2017 and cost $1.4 million. A four-year construction period for the plant will begin in 2019 with a projected cost of $92 million. Once operational, the treatment facility will have a treatment capacity of 3,000 gallons of water per minute and have a 2-million-gallon storage capacity.

The $549 million *Highly Enriched Uranium Materials Facility* at Y-12, a storage complex for weapons-grade uranium, was completed in late 2008. This storage facility replaced multiple aging facilities and allows for storage of its uranium stocks in one central location that represents maximized physical security with minimal vulnerabilities and operating costs. It is designed to protect the large cache of U-235 against any type of terrorist assault. The facility is currently over 85% storage capacity of bomb-grade uranium.

The *Uranium Processing Facility* (the "UPF") Project, cornerstone of Y-12's new modernization strategy, will replace current enriched uranium and other processing operations. It will replace Y-12's main production center and cost $6.5 billion. In 2018, the last approval from the DOE was given to build the final three buildings that will make up the UPF. The $6.5 billion project will be the largest construction project the state has ever seen, and the project is expected to create more than 2,000 jobs during peak construction. The design phase began in 2006, construction began in 2009, and the facility should be in operation by 2025. Construction of the UPF will accelerate consolidation of aging facilities, bringing production operations currently housed in multiple buildings together, reducing the size of the plant's highest security area by 90 percent, improving the overall security posture, making the plant more secure and saving millions of dollars in annual operating costs. See "RECENT DEVELOPMENTS" for more information.

Source: City of Oak Ridge, ORNL, Y-12 National Security Complex and the Knoxville News Sentinel.

POWER PRODUCTION

Bull Run Fossil Plant. TVA's Bull Run Fossil Plant is located on Bull Run Creek near Oak Ridge in Anderson County. It is the only single-generator coal-fired power plant in the TVA system. When the generator went into operation in 1967, it was the largest in the world in the volume of steam produced. Bull Run has a single coal-fired generating unit. The winter net dependable generating capacity is about 870 megawatts. The plant consumes about 7,300 tons of coal a day. Bull Run's boiler, one of the largest in the United States, contains about 300 miles of tubes.

Electricity is generated at Bull Run by the process of heating water in a boiler to produce steam. Under extremely high pressure, the steam flows into a turbine that spins a generator to make electricity. Bull Run generates more than six billion kilowatt-hours of electricity a year, enough to supply about 430,000 homes. It has been ranked the most-efficient coal-fired plant in the nation 13 times and is consistently in the top five each year.

To reduce sulfur dioxide (SO_2) emissions, Bull Run burns a blend of low-sulfur coal. Construction of a scrubber to further reduce SO_2 began in 2005 completed in 2009. To reduce nitrogen oxides (NO_X), the plant uses a selective catalytic reduction system as well as combustion and boiler optimization controls. In 2010 TVA had spent about $5.7 billion on emission controls at its fossil-fuel plants to ensure that this power supply is generated as cleanly as possible, consistent with efficiency.

See "RECENT DEVELOPMENTS" on TVA's plan to shut down Bull Run Steam Plant by 2023.

Kingston Fossil Plant. TVA's Kingston Fossil Plant is located on Watts Bar Reservoir on the Tennessee River near Kingston in Roane County. At the time it was finished in 1955, Kingston was the largest coal-burning power plant in the world. Kingston has nine coal-fired generating units. The winter net dependable generating capacity is 1,456 megawatts. The plant consumes some 14,000 tons of coal a day.

Electricity is produced at each of Kingston's nine coal-fired units by the process of heating water in a boiler to produce steam. Under extremely high pressure, the steam flows into a turbine that spins a generator to make electricity. Kingston generates about 10 billion kilowatt-hours of electricity a year, enough to supply more than 700,000 homes. To reduce sulfur dioxide (SO_2) emissions, all nine units use a blend of low-sulfur coal. Scrubbers are being added to the units to further reduce SO_2. This project cost about $500 million. TVA spent about $6 billion on emissions controls at its fossil-fuel plants to ensure that this power supply is generated as cleanly as possible, consistent with efficiency.

Source: Tennessee Valley Authority.

Norris Dam. TVA's Norris Dam, the first dam TVA built, is located in Anderson County on the Clinch River. Construction of the Dam began in 1933, just a few months after the creation of TVA, and was completed in 1936. Norris Dam is 265 feet high and stretches 1,860 feet across the Clinch River. The generating capacity of Norris is 131,400 kilowatts of electricity. In 2005 TVA opened a new visitor center at the dam. Visitors can learn about the history of Norris, hydropower operations, and TVA's management of the river system.

Source: Tennessee Valley Authority.

MANUFACTURING AND COMMERCE

A dedicated effort by the DOE to transfer technology to the private sector that was heretofore held as proprietary to the U.S. Government alone has led to an unparalleled growth in new business development in the area. Licenses have been granted to existing firms as well as start-up firms to manufacture for commercial use products using state-of-the-art technology in robotics, ceramics and nuclear medicine.

Currently, there are several industrial parks in the County which were developed by the County, and a few parks which were developed by private firms. The number of tenants, the diversity of their products and total employment in these parks point to a stable and thriving economic sector. The *Municipal Industrial Park* was the first park to be developed by the County and has been fully privatized for some years.

The activities undertaken by these firms include generalized and highly specific tooling and machining operations; design and manufacture of instrumentation and measurement devices; design and fabrication of metal bellows, piping and damping systems; custom fabrication of aluminum and zinc die cast parts, design and manufacture of food packaging systems; super-conducting magnet design and fabrication; and decontamination, restoration and recycling of nuclear equipment components and materials.

Oak Ridge completed building the infrastructure for the 118-acre *Bethel Valley Industrial Park* in 1989. All of the park's 28 sites, totaling approximately 80 acres, have been sold to industries.

The *Clinch River Industrial Park* is a 100-acre site that has been fully privatized since 1990. The Scientific Ecology Group, Inc. and International Technology Corporation (IT) occupy the 8 lots within this park resulting in employment of approximately 1,300 individuals. Both firms operate decontamination waste facilities. The *Clinton / I-75 Industrial Park* has about 40 acres near Interstate 75.

Commerce Park, a 300-acre fully planned industrial/research and development park developed by Lockheed Martin is strategically located as the northern anchor to the Technology Corridor. The Technical Center is a 262,000-square foot office complex consisting of five structures, all of which are fully leased.

Located on the west side of Oak Ridge, *The East Tennessee Technology Park* (the "ETTP") is a compilation of resource-rich industrial facilities which have their beginnings in the Manhattan Project during World War II. The site's original mission was to enrich uranium in the uranium 235 isotope for use in atomic weapons and subsequently for use in the commercial nuclear power industry. The plant was permanently shut down in 1987 and in 1996 reindustrialization went into effect with efforts focusing on restoration of the environment, decontamination and decommissioning of the facilities, and management of legacy wastes. The biggest task includes dismantlement and demolition of the K-25 building – a mile-long, U-shaped structure that was built to process uranium.

The ETTP site also serves as the test location of the next-generation enrichment technology under the U.S. Enrichment Corporation's American Centrifuge Program. This technology will allow the United States to maintain energy security through use of state-of-the-art materials, control systems and manufacturing processes to enrich uranium. Centrifuges are presently tested at the site for eventual use in a full-scale American Centrifuge Plant by the end of the decade.

The goal is to create a brownfields industrial park known as *Heritage Center* under coordination of the Community Reuse Organization of East Tennessee. Also, near the ETTP site is Horizon Center, which includes more than 1,000 acres of pristine greenfield land that is available for private industrial use.

The Horizon Center is a greenfield industrial park with more than 1,000 acres ready for immediate development. Horizon Center is a designed to provide building sites and amenities desired by high-tech companies while still preserving the area's scenic beauty. There is one corporate headquarters located in the park, Carbon Fiber Technology, which opened in 2013.

The *Valley Industrial Park*, a 90-acre site has more than 20 industrial facilities located within the Park. The activities undertaken by firms in this park include development and manufacturing of robotics devices; development of coating materials; manufacturing of security devices; integrated information management services; manufacturing of precision measuring devices; tooling and machining operations; rolling and fabrication of metal sheet products; and a waste management facility. See “RECENT DEVELOPMENTS” for more information.

Source: Knoxville News Sentinel.

[balance of page left blank]

Listed below are the larger employers located in the County:

Major Employers in Anderson County[1]

Name	Product	Employment
Y-12 National Security Complex[2]	National Security	8,000
Oak Ridge National Lab[3]	National Security	4,387
UCOR	Environmental Management	1,700
Anderson County Schools	Education	1,050
SiTel	Customer Service Centers	1,001
Oak Ridge Associated Universities	Research & Development	1,000
Methodist Medical Center	Health Care	998
SamLip (SL) Tennessee	Manufacturing	950
Eagle Bend Manufacturing	Manufacturing	850
Aisin Automotive Casting	Automotive Parts	820
Oak Ridge Schools	Education	689
Anderson County	Government	507
Science Applications, Int'l. Corp.	IT Research & Engineering	500
ORNL Federal Credit Union	Finance	475
Caristar Group	Manufacturing	400
Appalachian Underwriters	Insurance	300

[1] Contains employers located in both the counties the City of Oak Ridge lies in.
[2] Contains contractors, subcontractors and federal employees of Y-12 National Security Complex.
[3] ORNL is a joint venture of University of Tennessee and Battelle.
Source: Knoxville News Sentinel, Anderson County Audit and the City of Oak Ridge – 2018.

[balance of page left blank]

EMPLOYMENT INFORMATION

For the month of May 2019, the unemployment rate for Oak Ridge stood at 3.0% with 14,230 persons employed out of a labor force of 14,670. For the month of May 2019, the unemployment rate for Anderson County stood at 2.8% with 34,280 persons employed out of a labor force of 35,280.

The Knoxville MSA's unemployment for May 2019 was at 2.9% with 426,640 persons employed out of a labor force of 439,420. As of May 2019, the unemployment rate in the Knoxville-Sevierville-Morristown CSA stood at 2.9%, representing 547,970 persons employed out of a workforce of 564,600.

Unemployment

	Annual Average **2014**	Annual Average **2015**	Annual Average **2016**	Annual Average **2017**	Annual Average **2018**
National	6.2%	5.3%	4.9%	4.4%	3.6%
Tennessee	6.6%	5.6%	4.7%	3.7%	3.3%
Oak Ridge	**6.2%**	**5.3%**	**4.6%**	**3.6%**	**3.0%**
Index vs. National	100	100	94	82	83
Index vs. State	94	95	98	97	91
Anderson County	**6.8%**	**5.8%**	**4.9%**	**3.9%**	**3.2%**
Index vs. National	110	109	100	89	89
Index vs. State	103	104	104	105	97
Knoxville MSA	**6.1%**	**5.2%**	**4.4%**	**3.5%**	**2.9%**
Index vs. National	98	98	90	80	81
Index vs. State	92	93	94	95	88
Knoxville-Sevierville-Morristown CSA	**6.4%**	**5.5%**	**4.6%**	**3.7%**	**2.9%**
Index vs. National	103	104	94	84	81
Index vs. State	97	98	98	100	88

Source: Tennessee Department of Employment Security, CPS Labor Force Estimates Summary.

ECONOMIC DATA

Per Capita Personal Income

	2013	2014	2015	2016	2017
National	$44,826	$47,025	$48,940	$49,831	$51,640
Tennessee	$39,549	$40,977	$42,810	$43,932	$45,517
Anderson County	**$36,252**	**$37,534**	**$38,686**	**$39,883**	**$40,847**
Index vs. National	81	80	79	80	79
Index vs. State	92	92	90	91	90
Knoxville MSA	**$38,267**	**$39,816**	**$41,611**	**$42,547**	**$43,903**
Index vs. National	85	85	85	85	85
Index vs. State	97	97	97	97	96
Knoxville-Sevierville-Harriman CSA	**$36,786**	**$38,233**	**$39,953**	**$40,847**	**$42,102**
Index vs. National	82	81	82	82	82
Index vs. State	93	93	93	93	92

Source: U.S. Department of Commerce, Bureau of Economic Analysis.

Social and Economic Characteristics

	National	Tennessee	Anderson County	Clinton	Oak Ridge
Median Value Owner Occupied Housing	$184,700	$146,000	$132,300	$150,000	$149,900
% High School Graduates or Higher Persons 25 Years Old and Older	87.0%	86.0%	85.5%	86.1%	92.4%
% Persons with Income Below Poverty Level	12.3%	15.0%	15.3%	15.0%	15.9%
Median Household Income	$55,322	$46,574	$44,241	$41,078	$55,322

Source: U.S. Census Bureau State & County QuickFacts - 2017.

TOURISM AND RECREATION

American Museum of Science and Energy. Drawing thousands of visitors from across the United States and abroad are the American Museum of Science and Energy and the Oak Ridge Graphite Reactor. More than 225,000 persons visit the Museum annually. The museum opened in 1949 in an old wartime cafeteria of the ORNL. Its guided tours took visitors through the peaceful uses of atomic energy. The present facility, opened in 1975, continues to provide the general public with energy information. The museum includes historical photographs, documents and artifacts explaining the story of Oak Ridge and the Manhattan Project. There is an Exploration Station that offers self-directed activities which explore light and color, sound, problem-solving, static electricity, robotics, vision and more. It also includes exhibits on Y-12 and National Defense, the Earth's energy resources and nuclear reactors and energy.

The X-10 Graphite Reactor at ORNL, formerly known as the Clinton Pile and X-10 Pile, was the world's second artificial nuclear reactor and was the first reactor designed and built for continuous operation. The Graphite Reactor is open to the public and a National Historic Landmark. Also, an overlook display at the Oak Ridge Gaseous Diffusion Plant and facilities of the TVA is available for visitors.

Source: American Museum of Science and Energy.

Arboretum. The Arboretum is a project of the University of Tennessee Forest Resources Research and Education Center located in Oak Ridge. It generally hosts more than 30,000 visitors annually. This 250-acre research and education facility has over 2,500 native and exotic woody plant specimens that represent 800 species, varieties, and cultivars. The Arboretum serves as an outdoor classroom to university students in a variety of fields. It is also a place that provides a natural laboratory for research in plant uses, genetics and adaptability, insect and disease control, and the management of associated natural resources. The facility is recognized as an official Wildlife Observation Area and part of the National Watchable Wildlife Program by the Tennessee Wildlife Resources Agency. It is also recognized by the Holly Society of America as an official Holly test garden and the trails are part of the Tennessee Recreational Trail System.

Source: Forest Resources Research and Education Center.

Melton Hill Reservoir. TVA's Melton Hill Dam is located in Loudon County on the Clinch River. Melton Hill Reservoir extends almost 57 miles upstream from Melton Hill Dam to Norris Dam along the county lines of Loudon, Roane, Knox and Anderson Counties. Unlike other TVA reservoirs, Melton Hill is not used for flood control. But because it's used for power production, the level of the water in the reservoir fluctuates about four feet throughout the year. Melton Hill Reservoir has a nationally recognized rowing course and is a spring training site for collegiate teams from throughout the eastern United States. The reservoir has hosted a number of national championships. Melton Hill Reservoir extends the reach of barge traffic 38 miles up the Clinch River to Clinton, Tennessee, making the area attractive to industries that rely on this mode of transportation.

Source: Tennessee Valley Authority.

Parks nearby. Within 50 miles of the County are over a dozen lakeside resorts and State parks with cabins for rent, camping facilities, or both. The State parks - Cove Lake and Norris Dam in Campbell County, Big Ridge in Union County and Cumberland Mountain in Cumberland County - all offer cabins, camping and restaurants. Great Smoky Mountains National Park is a scenic seventy-five-minute drive south of the County.

Norris Reservoir. Norris Reservoir extends 73 miles up the Clinch River and 56 miles up the Powell from Norris Dam. It covers 5 counties: Anderson, Campbell, Union, Claiborne and Grainger Counties. Norris provides 809 miles of shoreline and 33,840 acres of water surface. It is the largest reservoir on a tributary of the Tennessee River. Norris Reservoir is an important component of the system TVA set up to reduce the risks of these disasters. The area around the Clinch River receives more than 45 inches of rain a year. In the past, floodwaters on the Clinch sometimes inundated areas hundreds of miles downstream. The recreational use of Norris Reservoir exceeds that of any other tributary reservoir in the TVA river system. Water sports at Norris include boating, water skiing, swimming, and excellent fishing.

Source: Tennessee Valley Authority.

Watts Bar Reservoir. TVA's Watts Bar Dam is located along the Meigs and Rhea County line on the Tennessee River. Watts Bar Reservoir extends 72.4 miles northeast from the Dam to Fort Loudoun Dam through Rhea, Meigs, Roane and Loudon Counties. Watts Bar, located about midway between Knoxville and Chattanooga, is one of nine TVA dams on the Tennessee River. The reservoir attracts millions of recreational visits each year for boating, fishing, swimming, camping, and other outdoor activities. Watts Bar also creates a slack-water channel for navigation more than 20 miles up the Clinch River and 12 miles up its tributary, the Emory. The lock at Watts Bar handles more than a million tons of cargo a year, and the reservoir plays an important role in flood control.

Source: Tennessee Valley Authority.

OTHER DEVELOPMENTS

Bull Run Steam Plant. In early 2019 TVA announced plans to shut down the Bull Run Steam Plant by 2023, along with the Paradise Fossil Plant in western Kentucky. TVA estimates the shutdown of the aging facilities, which would have required an estimated $1.3 billion in equipment and maintenance investments over an extended life of the plants, will save TVA $320 million.

The closing of the two plants will cost 167 jobs at Paradise and about 100 jobs at Bull Run, plus hundreds of other coal supply and related jobs in support of the plants. TVA has already shut down 32 of the 59 coal-fired units it once operated, cutting the share of its power generated by burning coal from nearly two-thirds of TVA's generation in the 1980s to less than 20 percent in fiscal 2018.

The Bull Run Fossil Plant, located on the Bull Run Creek near Oak Ridge, is the only single-generator coal-fired power plant in the TVA system and went into operation in 1967. The plant has a capacity of generating 881 megawatts of power, or enough to supply about 400,000 homes.

Dura-Line. Headquartered in Knoxville, Dura-Line is a manufacturer of conduit products for the telecommunications industry. In 2015 the company announced a new $25 million facility in Clinton that will create 70 new jobs.

General Aviation Airport. The establishment of a new general aviation airport located in the East Tennessee Technology Park in Oak Ridge on the Roane County side is currently under Federal Aviation Administration review. The Metropolitan Knoxville Airport Authority (the "MKAA") will own and manage the new facility. MKAA also owns and maintains the regional commercial air service facility, McGhee Tyson Airport in Alcoa, which is about 25 miles from the City. The East Tennessee Technology Park is located at the former K-25 site located at the ORNL. The estimated cost for the project as of January 2018 is between $40 - $45 million.

Integrated Facilities Disposition Program. The DOE approved a massive $14.5 billion Oak Ridge cleanup campaign. The cleanup program would demolish more than 400 contaminated building at ORNL and the Y-12 nuclear weapons plan. The program would also focus on mitigating polluted ground water at the sites and other actions to reduce environmental damage. The work began in 2011 and could take up to 25 years to complete.

The 2009 stimulus act passed by Congress gave the DOE Oak Ridge's office $1.9 billion for environmental cleanup projects. The stimulus money sent directly for projects in Oak Ridge, $1.2 billion, saved or created about 3,863 new jobs through sub-contracting construction-type jobs as well as technical and specialty positions associated with handling radioactive materials and evaluating environmental risks. The clean-up money was divided among four sites: $239 million to ORNL, $292 million to Y-12, $144 million to East Tennessee Technology Park and $80 million to the Transuranic Waste Processing Center. At Y-12 alone, seven cleanup projects created 2,000 jobs, demolished about 150,000 square feet of old buildings and got rid of about 74,000 cubic meters of waste.

Oak Ridge Associated Universities (the "ORAU"). In 2015 the ORAU received a five-year $7.3 million contract for radiation training for the U.S. Nuclear Regulatory Commission (the "NRC"). The new contract with NRC will include training at the contractor's Oak Ridge facilities, as well as development and maintenance of the NRC's Technical Training Center in Chattanooga.

Samlip Tennessee. An automotive parts supplier, Samlip Tennessee, invested $80.5 million and created 1,000 jobs to expand its Clinton facility in the Eagle Bend Industrial Park, which was operational in 2015. This 2015 expansion added 250,000 more square feet to its existing 500,000 square feet under roof. The company already has made $50 million in expansions and added 400 workers since 2010. The expansions are due to the new Volkswagen automotive plant north of Chattanooga. SL America Corporation has three facilities in North America and more than 6,000 employees world-wide.

Uranium Processing Facility (the "UPF"). The UPF project is being built through a series of seven sub-projects. Two have already been completed under budget and two are currently under construction. The salvage and accountability building, a process support facility and the UPF's 240,000 square-foot main process building were the last of seven sub-projects to receive DOE approval. The main process building will house the facility's primary stockpile maintenance function: recycling uranium from old nuclear warheads to maintain the current arsenal. The designs reached the 90 percent completion milestone in September 2017. The National Nuclear Security Administration (NNSA) said the Uranium Processing Facility will use a "safer, cleaner and more efficient" process to modernize uranium warheads. President Trump signed a $1.3 trillion government spending bill in March of 2018 that allocated $663 million for the facility's construction. The money allocated will help keep the construction on schedule for 2025 completion and under its $6.5 billion budget cap.

Source: City of Oak Ridge, the OakRidger, ORNL, Y-12 National Security Complex, www.oakridgeairport.org and the Knoxville News Sentinel.

CITY OF OAK RIDGE, TENNESSEE

SUMMARY OF BONDED INDEBTEDNESS

	PURPOSE	DUE DATE	INTEREST RATE(S)		OUTSTANDING AS OF JUNE 30, 2019
(4)	$7,500,000 General Obligation Loan, Series 1995	May 2022	Variable	(6)	$ 1,534,800
(2)	$3,000,000 Water & Sewer Revenue & Tax Loan, Series 2001	May 2022	Variable	(6)	655,000
	$7,049,360 Qualified Zone Academy Bonds, Series 2004	Nov 2020	Fixed		1,018,837
(8)	$11,000,000 General Obligation Loan, Series 2008	May 2027	Variable	(6)	10,530,000
	$27,285,000 General Obligation Refunding Bonds, Series 2009	Jun 2022	Fixed		6,540,000
(7)	$21,140,000 Local Gov. Public Imp. Bonds, Series VII-E-1	Jun 2036	Synthetic Fixed	(6)	21,140,000
(9)	$20,000,000 General Obligation Bonds, Series 2009B	Jun 2041	Fixed		19,300,000
(7)	$4,735,000 Local Gov. Public Imp. Bonds, Series VI-M-1	Jun 2029	Synthetic Fixed	(6)	4,735,000
	$5,240,000 General Obligation Refunding Bonds, Series 2010	Jun 2021	Fixed		1,165,000
	$5,000,000 Interfund Capital Outlay Note, Series 2010	Nov 2019	Fixed		238,095
(2)	$9,810,000 General Obligation Bonds, Series 2011B	Jun 2028	Fixed		8,785,000
(10)	$23,205,000 General Obligation Bonds, Series 2013	June 2034	Fixed		16,525,000
(2)	$4,000,000 State Revolving Fund Wastewater Loan, Series 2013-324	Mar 2037	Fixed		3,226,121
(2)	$14,000,000 State Revolving Fund Wastewater Loan, Series 2013-325	Sep 2036	Fixed		11,080,888
(2)	$3,000,000 State Revolving Fund Wastewater Loan, Series 2014-337	Aug 2036	Fixed		2,357,642
	$9,140,000 General Obligation Refunding Bonds, Series 2015A	June 2024	Fixed		5,850,000
	$9,445,000 General Obligation Refunding Bonds, Series 2015B	June 2032	Fixed		9,240,000
(5)	$9,665,000 General Obligation Refunding Bonds, Series 2016	June 2033	Fixed		7,375,000
(2)	$2,000,000 State Revolving Fund Wastewater Loan, Series 2017-356	June 2039	Fixed	(12)	1,860,000
(2)	$19,125,000 General Obligation Refunding Bonds, Series 2017	June 2033	Fixed	(11)	18,580,000
(2)	$3,100,000 State Revolving Fund Wastewater Loan, Series 2017-396	June 2039	Fixed	(12)	2,334,000
	$3,000,000 EESI Loan, Series 2017	June 2031	Fixed	(12)	3,000,000
	$13,285,000 General Obligation Bonds, Series 2018	June 2043	Fixed		13,285,000
	TOTAL BONDED DEBT				$ 170,355,383
	Plus: $28,295,000 General Obligation Refunding Bonds, Series 2019	June 2038	Fixed		28,295,000
	Less: Refunded Bonds	Apr 2015	Fixed		(25,840,000)
	Less: Revenue-Supported Debt				(76,085,418)
	NET BONDED DEBT				$ 96,724,965

NOTES:

(1) The above figures do not include short-term notes outstanding, if any. For more information, see the notes to the Financial Statements in the CAFR.

(2) Revenue & Tax Supported bonds.

(3) Revenue Supported bonds.

(4) Water and Wastewater system revenues support $1,275,960 of this outstanding debt.

(5) The Water and Wastewater system revenues support $6,105,000 of this outstanding debt and the Electric system supports $1,270,000 of this outstanding debt.

(6) The City budgets to account for interest rate and/or basis risk. For more information, see the notes to the Financial Statements in the CAFR.

(7) The Borrower's Series VII-E-1 obligation refunded the Borrower's Series VI-D-3 obligation and $11,000,000 of the VI-H-1 obligation. The Authority on behalf of the Borrower has entered into interest rate swap agreements with respect to Series VI-D-3 and VI-H-1 Bonds. The interest rate swap agreement with respect to the Series VI-D-3 Bonds still remains outstanding and serves as a hedge for the portion of the Series VII-E-1 Bonds allocated to the refunding of the Series VI-D-3 Bonds. The interest rate swap agreement with respect to the Series VI-H-1 Bonds still remains outstanding and serves as a hedge for the portion of the Series VII-E-1 Bonds allocated to the refunding of the Series VI-H-1 Bonds and for the Series VI-M-1 Bonds.

(8) The Water & Wastewater system revenues support $1,574,416 of this outstanding debt. The Electric system revenues support $1,323,296 of this outstanding debt.

(9) The Water & Wastewater system revenues support $5,000,000 of this outstanding debt. The Electric system revenues support $5,000,000 of this outstanding debt.

(10) The Water & Wastewater system revenues support $16,525,000 of this outstanding debt.

(11) The Emergency Communication District Fund revenues support $1,675,000 of the outstanding debt. The Water & Wastewater system revenues support $980,000 of this outstanding debt. The Electric system revenues support $7,520,000 of this outstanding debt.

(12) The amount shown is the estimated principal balance of the loan once all loan proceeds have been drawn. At June 30, 2019, the principal balance of the 2017-396 loan was $2,069,310, the principal balance of the 2017-356 loan was $1,606,086 and the principal balance on the EESI loan was $2,508,196. Final amortizations on the SRF loans will be set once all draws have been completed. On May 9, 2019, the City entered into SRF loan 2019-216 in the amount of $3,288,000. As of June 30, 2019, there were no expenditures from this loan.

CITY OF OAK RIDGE, TENNESSEE
Indebtedness and Debt Ratios

INTRODUCTION

The information set forth in the following table is based upon information derived in part from the CAFR and the table should be read in conjunction with those statements. The table does not include future funding plans whether disclosed or not in this Official Statement.

	For the Fiscal Year Ended June 30					Unaudited	After Issuance
INDEBTEDNESS	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2019**
TAX SUPPORTED							
General Obligation Bonds & Notes	$87,393,982	$83,601,563	$78,563,345	$74,689,379	$83,914,634	$92,079,965	$95,559,965
Golf Course	$3,600,000	$3,155,000	$2,695,000	$2,220,000	$1,720,000	$1,165,000	$1,165,000
TOTAL TAX SUPPORTED	$90,993,982	$86,756,563	$81,258,345	$76,909,379	$85,634,634	$93,244,965	$96,724,965
REVENUE SUPPORTED							
Water & Sewer Revenue Bonds & Notes	67,732,392	68,824,408	66,957,532	64,298,092	64,847,914	61,997,122	61,162,122
Electric Revenue Bonds & Notes	20,482,626	19,394,516	18,178,296	17,023,296	16,368,296	15,113,296	14,923,296
TOTAL REVENUE SUPPORTED	$88,215,019	$88,218,923	$85,135,828	$81,321,388	$81,216,211	$77,110,418	$76,085,418
TOTAL DEBT	$179,209,000	$174,975,486	$166,394,173	$158,230,767	$166,850,845	$170,355,383	$172,810,383
Less: Revenue Supported Debt	($88,215,019)	($88,218,923)	($85,135,828)	($81,321,388)	($81,216,211)	($77,110,418)	($76,085,418)
Less: Debt Service Fund	(10,098,497)	(9,461,652)	(8,731,046)	(8,095,415)	(7,941,004) *	(7,941,004)	(7,941,004)
NET DIRECT DEBT	$80,895,485	$77,294,911	$72,527,299	$68,813,964	$77,693,630	$85,303,961	$88,783,961
OVERLAPPING DEBT (1)	26,062,789	11,247,336	9,827,662	10,224,162	9,375,446 *	9,375,446	9,375,446
NET DIRECT & OVERLAPPING DEBT	$106,958,274	$88,542,247	$82,354,961	$79,038,126	$87,069,076	$94,679,407	$98,159,407

PROPERTY TAX BASE (2)							
Estimated Actual Value	$ 2,712,967,800	$ 2,739,211,457	$ 2,625,119,789	$ 2,634,914,582	$ 2,768,687,961	$ 2,804,657,875	$ 2,804,657,875
Appraised Value	2,712,967,800	2,739,211,457	2,625,119,789	2,634,914,582	2,768,687,961	2,804,657,875	2,804,657,875
Assessed Value	814,281,004	824,764,059	796,947,949	800,091,142	802,284,012	814,331,436	814,331,436

(1) OVERLAPPING DEBT Includes the City's share of Anderson and Roane County's Net Direct Debt.

(2) The Property Tax Base figures are based on both Counties the City is located in, Anderson and Roane County.

* 2019 Debt Service Fund and Overlapping Debt reflect prior year due to 2019 audit not being released as of this document.

Source: Comprehensive Annual Financial Report for City of Oak Ridge, Tennessee and City Officials.

DEBT RATIOS	2014	2015	2016	2017	2018	Unaudited 2019	After Issuance 2019
	For the Fiscal Year Ended June 30						
TOTAL DEBT to Estimated Actual Value	6.61%	6.39%	6.34%	6.01%	6.03%	6.07%	6.16%
TOTAL DEBT to Appraised Value	6.61%	6.39%	6.34%	6.01%	6.03%	6.07%	6.16%
TOTAL DEBT to Assessed Value	22.01%	21.22%	20.88%	19.78%	20.80%	20.92%	21.22%
NET DIRECT DEBT to Estimated Actual Value	2.98%	2.82%	2.76%	2.61%	2.81%	3.04%	3.17%
NET DIRECT DEBT to Appraised Value	2.98%	2.82%	2.76%	2.61%	2.81%	3.04%	3.17%
NET DIRECT DEBT to Assessed Value	9.93%	9.37%	9.10%	8.60%	9.68%	10.48%	10.90%
OVERLAPPING DEBT to Estimated Actual Value	0.96%	0.41%	0.37%	0.39%	0.34%	0.33%	0.33%
OVERLAPPING DEBT to Appraised value	0.96%	0.41%	0.37%	0.39%	0.34%	0.33%	0.33%
OVERLAPPING DEBT to Assessed Value	3.20%	1.36%	1.23%	1.28%	1.17%	1.15%	1.15%
NET DIRECT & OVERLAPPING DEBT to Estimated Actual Value	3.94%	3.23%	3.14%	3.00%	3.14%	3.38%	3.50%
NET DIRECT & OVERLAPPING DEBT to Appraised Value	3.94%	3.23%	3.14%	3.00%	3.14%	3.38%	3.50%
NET DIRECT & OVERLAPPING DEBT to Assessed Value	13.14%	10.74%	10.33%	9.88%	10.85%	11.63%	12.05%
PER CAPITA RATIOS							
POPULATION (1)	29,303	29,302	29,350	29,350	29,350	29,350	29,350
PER CAPITA PERSONAL INCOME (2)	$37,534	$38,686	$39,883	$40,847	$40,847	$40,847	$40,847
Estimated Actual Value to POPULATION	92,583	93,482	89,442	89,776	94,333	95,559	95,559
Assessed Value to POPULATION	27,788	28,147	27,153	27,260	27,335	27,746	27,746
Total Debt to POPULATION	6,116	5,971	5,669	5,391	5,685	5,804	5,888
Net Direct Debt to POPULATION	2,761	2,638	2,471	2,345	2,647	2,906	3,025
Overlapping Debt to POPULATION	889	384	335	348	319	319	319
Net Direct & Overlapping Debt to POPULATION	3,650	3,022	2,806	2,693	2,967	3,226	3,344
Total Debt Per Capita as a percent of PER CAPITA PERSONAL INCOME	16.29%	15.44%	14.21%	13.20%	13.92%	14.21%	14.41%
Net Direct Debt Per Capita as a percent of PER CAPITA PERSONAL INCOME	7.36%	6.82%	6.20%	5.74%	6.48%	7.12%	7.41%
Overlapping Debt Per Capita as a % of PER CAPITA PERSONAL INCOME	2.37%	0.99%	0.84%	0.85%	0.78%	0.78%	0.78%
Net Direct & Overlapping Debt Per Capita as a % of PER CAPITA PERSONAL INCOME	9.72%	7.81%	7.04%	6.59%	7.26%	7.90%	8.19%

(1) Per Capita computations are based upon POPULATION data according to the U.S. Census.
(2) PER CAPITA PERSONAL INCOME is based upon the most current data available from the U. S. Department of Commerce.

CITY OF OAK RIDGE, TENNESSEE
BONDED DEBT SERVICE REQUIREMENTS - General Obligation

F.Y. Ended	Existing Debt - General Obligation as of June 30, 2019[1]				Less: Refunded Bonds				General Obligation Refunding Bonds, Series 2019			Total Bonded Debt Service Requirements(1)				% Principal
6/30	Principal	Interest	Net Treasury Subsidy	TOTAL	Principal	Interest	Net Treasury Subsidy	TOTAL	Principal	Interest (3)	TOTAL	Principal	Interest (2)	Treasury Subsidy	TOTAL	Repaid
2020	$ 5,901,414	$ 3,910,773	$ (173,973)	$ 9,638,214	$ (2,735,000)	$ (894,963)	$ 173,973	$ (3,455,989)	$ 2,730,000	$ 532,004	$ 3,262,004	$ 5,896,414	$ 3,547,815	$ -	$ 9,444,229	6.10%
2021	6,114,424	3,662,524	(173,973)	$ 9,602,975	(2,870,000)	(758,213)	173,973	(3,454,239)	2,745,000	605,831	3,350,831	5,989,424	3,510,143	-	9,499,567	
2022	6,013,443	3,401,461	(173,973)	$ 9,240,931	(935,000)	(614,713)	173,973	(1,375,739)	810,000	468,581	1,278,581	5,888,443	3,255,330	-	9,143,773	
2023	5,668,684	3,214,426	(173,973)	$ 8,709,137	-	(577,313)	173,973	(403,339)	215,000	428,081	643,081	5,883,684	3,065,195	-	8,948,879	
2024	5,531,132	3,041,347	(173,973)	$ 8,398,506	-	(577,313)	173,973	(403,339)	225,000	417,331	642,331	5,756,132	2,881,366	-	8,637,498	30.41%
2025	5,653,604	2,873,074	(173,973)	$ 8,352,705	(550,000)	(577,313)	173,973	(953,339)	705,000	406,081	1,111,081	5,808,604	2,701,843	-	8,510,447	
2026	5,826,100	2,662,602	(164,650)	$ 8,324,052	(650,000)	(546,375)	164,650	(1,031,725)	815,000	370,831	1,185,831	5,991,100	2,487,058	-	8,478,158	
2027	5,730,908	2,400,183	(153,387)	$ 7,977,704	(600,000)	(509,000)	153,387	(955,613)	715,000	330,081	1,045,081	5,845,908	2,221,265	-	8,067,173	
2028	3,966,176	2,164,322	(142,765)	$ 5,987,734	(400,000)	(473,750)	142,765	(730,985)	1,385,000	294,331	1,679,331	4,951,176	1,984,903	-	6,936,079	
2029	3,433,744	2,007,149	(135,532)	$ 5,305,361	(300,000)	(449,750)	135,532	(614,218)	1,345,000	225,081	1,570,081	4,478,744	1,782,480	-	6,261,224	58.40%
2030	3,531,348	1,866,599	(130,108)	$ 5,267,839	(300,000)	(431,750)	130,108	(601,642)	1,380,000	171,281	1,551,281	4,611,348	1,606,131	-	6,217,479	
2031	3,543,988	1,716,574	(124,684)	$ 5,135,878	-	(413,750)	124,684	(289,066)	1,185,000	129,881	1,314,881	4,728,988	1,432,705	-	6,161,693	
2032	5,610,000	1,574,744	(124,684)	$ 7,060,060	-	(413,750)	124,684	(289,066)	310,000	106,181	416,181	5,920,000	1,267,175	-	7,187,175	
2033	5,640,000	1,318,694	(124,684)	$ 6,834,010	-	(413,750)	124,684	(289,066)	320,000	99,981	419,981	5,960,000	1,004,925	-	6,964,925	
2034	2,920,000	1,053,194	(124,684)	$ 3,848,510	-	(413,750)	124,684	(289,066)	1,225,000	93,581	1,318,581	4,145,000	733,025	-	4,878,025	84.63%
2035	3,035,000	917,350	(124,684)	$ 3,827,666	-	(413,750)	124,684	(289,066)	1,245,000	69,081	1,314,081	4,280,000	572,681	-	4,852,681	
2036	3,160,000	772,050	(124,684)	$ 3,807,366	-	(413,750)	124,684	(289,066)	1,270,000	42,625	1,312,625	4,430,000	400,925	-	4,830,925	
2037	695,000	624,100	(124,684)	$ 1,194,416	-	(413,750)	124,684	(289,066)	345,000	15,638	360,638	1,040,000	225,988	-	1,265,988	
2038	720,000	596,300	(124,684)	$ 1,191,616	-	(413,750)	124,684	(289,066)	350,000	7,875	357,875	1,070,000	190,425	-	1,260,425	
2039	3,250,000	567,500	(124,684)	$ 3,692,816	(2,500,000)	(413,750)	124,684	(2,789,066)	-	-	-	750,000	153,750	-	903,750	96.59%
2040	3,280,000	383,750	(78,351)	$ 3,585,399	(2,500,000)	(260,000)	78,351	(2,681,649)	-	-	-	780,000	123,750	-	903,750	
2041	2,310,000	192,000	(29,382)	$ 2,472,618	(1,500,000)	(97,500)	29,382	(1,568,118)	-	-	-	810,000	94,500	-	904,500	
2042	840,000	64,125	-	$ 904,125	-	-	-	-	-	-	-	840,000	64,125	-	904,125	
2043	870,000	32,625	-	$ 902,625	-	-	-	-	-	-	-	870,000	32,625	-	902,625	100.00%
	$ 93,244,965	$ 41,017,467	$ (3,000,165)	$ 131,262,266	$ (15,840,000)	$ (10,491,700)	$ 3,000,165	$ (23,331,535)	$ 19,320,000	$ 4,814,360	$ 24,134,360	$ 96,724,965	$ 35,340,127	$ -	$ 132,065,092	

NOTES:

(1) The above figures do not include short-term notes outstanding, if any. For more information, see the notes to the Financial Statements in the CAFR.
(2) The City budgets to account for interest rate and/or basis risk.
(3) True Interest Cost of 1.886%.

CITY OF OAK RIDGE, TENNESSEE
BONDED DEBT SERVICE REQUIREMENTS - Water & Sewer

F.Y. Ended	Existing Debt Water & Sewer as of June 30, 2019[1]				Less: Refunded Bonds				General Obligation Ref Bonds, Series 2019			Total Bonded Debt Service Requirements				% Principal
6/30	Principal	Interest (2)	Net Treasury Subsidy	TOTAL	Principal	Interest	Net Treasury Subsidy	TOTAL	Principal	Interest (3)	TOTAL	Principal	Interest (2)	Net Treasury Subsidy	TOTAL	Repaid
2020	$ 3,577,713	$ 1,841,684	$ (95,189)	$ 5,324,208	$ -	$ (292,125)	$ 95,189	$ (196,936)	$ -	$ 132,010	$ 132,010	$ 3,577,713	$ 1,681,569	$ -	$ 5,259,282	5.85%
2021	3,773,798	1,747,232	(95,189)	5,425,841	-	(292,125)	95,189	(196,936)	-	184,200	184,200	3,773,798	1,639,307	-	5,413,105	
2022	3,879,528	1,640,767	(95,189)	5,425,106	-	(292,125)	95,189	(196,936)	-	184,200	184,200	3,879,528	1,532,842	-	5,412,370	
2023	3,591,298	1,526,151	(95,189)	5,022,260	(200,000)	(292,125)	95,189	(396,936)	480,000	184,200	664,200	3,871,298	1,418,226	-	5,289,524	
2024	4,256,708	1,431,285	(91,930)	5,596,063	(450,000)	(282,125)	91,930	(640,195)	240,000	160,200	400,200	4,046,708	1,309,360	-	5,356,068	31.31%
2025	4,227,345	1,313,248	(83,866)	5,456,727	(450,000)	(257,375)	83,866	(623,509)	325,000	148,200	473,200	4,102,345	1,204,073	-	5,306,418	
2026	4,263,212	1,191,557	(75,618)	5,379,150	(400,000)	(232,063)	75,618	(556,445)	275,000	131,950	406,950	4,138,212	1,091,444	-	5,229,656	
2027	4,518,727	1,067,828	(68,123)	5,518,432	(750,000)	(209,063)	68,123	(890,939)	490,000	118,200	608,200	4,258,727	976,965	-	5,235,692	
2028	4,350,648	924,515	(53,765)	5,221,398	(900,000)	(165,000)	53,765	(1,011,235)	765,000	93,700	858,700	4,215,648	853,215	-	5,068,863	
2029	4,012,225	781,414	(36,169)	4,757,469	(900,000)	(111,000)	36,169	(974,831)	775,000	55,450	830,450	3,887,225	725,864	-	4,613,088	64.99%
2030	4,164,046	634,692	(18,573)	4,780,165	(950,000)	(57,000)	18,573	(988,427)	815,000	24,450	839,450	4,029,046	602,142	-	4,631,188	
2031	3,481,115	481,423	-	3,962,538	-	-	-	-	-	-	-	3,481,115	481,423	-	3,962,538	
2032	3,603,435	377,203	-	3,980,638	-	-	-	-	-	-	-	3,603,435	377,203	-	3,980,638	
2033	3,706,012	261,314	-	3,967,326	-	-	-	-	-	-	-	3,706,012	261,314	-	3,967,326	
2034	3,078,847	141,447	-	3,220,294	-	-	-	-	-	-	-	3,078,847	141,447	-	3,220,294	94.26%
2035	1,291,947	44,379	-	1,336,326	-	-	-	-	-	-	-	1,291,947	44,379	-	1,336,326	
2036	1,310,314	26,012	-	1,336,326	-	-	-	-	-	-	-	1,310,314	26,012	-	1,336,326	
2037	417,304	12,422	-	429,725	-	-	-	-	-	-	-	417,304	12,422	-	429,725	
2038	244,162	7,092	-	251,254	-	-	-	-	-	-	-	244,162	7,092	-	251,254	
2039	248,741	2,513	-	251,254	-	-	-	-	-	-	-	248,741	2,513	-	251,254	100.00%
	61,997,122	15,454,176	($808,800)	$76,642,498	($5,000,000)	($2,482,125)	$808,800	($6,673,325)	$4,165,000	$1,416,760	$5,581,760	$ 61,162,122	$ 14,388,811	$ -	$ 75,550,933	

NOTES:

(1) The above figures do not include short-term notes outstanding, if any. For more information, see the notes to the Financial Statements in the CAFR.

(2) The City budgets to account for interest rate and/or basis risk.

(3) True Interest Cost of 1.48%.

CITY OF OAK RIDGE, TENNESSEE

BONDED DEBT SERVICE REQUIREMENTS - Revenue Supported Bonds

Electric System

F.Y. Ended	Electric System (as of June 30, 2019)[1]				Less: Refunded Bonds				General Obligation Ref Bonds, Series 2019			Total Bonded Debt Service Requirements (1)				% Principal
6/30	Principal	Interest	Net Treasury Subsidy	TOTAL	Principal	Interest	Net Treasury Subsidy	TOTAL	Principal	Interest	TOTAL	Principal	Interest (2)	Net Treasury Subsidy	TOTAL	Repaid
2020	$ 865,000	$ 703,011	$ (98,659)	$ 1,469,352	$ -	$ (302,775)	$ 98,659	$ (204,116)	$ -	$ 90,932	$ 90,932	$ 865,000	$ 491,167	$ (98,659)	$ 1,257,508	5.80%
2021	900,000	663,011	(98,659)	1,464,352	-	(302,775)	98,659	(204,116)	5,000	126,881	131,881	905,000	487,117	(98,659)	1,293,458	
2022	940,000	621,861	(98,659)	1,463,202	-	(302,775)	98,659	(204,116)	5,000	126,631	131,631	945,000	445,717	(98,659)	1,292,058	
2023	985,000	579,361	(98,659)	1,465,702	-	(302,775)	98,659	(204,116)	5,000	126,381	131,381	990,000	402,967	(98,659)	1,294,308	
2024	1,030,000	533,523	(98,659)	1,464,864	-	(302,775)	98,659	(204,116)	5,000	126,131	131,131	1,035,000	356,880	(98,659)	1,293,220	
2025	1,075,000	488,042	(98,659)	1,464,383	-	(302,775)	98,659	(204,116)	5,000	125,881	130,881	1,080,000	311,148	(98,659)	1,292,489	39.00%
2026	1,125,000	440,380	(98,659)	1,466,720	-	(302,775)	98,659	(204,116)	5,000	125,631	130,631	1,130,000	263,236	(98,659)	1,294,577	
2027	1,168,296	396,061	(98,659)	1,465,698	-	(302,775)	98,659	(204,116)	5,000	125,381	130,381	1,173,296	218,667	(98,659)	1,293,304	
2028	1,200,000	363,525	(98,659)	1,464,866	(450,000)	(302,775)	98,659	(654,116)	400,000	125,131	525,131	1,150,000	185,881	(98,659)	1,237,222	
2029	1,070,000	314,025	(89,861)	1,294,164	(450,000)	(275,775)	89,861	(635,914)	500,000	105,131	605,131	1,120,000	143,381	(89,861)	1,173,520	
2030	1,105,000	268,425	(81,063)	1,292,362	(450,000)	(248,775)	81,063	(617,712)	450,000	85,131	535,131	1,105,000	104,781	(81,063)	1,128,718	77.05%
2031	450,000	221,775	(72,265)	599,510	(450,000)	(221,775)	72,265	(599,510)	455,000	71,631	526,631	455,000	71,631	(72,265)	454,366	
2032	450,000	194,775	(63,467)	581,308	(450,000)	(194,775)	63,467	(581,308)	445,000	62,531	507,531	445,000	62,531	(63,467)	444,064	
2033	450,000	167,775	(54,670)	563,106	(450,000)	(167,775)	54,670	(563,106)	435,000	53,631	488,631	435,000	53,631	(54,670)	433,962	
2034	450,000	140,775	(45,872)	544,903	(450,000)	(140,775)	45,872	(544,903)	425,000	44,931	469,931	425,000	44,931	(45,872)	424,060	
2035	450,000	113,775	(37,074)	526,701	(450,000)	(113,775)	37,074	(526,701)	415,000	36,431	451,431	415,000	36,431	(37,074)	414,358	91.62%
2036	450,000	86,100	(28,056)	508,044	(450,000)	(86,100)	28,056	(508,044)	410,000	27,613	437,613	410,000	27,613	(28,056)	409,557	
2037	475,000	58,425	(19,038)	514,387	(475,000)	(58,425)	19,038	(514,387)	425,000	18,900	443,900	425,000	18,900	(19,038)	424,862	
2038	475,000	29,213	(9,519)	494,694	(475,000)	(29,213)	9,519	(494,694)	415,000	9,338	424,338	415,000	9,338	(9,519)	414,819	100.00%
	$ 15,113,296	$ 6,383,837	$ (1,388,818)	$ 20,108,315	$ (5,000,000)	$ (4,262,138)	$ 1,388,818	$ (7,873,320)	$ 4,810,000	$ 1,614,250	$ 6,424,250	$ 14,923,296	$ 3,735,950	$ (1,388,818)	$ 17,270,428	

NOTES:

(1) The above figures do not include short-term notes outstanding, if any. For more information, see the notes to the Financial Statements in the CAFR.

(2) The City budgets to account for interest rate and/or basis risk.

(3) True Interest Cost of 2.095%.

FINANCIAL INFORMATION

INTRODUCTION

The City has an appointed Finance Director who is in charge of the City Finance Department. The Finance Department is responsible for all general accounting, financial reporting, purchasing, warehousing and utility accounting functions of the City.

As required by the City Charter and generally accepted accounting principles (GAAP), all City funds and account groups are organized according to standards established by the Government Accounting Standards Board (GASB). The City's financial reporting system is designed to provide timely, accurate feedback on the City's overall financial position and includes, at a minimum, quarterly reports to the City Council. All City financial statements are audited annually by independent certified public accountants.

The City has received annually the GFOA Certificate of Achievement for Excellence in Financial Reporting for its Comprehensive Annual Financial Report since the City was incorporated. The Certificate of Achievement recognizes that the City's financial statements meet the strict standards of GASB. The City's General Purpose Financial Statements, which are extracts of the Comprehensive Annual Financial Reports are included herein.

BASIS OF ACCOUNTING AND PRESENTATION

All governmental funds are accounted for using the modified accrual basis of accounting. Revenues are recognized when they become measurable and available as a net current asset. Expenditures are generally recognized when the related fund liability is incurred. Exceptions to this general ruling include: (1) sick pay which is not accrued, and (2) principal and interest on general long-term debt which is recognized when due.

All proprietary funds are accounted for using the accrual basis of accounting, whereby revenues are recognized when they are earned and expenses are recognized when they are incurred. The reserve method is used to estimate the allowance for doubtful accounts for electric, water and sewer service receivables.

[balance of page left blank]

FUND BALANCES, NET ASSETS AND RETAINED EARNINGS

The City maintains fund balances, net assets or retained earnings in most major operating funds. Additionally, several reserves have been established to address specific needs of the City. The Reserve for Debt Retirement was established to accumulate excess revenues from the sales tax which were pledged to the retirement of outstanding general obligation school debt. The following table depicts fund balances, net assets and retained earnings for the last five fiscal years.

	For the Fiscal Year Ended June 30,				
Fund Type	**2014**	**2015**	**2016**	**2017**	**2018**
Governmental Funds:					
General	$ 9,473,710	$ 9,416,325	$10,347,792	$11,374,838	$11,578,074
School Fund	5,922,323	6,006,340	7,003,068	7,295,578	8,156,713
Capital Projects	1,697,888	2,515,731	2,314,981	2,632,498	7,358,532
Debt Service	10,098,497	9,461,652	8,731,046	8,095,418	7,941,004
Other Governmental	3,553,843	1,894,604	2,612,641	3,495,123	4,464,855
Total	**$30,746,261**	**$29,294,652**	**$31,009,528**	**$32,8593,455**	**$39,499,178**
Proprietary Net Assets:					
Electric Fund	$34,162,638	$ 35,646,138	$ 38,237,635	$ 40,772,255	$ 42,591,002
Waterworks Fund	54,708,551	56,031,873	58,614,276	59,853,258	62,461,152
Nonmajor Fund	1,583,110	1,666,074	1,594,667	1,587,557	2,517,489
Internal Service Funds	6,797,188	6,879,717	6,568,538	7,061,746	7,562,244
Total	**$97,251,487**	**$100,223,802**	**$105,015,116**	**$109,274,816**	**$115,131,887**

Source: Comprehensive Annual Financial Reports of the City of Oak Ridge, Tennessee.

[balance of page left blank]

CITY OF OAK RIDGE, TENNESSEE

Five Year Summary of Revenues, Expenditures and
Changes In Fund Balances - General Fund
For the Fiscal Year Ended June 30

	2014	2015	2016	2017	2018
Revenues:					
Local taxes	$ 23,176,750	$ 22,995,915	$ 22,720,922	$ 23,354,010	$ 23,044,252
Licenses and Permits	174,011	198,147	319,837	306,359	348,300
Intergovernmental Revenue	13,292,265	13,401,285	14,264,590	14,661,064	15,086,053
Charges For Services	1,342,178	1,328,652	2,588,360	1,232,188	1,207,009
Grants	-	-	1,443,382	954,471	357,228
Fines and Forfeits	353,138	321,828	339,088	364,740	825,329
Interest and Investment Earnings	30,839	26,256	36,228	67,118	187,631
Miscellaneous	605,644	523,665	701,993	558,015	568,498
Total Revenues	$ 38,974,825	$ 38,795,748	$ 42,414,400	$ 41,497,965	$ 41,624,300
Expenditures and Other Uses:					
General Government	$ 1,841,776	$ 1,818,670	$ 1,828,749	$ 1,637,951	$ 1,894,168
Public Safety	10,473,956	10,722,546	10,629,953	10,762,280	11,290,299
Public Works	4,640,079	4,694,930	4,609,955	1,981,597	2,036,572
Community Services	5,792,903	5,489,331	5,439,682	5,646,924	5,530,905
Grants	-	-	1,575,929	1,182,550	1,049,353
Total Expenditures	$ 22,748,714	$ 22,725,477	$ 24,084,268	$ 21,211,302	$ 21,801,297
Excess of Revenues & Over (under) Expenditures	$ 16,226,111	$ 16,070,271	$ 18,330,132	$ 20,286,663	$ 19,823,003
Other Financing Sources (Uses):					
Interfund Transfers - In	$ 3,012,318	$ 3,339,582	$ 3,379,250	$ 3,451,074	$ 3,329,927
Interfund Transfers - Out	(19,824,859)	(19,467,238)	(20,777,915)	(22,710,691)	(22,949,694)
Interfund Transfers - Out Component Fund	-	-	-	-	-
Other Transfers	-	-	-	-	-
Total Other Financing Sources (Uses)	$ (16,812,541)	$ (16,127,656)	$ (17,398,665)	$ (19,259,617)	$ (19,619,767)
Excess of Revenue and Other Sources over (Under) Expenditures and Other Sources	$ (586,430)	$ (57,385)	$ 931,467	$ 1,027,046	$ 203,236
Residual Equity Transfers	$ -	$ -	$ -	$ -	$ -
Fund Balance July 1	$ 10,060,140	$ 9,473,710	$ 9,416,325	$ 10,347,792	$ 11,374,838
Prior Period Adjustment	-	-	-	-	-
Fund Balance June 30	**$ 9,473,710**	**$ 9,416,325**	**$ 10,347,792**	**$ 11,374,838**	**$ 11,578,074**

Source: Comprehensive Annual Financial Report for City of Oak Ridge, Tennessee

CITY OF OAK RIDGE, TENNESSEE
Five Year Summary of Revenues, Expenditures and
Changes In Fund Balances - Electric Fund
For the Fiscal Year Ended June 30

	2014	2015	2016	2017	2018
Operating Revenues:					
Charges for Services	$ 55,752,733	$ 55,589,835	$ 53,829,111	$ 55,484,213	$ 54,838,283
Other	931,109	959,771	916,482	974,256	1,104,916
Total Operating Revenues	$ 56,683,842	$ 56,549,606	$ 54,745,593	$ 56,458,469	$ 55,943,199
Operating Expenses:					
Maintenance and Administrative	$ 7,532,551	$ 7,511,833	$ 7,491,677	$ 8,683,914	$ 8,245,366
Purchased Power and Water	42,445,405	41,983,485	40,366,676	41,650,984	41,407,722
Depreciation	2,175,288	2,195,340	2,246,651	2,307,433	2,361,511
Total Operating Expenses	$ 52,153,244	$ 51,690,658	$ 50,105,004	$ 52,642,331	$ 52,014,599
Operating Income (Loss)	$ 4,530,598	$ 4,858,948	$ 4,640,589	$ 3,816,138	$ 3,928,600
Non-Operating Revenues (Expenses):					
Intergovernmental Revenue	$ -	$ -	$ -	$ -	$ -
Capital Contributions	-	113,539	215,166	953,212	458,766
Interest Revenue	4,489	4,662	22,097	21,919	88,734
Interest Expense	(719,445)	(643,972)	(662,211)	(598,538)	(828,198)
Total Non-Operating Revenues (Expenses)	$ (714,956)	$ (525,771)	$ (424,948)	$ 376,593	$ (280,698)
Net Income (Loss) Before Operating Transfers	$ 3,815,642	$ 4,333,177	$ 4,215,641	$ 4,192,731	$ 3,647,902
Operating Transfers In (Out):					
Operating Transfers In	$ -	$ -	$ -	$ -	$ -
Operating Transfers Out	(1,463,402)	(1,484,735)	(1,624,144)	(1,658,111)	(1,645,492)
Total Operating Transfers In (Out)	$ (1,463,402)	$ (1,484,735)	$ (1,624,144)	$ (1,658,111)	$ (1,645,492)
Net Income	$ 2,352,240	$ 2,848,442	$ 2,591,497	$ 2,534,620	$ 2,002,410
Retained Earnings - July 1	$ 31,810,580	$ 34,162,638	$ 35,646,138	$ 38,237,635	$ 40,772,255
Prior Year Adjustments	-	(1,364,942)	-	-	(183,663)
Retained Earnings - June 30	**$ 34,162,820**	**$ 35,646,138**	**$ 38,237,635**	**$ 40,772,255**	**$ 42,591,002**

Source: Comprehensive Annual Financial Reports for City of Oak Ridge, Tennessee.

BUDGETARY PROCESS

The City follows the procedures outlined below in establishing the budgetary data reflected in the financial statements.

1. By mid-May, the City Manager submits to the City Council a proposed operating budget for the fiscal year commencing the following July 1. The operating budget includes proposed expenditures and the means of financing them. Also, a six-year capital budget is developed and presented to City Council prior to preparation of the upcoming annual operating budget.

2. A public hearing is conducted at the Municipal Building to obtain taxpayer comments.

3. Prior to July 1, the budgets for all governmental funds are legally enacted through passage of an ordinance by City Council.

4. The City Manager is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the total expenditures of any fund must be approved by the City Council. Expenditures may not exceed appropriations at the fund level.

5. Formal budgetary integration is employed as a management control device during the year for the General Fund, Special Revenue Funds, Debt Service Fund, and Capital Projects Fund. Budgetary control is also achieved for the Debt Service Fund through general obligation bond indenture provisions.

6. The budgets for all governmental funds are legally adopted on a basis consistent with accounting principles generally accepted in the United States of America (GAAP), except that in the General, Special Revenue, and Capital Projects Funds, encumbrances are treated as budgeted expenditures in the year the commitment to purchase is incurred. The adjustments necessary to convert the basis of budgeting to GAAP represent the net change in encumbrances outstanding at the beginning and ending of the fiscal year.

7. All appropriations which are not expended or encumbered lapse at year end.

8. During the year, supplementary appropriations were necessary for the School Fund. Refer to the City's Annual Comprehensive Annual Financial Report.

INVESTMENT AND CASH MANAGEMENT PRACTICES

Investment of idle City operating funds is controlled by State statute and local policies. Generally, such policies limit investment instruments to direct U. S. Government obligations, those issued by U.S. Agencies or Certificates of Deposit. Unless deposited in a financial institution participating in the State Consolidated Collateral Pool, all demand deposits or Certificates of Deposit must be secured by similar grade collateral (such as direct U. S. Government obligations, those issued by U.S. Agencies or Certificates of Deposit) pledged at 105% of market value for amounts in excess of that guaranteed through federally sponsored insurance programs. Deposits with savings and loan associations must be collateralized as outlined above, by an irrevocable letter of credit issued by the Federal Home Loan Bank or by providing notes secured by the first mortgages or first deeds for trust upon residential property in the state equal to at least 150 percent of the amount of uninsured deposits. The Finance Director is responsible for the administration of all City investments.

Unless deposited in an institution participating in the State Collateral Pool, all collateral must be held in a third party escrow account for the benefit of the City. For reporting purposes, all investments are stated at cost which approximates market value.

Prevailing State law does not allow cities or counties in the State to invest in reverse repurchase agreements or unusual “derivative" products.

REAL PROPERTY ASSESSMENT, TAX LEVY AND COLLECTION PROCEDURES

State Taxation of Property; Classifications of Taxable Property; Assessment Rates

Under the Constitution and laws of the State of Tennessee, all real and personal property is subject to taxation, except to the extent that the General Assembly of the State of Tennessee (the "General Assembly") exempts certain constitutionally permitted categories of property from taxation. Property exempt from taxation includes federal, state and local government property, property of housing authorities, certain low cost housing for elderly persons, property owned and used exclusively for certain religious, charitable, scientific and educational purposes and certain other property as provided under Tennessee law.

Under the Constitution and laws of the State of Tennessee, property is classified into three separate classes for purposes of taxation: Real Property; Tangible Personal Property; and Intangible Personal Property. Real Property includes lands, structures, improvements, machinery and equipment affixed to realty and related rights and interests. Real Property is required constitutionally to be classified into four sub classifications and assessed at the rates as follows:

(a) Public Utility Property (which includes all property of every kind used or held for use in the operation of a public utility, such as railroad companies, certain telephone companies, freight and private car companies, street car companies, power companies, express companies and other public utility companies), to be assessed at 55% of its value;

(b) Industrial and Commercial Property (which includes all property of every kind used or held for use for any commercial, mining, industrial, manufacturing, business or similar purpose), to be assessed at 40% of its value;

(c) Residential Property (which includes all property which is used or held for use for dwelling purposes and contains no more than one rental unit), to be assessed at 25% of its value; and

(d) Farm Property (which includes all real property used or held for use in agriculture), to be assessed at 25% of its value.

Tangible Personal Property includes personal property such as goods, chattels and other articles of value, which are capable of manual or physical possession and certain machinery and equipment. Tangible Personal Property is required constitutionally to be classified into three sub classifications and assessed at the rates as follows:

(a) Public Utility Property, to be assessed at 55% of its value;
(b) Industrial and Commercial Property, to be assessed at 30% of its value; and
(c) All other Tangible Personal Property (including that used in agriculture), to be assessed at 5% of its value, subject to an exemption of $7,500 worth of Tangible Personal Property for personal household goods and furnishings, wearing apparel and other tangible personal property in the hands of a taxpayer.

Intangible Personal Property includes personal property, such as money, any evidence of debt owed to a taxpayer, any evidence of ownership in a corporation or other business organization having multiple owners and all other forms of property, the value of which is expressed in terms of what the property represents rather than its own intrinsic value. The Constitution of the State of Tennessee empowers the General Assembly to classify Intangible Personal Property into sub classifications and to establish a ratio of assessment to value in each class or subclass and to provide fair and equitable methods of apportionment of the value to the State of Tennessee for purposes of taxation.

The Constitution of the State of Tennessee requires that the ratio of assessment to value of property in each class or subclass be equal and uniform throughout the State of Tennessee and that the General Assembly direct the method to ascertain the value and definition of property in each class or subclass. Each respective taxing authority is constitutionally required to apply the same tax rate to all property within its jurisdiction.

County Taxation of Property

The Constitution of the State of Tennessee empowers the General Assembly to authorize the several counties and incorporated towns in the State of Tennessee to impose taxes for county and municipal purposes in the manner prescribed by law. Under the *Tennessee Code Annotated,* the General Assembly has authorized the counties in Tennessee to levy an *ad valorem* tax on all taxable property within their respective jurisdictions, the amount of which is required to be fixed by the county legislative body of each county based upon tax rates to be established on the first Monday of July of each year or as soon thereafter as practicable.

All property is required to be taxed according to its value upon the principles established in regard to State taxation as described above, including equality and uniformity. All counties, which levy and collect taxes to pay off any bonded indebtedness, are empowered, through the respective county legislative bodies, to place all funds levied and collected into a special fund of the respective counties and to appropriate and use the money for the purpose of discharging any bonded indebtedness of the respective counties.

[balance of page left blank]

Assessment of Property

County Assessments; County Board of Equalization. The function of assessment is to assess all property (with certain exceptions) to the person or persons owning or claiming to own such property on January I for the year for which the assessment is made. All assessment of real and personal property are required to be made annually and as of January 1 for the year to which the assessment applies. Not later than May 20 of each year, the assessor of property in each county is required to (a) make an assessment of all property in the county and (b) note upon the assessor's records the current classification and assessed value of all taxable property within the assessor's jurisdiction.

The assessment records are open to public inspection at the assessor's office during normal business hours. The assessor is required to notify each taxpayer of any change in the classification or assessed value of the taxpayer's property and to cause a notice to be published in a newspaper of general circulation stating where and when such records may be inspected and describing certain information concerning the convening of the county board of equalization. The notice to taxpayers and such published notice are required to be provided and published at least 10 days before the local board of equalization begins its annual session.

The county board of equalization is required (among other things) to carefully examine, compare and equalize the county assessments; assure that all taxable properties are included on the assessments lists and that exempt properties are eliminated from the assessment lists; hear and act upon taxpayer complaints; and correct errors and assure conformity to State law and regulations.

State Assessments of Public Utility Property; State Board of Equalization. The State Comptroller of the Treasury is authorized and directed under Tennessee law to assess for taxation, for State, county and municipal purposes, all public utility properties of every description, tangible and intangible, within the State. Such assessment is required to be made annually as of the same day as other properties are assessed by law (as described above) and takes into account such factors as are prescribed by Tennessee law.

On or before the first Monday in August of each year, the assessments are required to be completed and the State Comptroller of the Treasury is required to send a notice of assessment to each company assessable under Tennessee law. Within ten days after the first Monday in August of each year, any owner or user of property so assessed may file an exception to such assessment together with supporting evidence to the State Comptroller of the Treasury, who may change or affirm the valuation. On or before the first Monday in September of each year, the State Comptroller of the Treasury is required to file with the State Board of Equalization assessments so made. The State Board of Equalization is required to examine such assessments and is authorized to increase or diminish the valuation placed upon any property valued by the State Comptroller of the Treasury.

The State Board of Equalization has jurisdiction over the valuation, classification and assessment of all properties in the State. The State Board of Equalization is authorized to create an assessment appeals commission to hear and act upon taxpayer complaints. The action of the State Board of Equalization is final and conclusive as to all matters passed upon by the Board, subject to judicial review consisting of a new hearing in chancery court.

Periodic Reappraisal and Equalization

Tennessee law requires reappraisal in each county by a continuous six-year cycle comprised of an on-site review of each parcel of real property over a five-year period, or, upon approval of the State Board of Equalization, by a continuous four-year cycle comprised of an one-site review of each parcel of real property over a three-year period, followed by revaluation of all such property in the year following completion of the review period. Alternatively, if approved by the assessor and adopted by a majority vote of the county legislative body, the reappraisal program may be completed by a continuous five-year cycle comprised of an on-site review of each parcel of real property over a four-year period followed by revaluation of all such property in the year following completion of the review period.

After a reappraisal program has been completed and approved by the Director of Property Assessments, the value so determined must be used as the basis of assessments and taxation for property that has been reappraised. The State Board of Equalization is responsible to determine whether or not property within each county of the State has been valued and assessed in accordance with the Constitution and laws of the State of Tennessee.

Valuation for Property Tax Purposes

County Valuation of Property. The value of all property is based upon its sound, intrinsic and immediate value for purposes of sale between a willing seller and a willing buyer without consideration of speculative values. In determining the value of all property of every kind, the assessor is to be guided by, and follow the instructions of, the appropriate assessment manuals issued by the division of property assessments and approved by the State Board of Equalization. Such assessment manuals are required to take into account various factors that are generally recognized by appraisers as bearing on the sound, intrinsic and immediate economic value of property at the time of assessment.

State Valuation of Public Utility Property. The State Comptroller of the Treasury determines the value of public utility property based upon the appraisal of the property as a whole without geographical or functional division of the whole *(i.e.,* the unit rule of appraisal) and on other factors provided by Tennessee law. In applying the unit rule of appraisal, the State Comptroller of the Treasury is required to determine the State's share of the unit or system value based upon factors that relate to the portion of the system relating to the State of Tennessee.

Certified Tax Rate

Upon a general reappraisal of property as determined by the State Board of Equalization, the county assessor of property is required to (1) certify to the governing bodies of the county and each municipality within the county the total assessed value of taxable property within the jurisdiction of each governing body and (2) furnish to each governing body an estimate of the total assessed value of all new construction and improvements not included on the previous assessment roll and the assessed value of deletions from the previous assessment roll. Exclusive of such new construction, improvements and deletions, each governing body is required to determine and certify a tax rate (herein referred to as the *"Certified Tax Rate")* which will provide the same *ad valorem* revenue for that jurisdiction as was levied during the previous year. The governing body of a county or municipality may adjust the Certified Tax Rate to reflect extraordinary assessment changes or to recapture excessive adjustments.

Tennessee law provides that no tax rate in excess of the Certified Tax Rate may be levied by the governing body of any county or of any municipality until a resolution or ordinance has been adopted by the governing body after publication of a notice of the governing body's intent to exceed the Certified Tax Rate in a newspaper of general circulation and the holding of a public hearing.

The Tennessee Local Government Public Obligations Act of 1986 provides that a tax sufficient to pay when due the principal of and interest on general obligation bonds (such as the Bonds) shall be levied annually and assessed, collected and paid, in like manner with the other taxes of the local government as described above and shall be in addition to all other taxes authorized or limited by law. Bonds issued pursuant to the Local Government Public Obligations Act of 1986 may be issued without regard to any limit on indebtedness provided by law.

Tax Freeze for the Elderly Homeowners

The Tennessee Constitution was amended by the voters in November 2006 to authorize the Tennessee General Assembly to enact legislation providing property tax relief for homeowners age 65 and older. The General Assembly subsequently adopted the Property Tax Freeze Act permitting (but not requiring) local governments to implement a program for "freezing" the property taxes of eligible taxpayers at an amount equal to the taxes for the year the taxpayer becomes eligible. For example, if a taxpayer's property tax bill is $500 for the year in which he becomes eligible, his property taxes will remain at $500 even if property tax rates or appraisals increase so long as he continues to meet the program's ownership and income requirements.

Tax Collection and Tax Lien

Property taxes are payable the first Monday in October of each year. The county trustee of each county acts as the collector of all county property taxes and of all municipal property taxes when the municipality does not collect its own taxes.

The taxes assessed by the State of Tennessee, a county, a municipality, a taxing district or other local governmental entity, upon any property of whatever kind, and all penalties, interest and costs accruing thereon become and remain a first lien on such property from January 1 of the year for which such taxes are assessed. In addition, property taxes are a personal debt of the property owner as of January and, when delinquent, may be collected by suit as any other personal debt. Tennessee law prescribes the procedures to be followed to foreclose tax liens and to pursue legal proceedings against property owners whose property taxes are delinquent.

[balance of page left blank]

Assessed Valuations. According to the Tax Aggregate Report, property in the County and City reflected a ratio of appraised value to true market value of 0.9459 in Anderson County and 0.9916 in Roane County. The following table shows pertinent data for tax year 2018[1].

Class	Estimated Assessed Valuation[2]	Assessment Rate	Estimated Appraised Value[2]
Public Utilities	$ 9,031,015	55%	$ 20,689,610
Commercial and Industrial	353,399,440	40%	926,102,896
Personal Tangible Property	50,425,481	30%	175,055,033
Residential and Farm	401,475,500	25%	1,682,810,336
Total	**$814,331,436**		**$2,804,657,875**

[1] The tax year coincides with the calendar year, therefore, tax year 2018 is actually fiscal year 2018-2019.
Source: 2018 Tax Aggregate Report and the City.

The estimated assessed value of property in the City for the fiscal year ending June 30, 2019 (tax year 2018) is $814,331,436 compared to $802,284,012 the fiscal year ending June 30, 2018 (tax year 2017). The estimated actual value of all taxable property for tax year 2018 is $2,804,657,875 compared to $2,768,687,961 for tax year 2017.

Property Tax Rates and Collections. The following table shows the property tax rates and collections of the City for tax years 2014 through 2018 as well as the aggregate uncollected balances for each fiscal year ending June 30, 2018.

PROPERTY TAX RATES AND COLLECTIONS				Fiscal Yr Collections		Aggregate Uncollected Balance	
Tax Year [1]	Assessed Valuation[2]	Tax Rates	Taxes Levied	Amount	Pct	as of June 30, 2018 Amount	Pct
2014	$824,764,059	$2.39	$19,734,855	$19,128,736	96.9%	$ 96,272	0.5%
2015	796,947,949	2.52	20,079,120	19,129,012	95.3%	293,630	1.5%
2016	800,091,142	2.52	20,107,592	19,527,803	97.1%	264,118	1.3%
2017	802,284,012	2.52	20,228,796	19,596,550	96.9%	632,246	3.1%
2018	814,331,436	2.54	20,668,790	**IN PROCESS**			

[1] The tax year coincides with the calendar year, therefore, tax year 2018 is actually fiscal year 2018-2019.
[2] Includes both Counties the City is located in.
Source: The City

Ten Largest Taxpayers. For the fiscal year ending June 30, 2018 (tax year 2017), the ten largest taxpayers in the City were as follows:

	Taxpayer	Type of Business	Assessed Valuation	Percentage of Total
1.	UT Battelle	National Laboratory	$43,991,816	5.48%
2.	Oak Ridge Projects LLC	Real Estate	35,973,254	4.48%
3.	Scientific Ecology Group (AKA GTS Duratek)	Environmental Services	13,519,924	1.68%
4.	Richard Chinn (R & R Properties)	Entrepreneur	12,084,870	1.51%
5.	Methodist Medical Center	Health Services	11,216,041	1.40%
6.	Oak Ridge Tech Center Oak Ridge Corp Partners	Office Complex	11,097,619	1.38%
7.	Wilkinson Realty	Apartment Complex	6,933,520	0.86%
8.	CARE GSL Oak Ridge Prop CLLC	Assisted Living	6,561,206	0.82%
9.	Kroger Company	Retailer	6,448,691	0.80%
10.	NPP – Oak Ridge	Apartment Complex	6,053,840	0.75%
	TOTAL		**$153,880,781**	**19.16%**

Source: The City.

SALES TAX

Pursuant to applicable provisions of Title 67, Chapter 6, Part 7 of *Tennessee Code Annotated* as amended, (the "Act"), Anderson and Roane Counties levy a county-wide local option sales tax. Under the Act, counties and incorporated cities may levy a sales tax on the same privileges on which the State levies its sales tax. The rate of any sales tax levied by a county or city is limited under State law to two and three-fourths percent (2 3/4%).

Pursuant to the Act, the levy of a sales tax by a county precludes any city from within the county from levying a sales tax, but a city may levy a sales tax in addition to the county's sales tax a rate not exceeding the difference between the county sales tax rate and the maximum local option sales tax rate of two and three fourths percent (2 3/4%). If a city is located in more than one county, each portion of the city that is located in a separate county is treated as a separate city for purposes of determining the maximum sales tax rate.

On August 5, 2004, the citizens in the Anderson County portion of Oak Ridge overwhelmingly voted to increase the local sales tax option from 2.25% to the state maximum of 2.75%, with the additional tax proceeds being legally restricted to fund the renovation, construction and related debt service of the Oak Ridge High School project. The sales tax rate increase became effective with sales beginning on October 1, 2004. In July 2006, the .50% increase in the local sales tax option became countywide. The City was required to split the additional .50% in local sales tax collections with Anderson County effective with July 2006 sale transactions.

The revenues from the county-wide sales taxes of Anderson and Roane Counties are distributed pursuant to the provisions of the Act and other provisions of the *Tennessee Code Annotated*. Fifty percent (50 %) of the revenues raised through the county-wide sales taxes are directed to educational purposes and are distributed to all organized school systems, such as the City's school system, in the county in which the taxes are collected based upon the average daily attendance of each school system. The balance of the sales tax collections are divided between the general fund of the county in which the taxes are collected and all incorporated cities or towns in such county based upon the situs of collection.

Sales tax receipts available to the City and its school system from the city-wide sales tax and the City's portion of the county-wide sales taxes are as follows:

	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018
City	$ 9,694,331	$ 9,888,838	$10,620,337	$11,422,815	$11,878,456
Schools	4,854,777	4,304,972	4,568,039	4,711,403	5,213,418
TOTAL	**$14,549,108**	**$14,193,810**	**$15,188,376**	**$16,134,218**	**$17,091,874**
**Sites of Collection Roane/ Anderson	16%/84%	13%/87%	16%/84%	16%/84%	10%/90%

**Based on City Collections
Source: City of Oak Ridge Department of Finance and Comprehensive Annual Financial Report of the City.

The Act authorizes a local jurisdiction, by resolution of its governing body, to pledge proceeds raised by the power and authority granted by the Act to the punctual payment of principal of and interest on bonds, notes or other evidence of indebtedness issued for purposes for which such proceeds were intended to be spent. The security provisions of the Bonds do not include a pledge of available local option sales tax revenues as additional security.

The increase in the sales taxes has allowed the City to move away from a primary reliance on property taxes to a more equitable funding formula utilized in property taxes, sales taxes and other revenues. The net result of the new sales taxes has been nearly a substantial reduction in the historical level of the City's property tax rate (see PROPERTY TAX - Property Tax Rates and Collections, contained herein).

PENSION PLANS

Employees of the City are members of the Political Subdivision Pension Plan (PSPP), an agent multiple-employer defined benefit pension plan administered by the Tennessee Consolidated Retirement System (TCRS). TCRS provides retirement benefits as well as death and disability benefits. Employees working in the school system are members of a separate plan administrated by the TCRS. Benefits are determined by a formula using the member's high five-year average salary and years of service. Members become eligible to retire at the age of 60 with 5 years of service or at any age with 30 years of service. A reduced retirement benefit is available to vested members at the age of 55. Disability benefits are available to active members with 5 years of service who became disabled and cannot engage in gainful employment. There is no service requirement for disability that is the result of an accident or injury occurring while the member was in the performance of duty. Active members on June 1, 1994 became vested after 5 years of service. Benefit provisions are established in State statute found in Title 8, Chapter 34-37 of the Tennessee Code Annotated (TCA). State statutes are amended by the Tennessee General Assembly. Cost of living adjustments (COLA) are provided each July based on the percentage change in the Consumer Price Index (CPI) during the previous calendar year. No COLA is granted if the CPI increase is less than .50%. The maximum annual COLA is capped at 3.0%. Political subdivisions such as the City participate in the TCRS as individual entities and are liable for all costs associated with the operation and administration of their plan. Benefit improvements are not applicable to a political subdivision unless approved by the chief governing body.

For additional information on the funding status, trend information and actuarial status of the City's retirement programs, please refer to the Notes to Financial Statements located in the General Purpose Financial Statements of the City located herein.

[balance of page left blank]

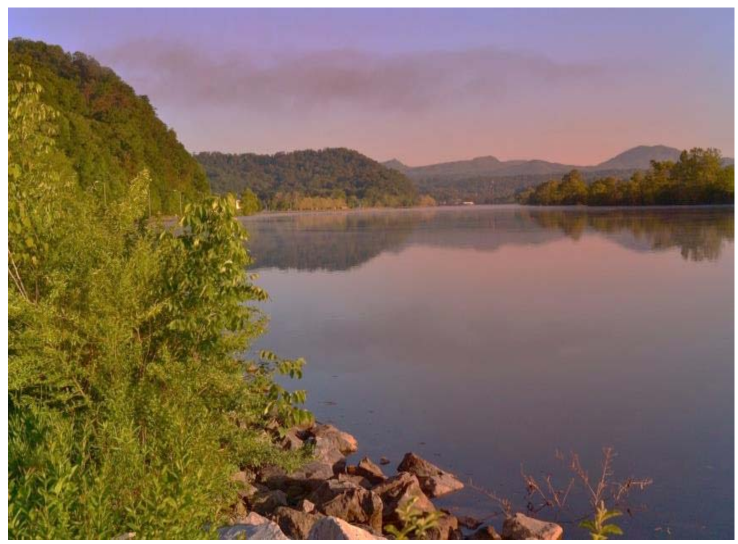
APPENDIX C

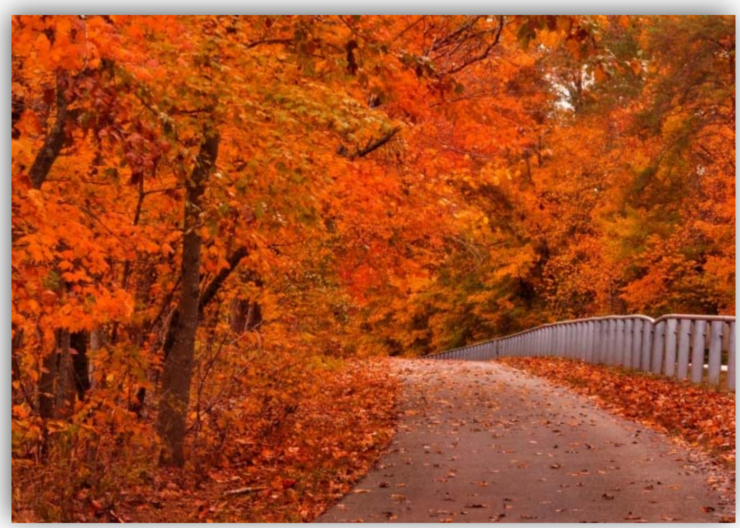
GENERAL PURPOSE FINANCIAL STATEMENTS

THE CITY OF OAK RIDGE, TENNESSEE

Comprehensive Annual Financial Report
City of Oak Ridge, Tennessee

For the Fiscal Year Ended
June 30, 2018





CITY OF OAK RIDGE, TENNESSEE

COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Fiscal Year Ended June 30, 2018

Prepared by

FINANCE DEPARTMENT

CITY OF OAK RIDGE, TENNESSEE
TABLE OF CONTENTS

For the Year Ended June 30, 2018

CITY OF OAK RIDGE

POST OFFICE BOX 1 • OAK RIDGE, TENNESSEE 37831-0001

December 31, 2018

Honorable Mayor,
Members of the City Council and
Citizens of the City of Oak Ridge, Tennessee

The Comprehensive Annual Financial Report (CAFR) of the City of Oak Ridge, Tennessee, for the fiscal year ended June 30, 2018, is hereby submitted. The financial statements are presented in conformity with generally accepted accounting principles (GAAP) as set forth by the Governmental Accounting Standards Board (GASB) and have been audited in accordance with generally accepted auditing standards by a firm of licensed certified public accountants.

This report consists of management's representations concerning the finances of the City of Oak Ridge. Consequently, management assumes full responsibility for the completeness and reliability of all of the information presented in this report. To provide a reasonable basis for making these representations, management of the City of Oak Ridge has established a comprehensive internal control framework that is designed both to protect the City's assets from loss, theft or misuse and to compile sufficient reliable information for the preparation of the City of Oak Ridge's financial statements in conformity with GAAP. Because the cost of internal controls should not outweigh their benefits, the City of Oak Ridge's comprehensive framework of internal controls has been designed to provide reasonable rather than absolute assurance that the financial statements will be free from material misstatement. As management, we assert that, to the best of our knowledge and belief, this financial report is complete and reliable in all material respects.

The City of Oak Ridge's financial statements have been audited by Coulter & Justus, PC, a firm of licensed certified public accountants. The goal of the independent audit was to provide reasonable assurance that the financial statements of the City of Oak Ridge, for the fiscal year ended June 30, 2018, are free of material misstatement. The independent audit involved examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; assessing the accounting principles used and significant estimates made by management; and evaluating the overall financial statements presentation. The independent auditor concluded, based upon the audit, that there was a reasonable basis for rendering an unmodified opinion that the City of Oak Ridge's financial statements for the fiscal year ended June 30, 2018 are fairly presented in conformity with GAAP. The independent auditor's report is presented as the first component of the financial section of this report.

The independent audit of the financial statements of the City of Oak Ridge was part of a broader, federally mandated "Single Audit" designed to meet the special needs of federal grantor agencies. The standards governing Single Audit engagements require the independent auditor to report not only on the fair presentation of the financial statements, but also on the City of Oak Ridge's internal controls and compliance with legal requirements, with special emphasis on internal controls and legal requirements involving the administration of federal awards. These reports are contained in section four of this report titled "Single Audit Section."

GAAP requires that management provide a narrative introduction, overview, and analysis to accompany the basic financial statements in the form of Management's Discussion and Analysis (MD&A). This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The City of Oak Ridge's MD&A can be found immediately following the report of the independent auditors.

Profile of the City of Oak Ridge

The City of Oak Ridge, incorporated on June 16, 1959, is located in the eastern part of the State, occupying the southern portion of Anderson County and an eastern portion of Roane County. The population of Oak Ridge according to the 2010 census is 29,330.

The City of Oak Ridge has a unique history. This area was selected by the United States government in 1942 as the location for its production plants for uranium-235, a component of the first atomic bomb. Constructed by the U.S. Corps of Engineers as part of the secret World War II "Manhattan Project" the early task of the plant was the separation of fissionable uranium-235 from the more stable uranium-238 by an electro-magnetic process. Some 80,000 workers were hired for emergency construction of the laboratories and offices in the then 56,000-acre site. The original townsite was built during World War II to house and furnish necessary facilities for the employees of the uranium plants. In 1955 Congress passed Public Law 22, which allowed the Atomic Energy Commission to sell the homes and land to the residents, and to give the City all municipal facilities if it voted to incorporate. Oak Ridge is approximately 92 square miles in area and includes the plant and facilities of the U.S. Department of Energy (DOE). Residential, commercial and municipal owned portions of the City make up nearly 30 square miles. The remaining area of the City is owned by the U.S. Department of Energy (DOE).

The City of Oak Ridge is empowered to levy a property tax on both real and personal property located within its boundaries. The City receives an annual in-lieu of tax payment from DOE on the acreage owned by the federal government, subject to annual congressional appropriation. The calculation is based on the land's usage prior to ownership by the federal government and is therefore valued as if it were agricultural farmland. Federal buildings located on this property are currently not subject to taxation by the City, with the exception of four newer private facilities located at the Oak Ridge National Laboratory (ORNL) and the Y-12 complex.

The City is governed by a modified City Manager-Council form of government. The governing body of the City is a seven member City Council. Approximately, half of the City Council is elected on a non-partisan basis every two years for a four-year term of office. Following each regular City election, the City Council elects one of its members as mayor to serve for a two-year period as ceremonial head of the City and presiding officer of the City Council. Policy-making and legislative authority are vested in City Council. The Council is responsible, among other things, for passing ordinances, adopting the budget, appointing committees, and hiring both the City Manager and the City Attorney. The City Manager is responsible for carrying out the policies and ordinances of the City Council, oversees the City's day-to-day operations and resources, and appoints heads of the various departments.

The City is a full service community, which includes police and fire protection; electric, water and wastewater services; residential solid waste collection; the construction and maintenance of highways, streets and infrastructure; public library, recreational activities and cultural events. The Oak Ridge Schools operate under the City Charter and are considered part of the City and, therefore, has been included as an integral part of the City of Oak Ridge's financial statements. In addition to general government activities, the City is financially accountable for the Convention and Visitors' Bureau whose activities are reported separately within the City of Oak Ridge's financial statements. Added in fiscal 2014 was the Oak Ridge Land Bank, which was allowed for establishment under new state legislation sponsored by the City to reclaim unused, vacant and/or undesirable land for revitalization. Also included are the activities of the Oak Ridge Public Schools

Education Foundation, Inc., whose primary mission is to enhance, promote and support the City of Oak Ridge Schools. However, the Oak Ridge Housing Authority, Oak Ridge Utility District, Oak Ridge Industrial Development Board and the Oak Ridge Health and Educational Facilities Board have not met the established criteria for inclusion; and, accordingly, are excluded from this report.

The annual budget serves as the foundation for the City of Oak Ridge's financial planning and control. The budget preparation process begins in the late summer when City departments begin the preparation of six-year Capital Improvements Program (CIP) requests for submission to the Oak Ridge Municipal Planning Commission for review. The program identifies anticipated capital projects, establishes priorities and identifies the anticipated source of funding. The CIP, as developed and approved by the Planning Commission, is submitted for Council's consideration prior to budget deliberations.

After one or more Council meetings devoted to guidance to the City Manager with respect to the budget to be submitted, the City Manager submits to the Council a proposed budget for the next fiscal year. As part of the budget preparation, the City Manager meets with City departments who outline requirements and challenges related to their departmental operating budgets. The Finance Department quantifies preliminary budget information, including revenue projections, for preparation of the City Manager's proposed budget. Prior to the first reading of the budget ordinance, the City Manager presents the proposed budget for the upcoming fiscal year to City Council at a work session or Council meeting. The Board of Education also presents the School Fund budget prior to final reading of the budget ordinance, which includes a request for appropriation of City funds to meet program obligations. Budget work sessions may be held with City Council during budget deliberations to provide a detailed review of the proposed operating and capital improvements budgets. The Council is required to hold a public hearing on the proposed budget and to adopt a final budget and tax rate prior to the start of the City's fiscal year on July 1. However, if for any reason an appropriation ordinance is not adopted by July 1, the appropriations for the current year shall be carried forward for the next fiscal year until the adoption of the new appropriation ordinance occurs.

The budget is presented by fund, function (e.g., public safety), and department (e.g., police). The budget is legally appropriated at the fund level. Department heads may make transfers of appropriations within a department and the City Manager may make transfers of appropriations between departments. Transfers of appropriation between funds, however, require approval of City Council. Budget-to-actual comparisons are provided in this report for each individual governmental fund for which an appropriated annual budget has been adopted. For the general fund and the general purpose school fund, this comparison is presented on pages C-8 and C-9 as part of the basic financial statements for the governmental funds. For non-major governmental funds with appropriated annual budgets, this comparison is presented in the governmental fund subsection of this report, which starts on page E-4. The comparison for the capital projects and debt service funds are presented on pages E-26 and E-27, respectively.

Factors Affecting Financial Condition

The information presented in the financial statements is perhaps best understood when it is considered from the broader perspective of the specific environment within which the City of Oak Ridge operates.

Local economy. The City of Oak Ridge currently enjoys a strong and growing economic environment. Recently, the development activities have escalated, particularly in the retail sector. Oak Ridge was not impacted as much as many areas in the country during the recent nationwide economic downturn due to the large federal government presence in Oak Ridge and the federal stimulus money awarded to those entities.

Since 2013, the City government has made it a significant goal to re-establish a new core to the central city. Through the use of tax increment financing, the City has incentivized the development of new construction of restaurants, grocery centers, and retail services. Initial cooperative ventures have led to the multi-phased, $91 million Oak Ridge Main Street project. The City has implemented $15 million in infrastructure in the redevelopment site. Opened since June 2016, new retail shops and junior major storefronts like TJ Maxx and Dick's Sporting Goods has led to a resurgence of new investment and partnerships, which is now leading to Phase II due to the success of Phase I.

The Main Street Phase II portion is yielding an additional 100,000 square-feet of retail space with soon to be announced national retailers. Planning processes also include a new 217 unit apartment complex. Also, in a public/private/non-profit partnership with the Department of Energy, the City has organized a land transfer in return for a newly remodeled American Museum of Science and Energy within the Main Street project, with 15 years of free rent and $1.6 million in remodeling. The Museum opened in October 2018. The 18 acre tract of land is being planned for seven more acres of adjacent grocery, restaurant and retail facilities to add to the shopping mix. Additional unanticipated facilities will add a projected $30-40 million in new construction for the land transfer site. The tax increment financing district has also seen a significant amount of upgrade and improvements in the building stock in adjacent and interior properties.

A 123,000-square-foot Kroger Marketplace opened at the end of June 2014 while eliminating 50 units of dilapidated housing. The site also contains room for an additional 12,000-square-foot strip center and several outparcels which are under development. Across the street another 12,000-square-foot strip center was constructed and occupied with small retail establishments. In October 2016, a Hobby Lobby opened in the vacated Kroger site in Oak Ridge and has exceeded projections.

To recap the Oak Ridge Mall site which happened at the end of June 2016: The sale of the Mall site allowed for redevelopment of the underutilized 58-acre site located in the center of Oak Ridge. Full demolition of the former mall buildings occurred and new City infrastructure installed. Existing Belk and J.C. Penny stores have remodeled. In the summer of 2017 the newly constructed Dick's Sporting Goods, T.J. Maxx, Ulta, Rack Room Shoes, Rue 21, Maurices, Pet Smart and Electronic Express opened. Phase II of the project will begin in the spring of 2019. New retail establishments adjacent to the Main Street site include a Panda Express that opened in the summer of 2017 and a retail space. Recently opened is a new 90-room Marriott Townplace hotel and a Freddy's Custard restaurant.

New housing construction is on the rise. With the anticipated apartment and condominium units planned by the Main Street project, interest has arisen in other parts of the city. A strong regional developer has optioned large portions of the Rarity Ridge subdivision site, now known as The Preserve at Clinch River. This area will address market driven, medium priced housing needs and size. Retail availability now has enhanced interest in several inactive subdivisions and further reviews by private sector developers are occurring. Crossroads at Wolf Creek is now substantially built out with 110 single family homes. Groves Park Commons is in due-diligence phase with a strong new developer. This subdivision will have 355 units.

Located at Oak Ridge National Laboratory (ORNL) is the Spallation Neutron Source (SNS) accelerator project which was built by a partnership of six U.S. Department of Energy laboratories and provides the most intense pulsed neutron beams in the world for scientific research and industrial development. The SNS recently broke a new record by ending its first neutron production cycle at its design power level of 1.4 megawatts. Scientists from around the world visit each year to study materials that will form the basis for new technologies in telecommunications, manufacturing, transportation, information, biotechnology and health. The complex includes the Joint Institute for Neutron Sciences, a 32,000-square-foot facility supporting users who come to Oak Ridge for experiments at the SNS and the High Flux Isotope Reactor and a guest house, providing an on-site hotel for scientists conducting experiments at the ORNL facilities.

In 2005, construction of a $50 million private sector funded complex was completed at ORNL to house a supercomputer. This was the first privately owned facility to be located on the federal reservation on which the City received real property tax payments based on the appraised value of the building. With three similar type facilities completed at ORNL and the Y-12 complex, the construction of taxable facilities on federal property represents a significant revenue stream for the City. The City real property taxes on these facilities are nearly $2,000,000 annually.

Phase I of the Science and Technology Park (S&T) on the ORNL campus is complete and two buildings totaling 155,000 square feet are now occupied by more than 15 companies. Future development phases will enable the S&T Park to grow to nearly 30 acres and up to 350,000 square feet of offices and laboratories to help meet ORNL's goal of successful technology transfer and commercialization.

Work is underway for the estimated $6.5 billion Uranium Processing Facility (UPF) at the Y-12 Complex in Oak Ridge. The UPF is a multiyear, multibillion dollar project for which project completion is anticipated in 2025. In September 2017, the overall UPF project achieved 90 percent design completion on the nuclear work, a major prerequisite for starting construction on the nuclear facilities. In November 2017, the $27.5 million Construction Support Building (CSB) was completed. Construction is now underway for the main UPF buildings. The Main Process Building (MPB) will be a three-story 240,000 square-foot building that will house enriched uranium operations. The other two buildings will support operations in the MPB. The economic impact of construction is estimated at $1.8 billion in goods and services and 2,400 jobs at peak. A study conducted by the University of Tennessee Howard H. Baker Jr. Center for Public Policy concluded that there would be a $5.7 billion increase in state gross domestic product (GDP) in the state during UPF construction, as well as significant increase in sales and use tax revenues.

The Department of Energy (DOE) is funding a five-year project to design, license and help commercialize small, modular nuclear reactors (SMR's) in the US. DOE will fund up to half the cost of the $450 million project under a cost-share agreement with Babcock & Wilcox (B & W), the lead company selected to implement it. The Tennessee Valley Authority (TVA) and Bechtel are also partners. DOE says it expects Nuclear Regulatory Commission licensing and achievement of commercial operations by mid-2020's. In January 2017, TVA announced that The Nuclear Regulatory Commission (NRC) has accepted and docketed the utility's early site permit application for the potential construction and operation of multiple SMR units at the Clinch River Site in Oak Ridge. This action means that the NRC staff may now begin its technical review of TVA's application.

U.S. Department of Energy. During fiscal 2008, the City entered into a contract with the U.S. Department of Energy to provide services to areas previously served by federal contractors. The City entered into an agreement with DOE, through their site contractor, to assume fire and emergency medical response duties for the federal East Tennessee Technology Park (ETTP) site. Under the agreement with DOE, through its contractor the City received over $10,000,000 in funding over the first four-year period of the agreement. On October 1, 2007, DOE transferred 2.23 acres of land, the ETTP fire station and firefighting and ambulance vehicles and equipment to the City to operate this facility. The City added an additional 28 employees to man this station, which will also serve the west end of Oak Ridge. The West End Fund, a special revenue fund, was established by the City to account for the operations of the ETTP fire station. The City received $2,782,239 under this contract in fiscal 2018. The contract was renewed for an additional four years through September 30, 2019.

The City receives an annual Payment in Lieu-of Tax (PILOT) from DOE, which was $1,795,988 in fiscal 2018. DOE's PILOT payment to the City is based on the number of acres on the federal reservation (32,671 acres) at a per acre appraisal approved by DOE at the City's property tax rate. In accordance with the Atomic Energy Commission Act, the land value is assessed based on the original usage of the property, which was residential/agricultural farmland when DOE purchased the land for the WWII effort, rather than the current use of the property. The residential property tax assessment rate of 25% is therefore used, rather than the 40% rate that would normally apply to commercial/industrial properties. DOE's remittance is also contingent on the annual federal appropriation of this payment. Additional smaller grants for historical archive projects and police security are also provided to the City.

Long-term financial planning

A major focus at this time is the water and wastewater infrastructure systems. The City is continuing its improvement to the wastewater collection system and wastewater lift station rehabilitation and replacement. The City began the project in 1997 to upgrade, expand and rehabilitate the wastewater treatment plant and wastewater collection system. The upgrades and expansion to the wastewater treatment plant increased capacity from 6 mgd to 9 mgd, a 33% increase in capacity to service new customers and construction of a new wastewater plant at the Preserve of Clinch River development site.

On September 27, 2010, the City received an administrative order (AO) from the United States Environmental Protection Agency (EPA). The City was found to be in violation of Section 301 of the Clean Water Act (CWA), 33 U.S.C. Section 1311. The City was given a timetable and actions to be made to remedy the violations. The City's approved mediation plan projected costs of $23,090,000 for wastewater capital projects. In September 2015, the City received a "closure letter" from EPA stating the AO had been fulfilled.

The City entered into a series of debt issuances totaling $37,360,327 to meet the requirements of the AO. Final major contractor payments on the wastewater construction projects under the AO occurred in October 2016. The City is required by EPA to continue ongoing improvements to the wastewater system. In June 2017, a $2,000,000 State Revolving Fund (SRF) Loan was approved by the State for rehabilitation of approximately 30,000 linear feet of sewer line. This loan contains a 7% principal forgiveness. In August 2017, a $3,100,000 SRF Loan was approved by the State for improvements to the Turtle Park Wastewater Pumping Station.

Upgrades and improvements are also planned to the water system. The existing water treatment plant was built during construction of the Manhattan Project facilities in the 1940's and is located within the federal complex in Oak Ridge, but is operated by the City of Oak Ridge. The water plant serves both the DOE facilities and the residents and businesses located within the City of Oak Ridge. DOE is a major water customer with approximately 50% of the City's annual water plant production being used by DOE facilities. The City recently had an engineering firm review options regarding whether to perform major renovations to the existing water treatment plant or to build a new water treatment plant. The construction of a new $43 million water plant close to the raw water intake station is the recommended option due to the significant slope issues at the existing water plant site. Improvements also include the raw water intake system, including electrical system replacement. DOE would be a financial partner to the City in the construction of the new water treatment plant. The City has applied and is currently under review for an approximate $20.9 million Water Infrastructure Finance and Innovation Act (WIFIA) loan. The WIFIA program was enacted in 2014 and is administered by EPA headquarters. The City was one of 12 entities nationwide that were invited to apply for a WIFIA loan in its first year of loan awards. The City is also currently under review for an engineering loan with the State of Tennessee revolving loan fund (SRF). The City plans to match the WIFIA loan with SRF loans which will provide the ultimate funding for the total water treatment plant project.

A number of rate increases have been adopted for both water and wastewater rates with the first phase effective May 2012 and the second phase effective January 2013. A new water and wastewater rate review was conducted in the summer 2013 which resulted in the adoption of rate increases for both services effective in January 2014 and a second increase in January 2015. The study anticipated annual rate increases for both water and wastewater services to occur through 2020. Wastewater rates were increased 6% effective January 2017 and an additional 6% in

January 2018. Increases to water rates were delayed until the evaluation of options regarding the water treatment plant could be completed. A 6% water rate increase was adopted effective October 2017 and an additional 4% was approved effective January 2019. A new water/wastewater rate study is planned for the spring of 2019.

City revenues from local sales and use tax collections were unusually high in fiscals 2010 through 2013 due to expenditures by federal contractors from stimulus grant awards. As federal funding to local contractors from stimulus awards diminished, the City experienced a decline in local sales and use tax collections that reached a low point during fiscal 2015 as federal projects transitioned to new missions including the $6.5 Billion Uranium Processing Facility (UPF). Sales and use tax collections rose during fiscal years 2016 and 2017 as remittances from federal contractors reached a more normalized level, plus additional collections from the new retail business establishments in Oak Ridge. However, an alert to declining sales tax collections in Roane County portion of Oak Ridge from collections $781,365 below budget in fiscal 2018, due to the usage of a 2015 state law for economic development incentives that exempted sales tax on research and development machinery and equipment. The major financial impact on the City was avoided with an amendment to the law in spring 2018, which only allowed sales tax exemption for two major federal projects: the Summit Supercomputer and the Spallation Neutron Source in Oak Ridge. Sales taxes are now more normalized and stable.

Fiscal 2018 sales tax collections in the Anderson County portion of Oak Ridge were $668,341 above budget due to increased spending by federal contractors related to the UPF project. Overall, local sales and use tax collections are budgeted to increase $761,319, 7.3%, in fiscal 2019 over 2018 levels due to the resumption of sales tax collection in the Roane County to a more normalized level and the continuation of the increased sales tax collections from increased spending by federal contractors related to the construction of the UPF project.

In November 2017, the City issued $19,125,000 in General Obligation Refunding Bonds, Series 2017. The bonds were sold at a premium of $2,055,564, with issuance costs of $297,620, resulting in a final True Interest Cost (TIC) of 2.2639056%. $6,220,000 of the bond proceeds along with $628,888 in City contributions were used for the advance refunding of $6,970,000 in Electric Fund debt for the outstanding 2020 to 2025 maturities of the General Obligation Refunding Bonds 2009. The remaining proceeds will be used for energy efficiency improvements to public buildings, design and site costs for a new Preschool and a new Senior Center, the purchase of software, including utility billing and financial software, and the purchase of a Motorola P25 Mission-Critical Radio System and related equipment.

In December 2018, the City issued $13,285,000 in General Obligation Refunding Bonds, Series 2018. The bonds were sold at a premium of $476,317, with issuance costs of $116,919 and an underwriter's discount of $109,398, resulting in a final True Interest Cost (TIC) of 3.618%. The majority of the bonds will be used for the construction of a new Preschool and a Senior Center in Oak Ridge. The new Preschool will be built on the current City Scarboro Park site. The park will be relocated to adjoining City property with all new recreational facilities. The new Senior Center will be constructed beside the City's current Civic Center. Remaining bond proceeds will be utilized for public building improvements to other City/School facilities.

Awards and Acknowledgements

The Government Finance Officers Association (GFOA) awarded a Certificate of Achievement for Excellence in Financial Reporting to the City of Oak Ridge, Tennessee, for its comprehensive annual financial report (CAFR) for the fiscal year ended June 30, 2017. This is the fifty-seventh consecutive year that the City has achieved this prestigious award. In order to be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized CAFR. This report satisfied both generally accepted accounting principles (GAAP) and applicable legal requirements.

A Certificate of Achievement is valid for a period of one year only. We believe that our current CAFR 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.

Preparation of this report was accomplished through the dedicated services of the Finance Department. We express our appreciation to all who contributed to its preparation. Credit also must be given to the governing City Council for their unfailing support for maintaining the highest standards of professionalism in the management of the City of Oak Ridge's finances.

Respectfully submitted,

Mark S Watson

Mark S. Watson
City Manager

Janice McGinnis

Janice E. McGinnis
Finance Director

Government Finance Officers Association

Certificate of Achievement for Excellence in Financial Reporting

Presented to

City of Oak Ridge

Tennessee

For its Comprehensive Annual Financial Report for the Fiscal Year Ended

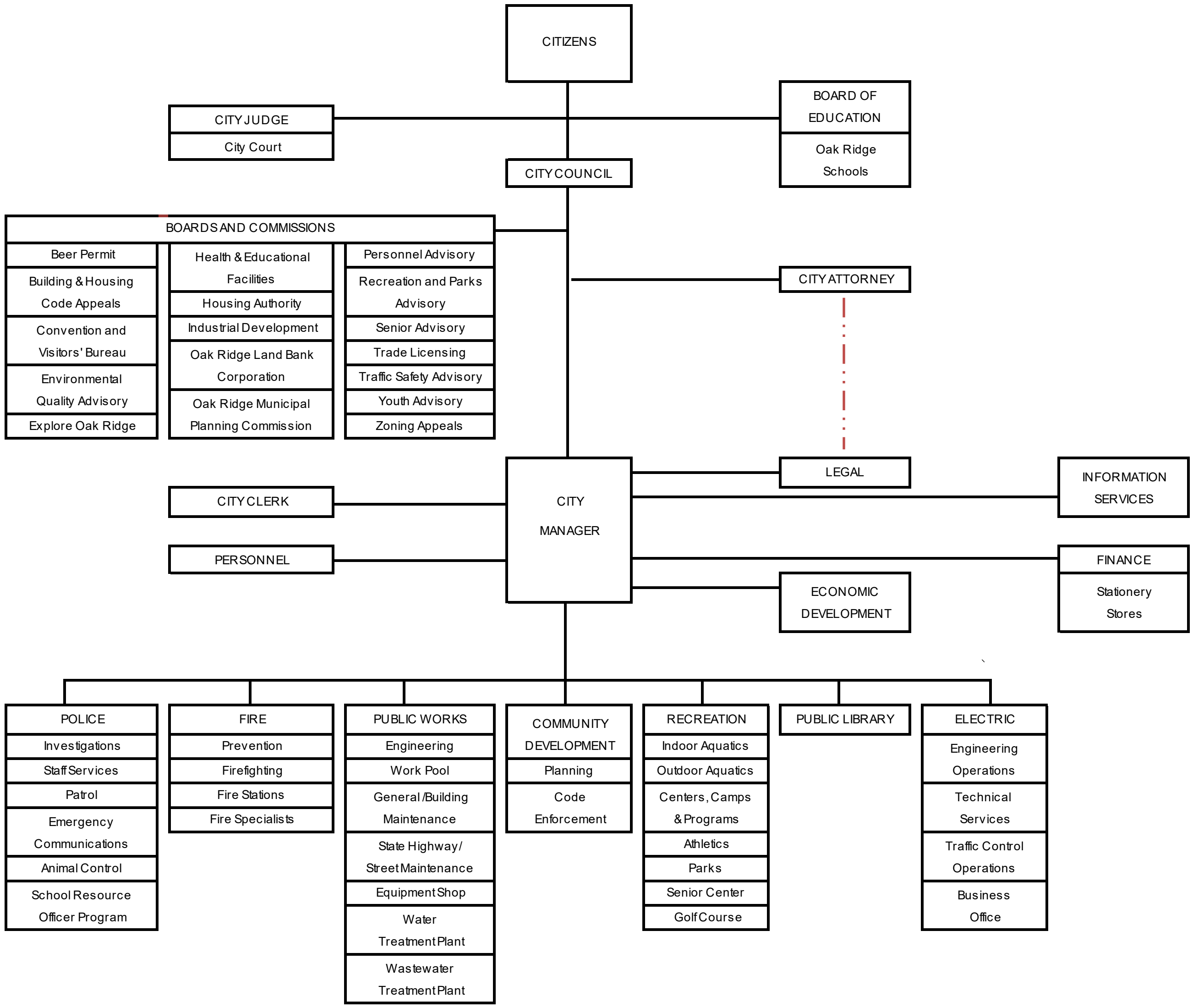
June 30, 2017

Christopher P. Morrill

Executive Director/CEO

ORGANIZATIONAL CHART

City of Oak Ridge, Tennessee



CITY OF OAK RIDGE, TENNESSEE

CITY OFFICIALS

Mayor

Warren L. Gooch

Members of City Council

Kelly Callison	Rick Chinn, Jr.
Jim Dodson	Charles J. Hope, Jr.
Ellen Smith	Hans Vogel

City Manager

Mark S. Watson

Department Directors

Wayne Blasius	Community Development Director
Jack L. Suggs	Electrical Director
Janice E. McGinnis	Finance Director
R. Darryl Kerley	Fire Chief
Amy Fitzgerald	Information Services Director
Kathy McNeilly	Library Director
Jon Hetrick	Parks & Recreation Director
Bruce Applegate	Director of Administrative Services
James T. Akagi	Police Chief
Shira McWaters	Public Works Director

City Attorney	City Judge	City Clerk
Kenneth R. Krushenski	Robert A. McNees III	Mary Beth Hickman

Board of Education

Keys Fillauer, Chairman
Robert Eby, Vice-Chair
Angi Agle
Paige Marshall
Laura McLean

Superintendent of Schools

Bruce Borchers, Ed.D

9717 Cogdill Road
Suite 201
Knoxville, TN 37932

COULTER & JUSTUS, P.C.

phone: (865) 637-4161
fax: (865) 524-2952
web: cj-pc.com

Report of Independent Auditors

Members of the City Council
City of Oak Ridge, Tennessee

Report on the Financial Statements

We have audited the accompanying financial statements of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund and the aggregate remaining fund information of the City of Oak Ridge, Tennessee (the City) as of and for the year ended June 30, 2018, and the related notes to the financial statements, which collectively comprise the City'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.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We did not audit the financial statements of the General Purpose School Fund, the School Federal Projects Fund, the Other Education Special Revenue Fund, the Extended School Program Fund, or the Central Cafeteria Fund, which represent 40% of assets, (19%) of net position and 48% of revenues of the governmental activities of the City. We did not audit the financial statements of the Oak Ridge Public Schools Education Foundation, Inc., a discretely presented component unit, which represents 79% of assets and 81% of net position of the aggregate discretely presented component units. We did not audit the financial statements of the Scholarship Fund or the Internal School Funds, which represent 100% of the assets, additions and net position of the fiduciary funds of the City. Those financial statements were audited by other auditors whose report thereon has been furnished to us, and our opinions, insofar as they relate to the amounts included for those funds, is based solely on the report of the other auditors. We conducted our audit in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

Auditor's Responsibility (continued)

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the City'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 City's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinions

In our opinion, based on our audit and the report of other auditors, the financial statements referred to above present fairly, in all material respects, the respective financial position of the governmental activities, the business-type activities, the aggregate discretely presented component units, each major fund, and the aggregate remaining fund information of the City as of June 30, 2018, and the respective changes in financial position and, where applicable, cash flows thereof and the respective budgetary comparison for the General Fund and General Purpose School Fund for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As discussed in Note 1 to the financial statements, in 2018 the City adopted new accounting guidance, Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*. Our opinion is not modified with respect to this matter.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages B-1 through B-15 and the required supplementary information on pages D-1 through D-10 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 and other auditors 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.

Members of the City Council
City of Oak Ridge, Tennessee

Other Matters (continued)

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the City's basic financial statements. The introductory section, other supplementary information section and statistical section are presented for purposes of additional analysis and are not a required part of the basic financial statements. The schedule of expenditures of federal awards and state financial assistance, as required by the audit requirements of Title 2 U.S. Code of Federal Regulations Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* is presented for purposes of additional analysis and is also not a required part of the basic financial statements.

The other supplementary information section and the schedule of expenditures of federal awards and state financial assistance are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America by us and the other auditors. In our opinion, the other supplementary information section and the schedule of expenditures of federal awards and state financial assistance are fairly stated in all material respects in relation to the basic financial statements as a whole.

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 December 31, 2018, on our consideration of the City's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of 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 City's internal control over financial reporting and compliance.

Coulter & Justus, P.C.

Knoxville, Tennessee
December 31, 2018

As management of the City of Oak Ridge, Tennessee (the City) we offer readers of the City's financial statements this narrative overview and analysis of the financial activities of the City for the fiscal year ended June 30, 2018. We encourage readers to consider the information presented here in conjunction with additional information that we have furnished in our letter of transmittal, which can be found on pages i-viii of this report.

Financial Highlights

- The assets of the City of Oak Ridge exceeded its liabilities at the close of the most recent fiscal year by $172,392,250 (*net position*). Of this amount, $38,660,330 (*unrestricted net position*) may be used to meet the government's ongoing obligations to citizens and creditors.

- The City adopted Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions,* in the year ended June 30, 2018. The objective of this statement is to address accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). The adoption of this standard resulted in a restatement to decrease beginning net position in the Statement of Activities for the governmental activities and business-type activities of $1,573,684 and $592,865, respectively.

- An adjustment of $38,004 to increase the beginning net positon of governmental activities was recorded to recognize inventory which was previously unreported for the year ended June 30, 2017.

- Net position increased by $10,942,833 (6.78%) compared to last fiscal year's ending net position after the net position adjustments listed above. The increase is due to program revenues of $131,995,991 and general revenues of $45,475,649 over expenses of $164,400,262. The City's changes in net position are detailed on page B-6 of this report.

- Total revenues increased $2,138,937 compared with the prior fiscal year, comprised of a $845,605 increase in revenues in governmental activities and a $1,293,332 increase in business type activities. The comparative increase in governmental activities revenue includes a $1,422,486 increase in program revenues, primarily due to an increase in revenues from operating grants and contributions, which was offset by a $576,881 reduction in general revenues, primarily due to the change in the fair value of interest rate swaps from the prior fiscal year. Changes in business-type activities revenue include a $827,522 increase in capital grants and contributions related to the recognition of grant revenue in the Emergency Communications Fund.

- The City's property tax rate remained at the fiscal 2017 rate of $2.52 per $100 of assessed valuation. Electric rates increased 1.5% in October 2017 to pass-through a wholesale power increase by TVA. Water rates increased 6% in October 2017 and wastewater rates increased 6% in January 2018.

- As of the close of the current fiscal year, the City's governmental funds reported combined ending fund balances of $39,499,178 an increase of $6,643,727 in comparison with the prior year. The fund balance increases include $861,135 in the General Purpose School Fund and $4,726,034 in the Capital Projects Fund due to the remaining bond proceeds on hand at fiscal year-end from the issuance of General Obligation Bonds in November 2017.

- At the end of the current fiscal year, unassigned fund balance for the General Fund was $9,794,937, or 44.9% of total general fund expenditures. Expenditures do not include transfers to other funds, which totaled $22,949,694 in the City's general fund.

- At June 30, 2018, the General Fund had a nonspendable fund balance of $771,165. This includes a $476,190 long-term note receivable from the City's Waterworks Fund, $250,000 in inventory, and $44,975 in prepaids.

- At the end of the current fiscal year, the General Purpose School Fund had an assigned fund balance of $7,270,394. This equates to 13.6% of expenditures for fiscal 2018.

- Overall, the City's total debt increased by $7,736,171 (4.83%) during the current fiscal year. Debt in governmental activities increased $6,511,675 and debt in business-type activities increased $1,224,496. During fiscal 2018, the issued $19,125,000 in fixed-rate General Obligation Bonds of which $8,935,000 was for new governmental activity capital projects and $10,190,000 for business-type activities of which $3,970,000 was for new capital projects and $6,220,000 was issued to refund $6,970,000 in outstanding electric debt. In October 2017, the City was approved for a $3,000,000 Energy Efficient Schools Initiative Loan for energy efficient improvements to School buildings of which $491,804 remained available for draw at year end. State Revolving Fund (SRF) Loans of $2,000,000 and $3,100,000 were approved by the State in June 2017 and August 2017, respectively, for wastewater projects. The $2,000,000 SRF loan contains a 7% principal forgiveness. At year-end, there was $4,040,541 remaining available for draw on SRF loans.

Overview of the Financial Statements

This discussion and analysis are intended to serve as an introduction to the City's basic financial statements. The City's basic financial statements comprise four components: 1) government-wide financial statements, 2) fund financial statements, 3) notes to the financial statements and 4) single audit report and findings and recommendations. This report also contains required supplementary information and other supplementary information in addition to the basic financial statements themselves.

Government-wide financial statements. The *government-wide financial statements* are designed to provide readers with a broad overview of the City's finances, in a manner similar to a private-sector business.

The *statement of net position* presents information on all the City's assets and liabilities, with the difference between the two reported as *net position*. Over time, increases or decreases in net position may serve as a useful indicator of whether the financial position of the City is improving or deteriorating.

The *statement of activities* presents information showing how the government's net position changed during the most recent fiscal year. All changes in net position are reported as soon as the underlying events giving rise to the change occur, *regardless of the timing of related cash flows*. Thus, revenues and expenses are reported in this statement for some items that will only result in cash flows in future fiscal periods (e.g., uncollected taxes and earned but unused vacation leave).

Both of the government-wide financial statements distinguish functions of the City that are principally supported by taxes and intergovernmental revenues (*governmental activities*) from other functions that are intended to recover all or a significant portion of their costs through user fees and charges (*business-type activities*). The governmental activities of the City include general government, public safety, highways and streets, residential solid waste collection, economic development, culture and recreation. The business-type activities of the City include electric distribution, water and wastewater treatment, distribution and collection and operation of an emergency communications district.

The government-wide financial statements include not only the City itself (known as the *primary government*) and the operations of the Oak Ridge Schools (the Schools), but also the legally separate Oak Ridge Convention and Visitors Bureau and the Oak Ridge Land Bank for which the City is financially accountable and the Oak Ridge Public Schools Education Foundation, Inc. whose main purpose is to provide financial support to the schools. Financial information for these *component units* are reported separately from the financial information presented for the primary government itself.

The government-wide financial statements can be found on pages C-1 through C-3 of this report.

Fund financial statements. A *fund* is a grouping of related accounts that is used to maintain control over resources that have been segregated for specific activities or objectives. The City, like other state and local governments, uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements. All funds of the City can be divided into three categories: governmental funds, proprietary funds, and fiduciary funds.

Governmental funds. *Governmental funds* are used to account for essentially the same functions reported as *governmental activities* in the government-wide financial statements. However, unlike the government-wide financial statements, governmental fund financial statements focus on *near-term inflows and outflows of spendable resources*, as well as on *balances of spendable resources* available at the end of the fiscal year. Such information may be useful in evaluating a government's near-term financing requirements.

Because the focus of governmental funds is narrower than that of the government-wide financial statements, it is useful to compare the information presented for *governmental funds* with similar information presented for *governmental activities* in the government-wide financial statements. By doing so, readers may better understand the long-term impact of the government's near-term financing decisions. Both the governmental fund balance sheet and the governmental fund statement of revenues, expenditures, and changes in fund balances provide a reconciliation to facilitate this comparison between *governmental funds* and *governmental activities*.

The City maintained thirteen individual governmental funds during fiscal 2018. Information is presented separately in the governmental fund balance sheet and in the governmental fund statement of revenues, expenditures, and changes in fund balances for the general fund, general purpose school fund, capital projects fund and debt service fund, all of which are considered to be major funds. Data from the other nine governmental funds are combined into a single, aggregated presentation. Individual fund data for each of these nonmajor governmental funds is provided in the form of *combining statements* as other supplementary information.

The City adopts an annual appropriated budget for its governmental funds. A budgetary comparison statement has been provided for the governmental funds to demonstrate compliance with this budget.

The basic governmental fund financial statements can be found on pages C-4 through C-9 of this report.

Proprietary funds. The City maintains two different types of proprietary funds: enterprise funds and internal service funds. *Enterprise funds* are used to report the same functions presented as *business-type activities* in the government-wide financial statements. The City uses enterprise funds to account for its electric, water and wastewater, and emergency communications district operations. *Internal service funds* are an accounting device used to accumulate and allocate costs internally among the City's various functions. The City uses internal service funds to account for its fleet of vehicles and insurance and benefit functions. Because these services predominantly benefit governmental rather than business-type functions, they have been included within *governmental activities* in the government-wide financial statements.

Proprietary funds provide the same type of information as the government-wide financial statements, only in more detail. The proprietary fund financial statements provide separate information for the electric distribution operation, water and wastewater treatment, collection and distribution, both of which are considered to be major funds of the City, and emergency communication. Conversely, both of the internal service funds are combined into a single, aggregated presentation in the proprietary fund financial statements. Individual fund data for the internal service funds is provided in the form of *combining statements* as other supplementary information.

The basic proprietary fund financial statements can be found on pages C-10 through C-13 of this report.

Fiduciary funds. Fiduciary funds are used to account for resources held for the benefit of parties outside the government. Fiduciary funds are *not* reflected in the government-wide financial statements because the resources of those funds are *not* available to support the City's own programs. The accounting used for fiduciary funds is much like that used for proprietary funds.

The basic fiduciary fund financial statements can be found on pages C-14 and C-15 of this report.

Notes to the financial statements. The notes provide additional information that is essential to a full understanding of the data provided in the government-wide and fund financial statements.

The notes to the financial statements can be found on pages C-16 through C-91 of this report.

Other information. The *required supplementary information* presented on pages D-1 through D-10 pertains to the City's and the Schools' progress in funding their obligation to provide pension and other post-employment benefits to their employees.

The combining statements referred to earlier in connection with nonmajor governmental funds and internal service funds are presented immediately following the notes to financial statements.

Combining and individual fund statements and schedules can be found on pages E-1 through E-27 of this report.

Government-wide Financial Analysis

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of the City of Oak Ridge, assets exceeded liabilities by $172,392,250 at the close of the most recent fiscal year.

By far the largest portion of the City's net position (75.8%) reflects its net investment in capital assets (e.g., land, building, machinery, and equipment); less any related debt used to acquire those assets that is still outstanding. The City uses these capital assets to provide services to citizens; consequently, these assets are *not* available for future spending. Although the City's investment in its capital assets is reported net of related debt, it should be noted that the resources needed to repay this debt must be provided from other sources, since the capital assets themselves cannot be used to liquidate these liabilities.

An additional portion of the City's net position (1.8%) represents resources that are subject to external restrictions on how they may be used. The remaining balance of unrestricted net position of $38,660,330 may be used to meet the government's ongoing obligations to citizens and creditors.

At the end of the current fiscal year, the City is able to report positive balances in all three categories of net position for both the government as a whole, as well as for its separate governmental and business-type activities.

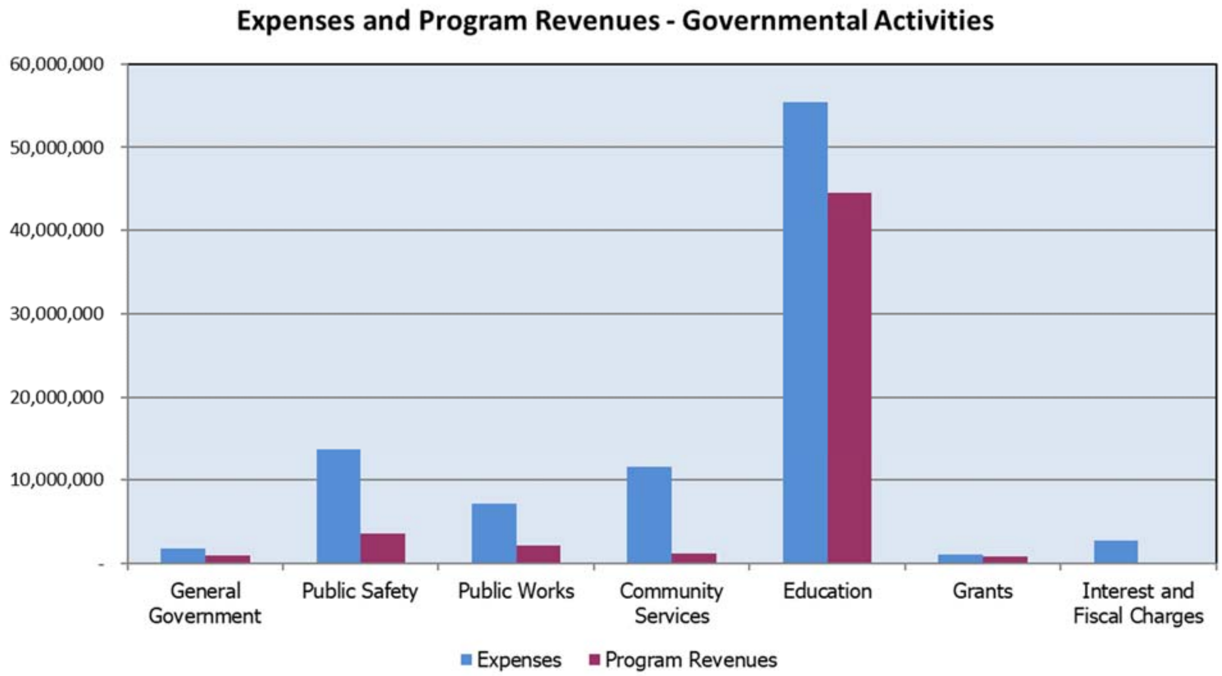
Net Position

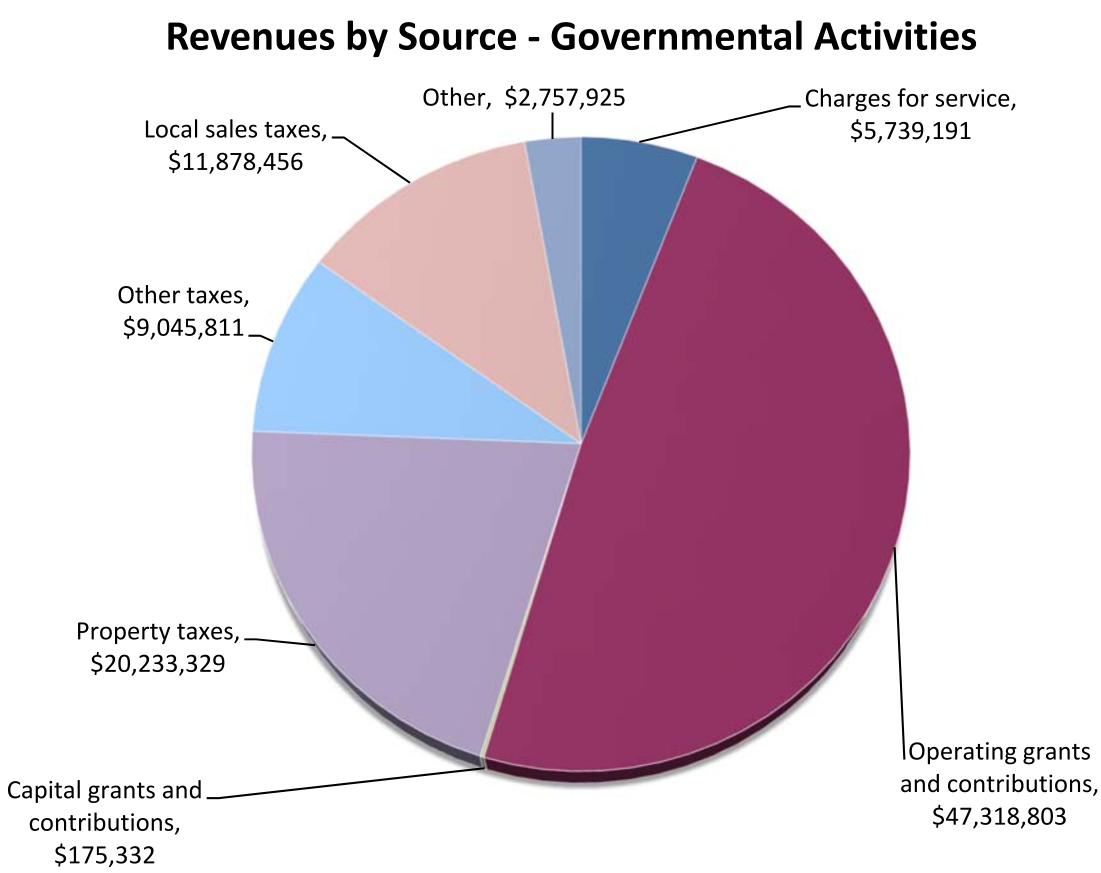
	Governmental activities		Business-type activities		Total	
	FY2018	FY2017	FY2018	FY2017	FY2018	FY2017
Current and other assets	$ 77,217,958	$ 67,392,899	$ 31,077,181	$ 30,055,014	$108,295,139	$ 97,447,913
Capital assets	124,116,500	122,031,959	174,352,399	167,974,999	298,468,899	290,006,958
Total assets	201,334,458	189,424,858	205,429,580	198,030,013	406,764,038	387,454,871
Deferred outflows of resources	10,076,069	13,655,178	2,258,688	2,410,219	12,334,757	16,065,397
Long-term liabilities outstanding	106,251,147	103,329,783	87,250,336	85,563,030	193,501,483	188,892,813
Other liabilities	8,442,923	7,477,114	12,470,733	11,603,559	20,913,656	19,080,673
Total liabilities	114,694,070	110,806,897	99,721,069	97,166,589	214,415,139	207,973,486
Deferred inflows of resources	31,893,850	33,036,792	397,556	1,060,573	32,291,406	34,097,365
Net position:						
Net investment in capital assets	37,567,543	42,071,020	93,054,587	88,352,038	130,622,130	130,423,058
Restricted	3,109,790	1,963,837	-	-	3,109,790	1,963,837
Unrestricted	24,145,274	15,201,490	14,515,056	13,861,032	38,660,330	29,062,522
Total net position	$ 64,822,607	$ 59,236,347	$107,569,643	$102,213,070	$172,392,250	$161,449,417

Governmental activities. Governmental activities during fiscal 2018 increased the City's net position by $7,121,940. The beginning net position was reduced by $1,573,684 due to the adoption of GASB Statement No. 75 and increased by $38,004 to recognize inventory which was previously unreported in the prior fiscal year. Total revenues increased $845,605 from the prior fiscal year. Program revenues increased $1,422,486 primarily from school operating grants and contributions. General revenues decreased $576,881 from the prior fiscal year. Other tax revenues increased $723,705, primarily from sales and unrestricted state shared taxes. Investment earnings related to the change in the fair value of interest rate swaps decreased $972,197. Governmental activities expenses increased $1,388,844 from the prior fiscal year. Expenses increased $978,736 for general government primarily due to an increase in pension expense and $631,366 for public safety due to an increase in wages for police patrol and fire fighting. Community services expenses increased $3,759,070 due to significant energy efficiency improvements to City buildings performed that could not be capitalized and education expenses decreased $3,567,529 primarily due to a reduction in pension expense.

Changes in Net Position

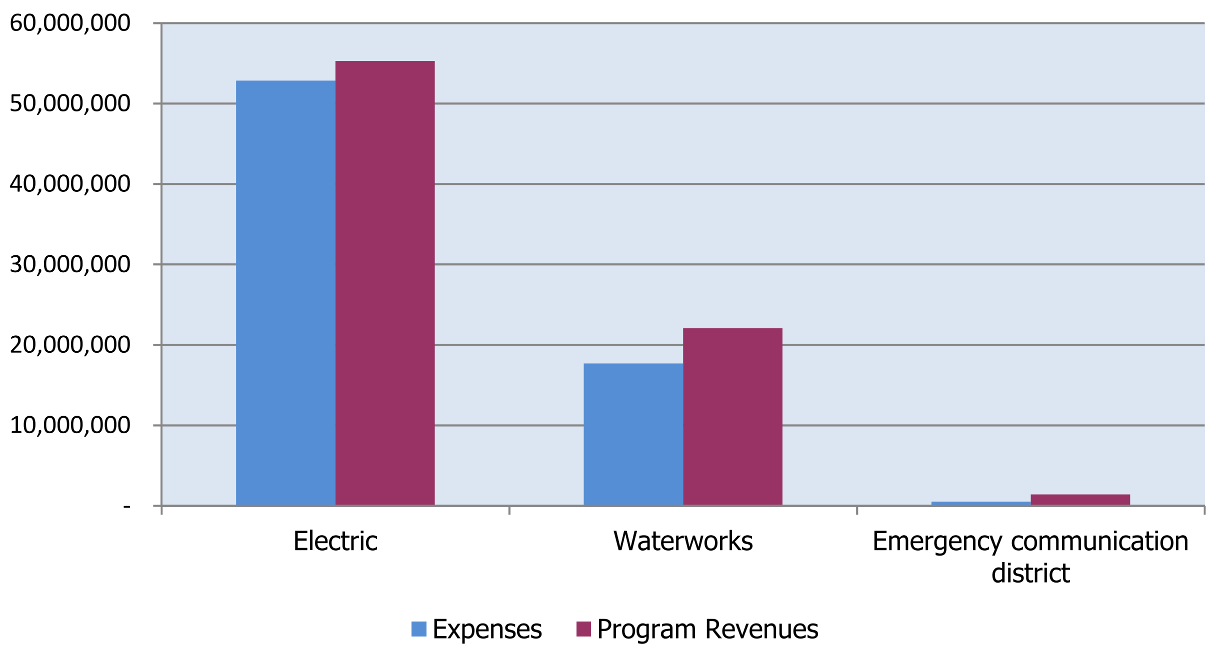
	Governmental activities		Business-type activities		Total	
	FY2018	FY2017	FY2018	FY2017	FY2018	FY2017
Revenues:						
Program revenues:						
Charges for service	$ 5,739,191	$ 5,730,394	$ 76,851,500	$ 76,588,303	$ 82,590,691	$ 82,318,697
Operating grants and contributions	47,318,803	45,747,010	-	-	47,318,803	45,747,010
Capital grants and contributions	175,332	333,436	1,911,165	1,083,643	2,086,497	1,417,079
General revenues:						
Property taxes	20,233,329	20,191,464	-	-	20,233,329	20,191,464
Other taxes	20,924,267	20,200,562	-	-	20,924,267	20,200,562
Other	2,757,925	4,100,376	1,560,128	1,357,515	4,318,053	5,457,891
Total Revenues	97,148,847	96,303,242	80,322,793	79,029,461	177,471,640	175,332,703
Expenses:						
General government	1,744,227	765,491	-	-	1,744,227	765,491
Public safety	13,730,548	13,099,182	-	-	13,730,548	13,099,182
Public works	7,141,870	7,322,431	-	-	7,141,870	7,322,431
Community services	11,571,106	7,812,036	-	-	11,571,106	7,812,036
Education	55,417,869	58,985,398	-	-	55,417,869	58,985,398
Grants	1,049,353	1,182,550	-	-	1,049,353	1,182,550
Interest and fiscal charges	2,701,861	2,800,902	-	-	2,701,861	2,800,902
Electric	-	-	52,842,797	53,240,869	52,842,797	53,240,869
Waterworks	-	-	17,679,002	17,941,238	17,679,002	17,941,238
Emergency communication district	-	-	521,629	629,788	521,629	629,788
Total expenses	93,356,834	91,967,990	71,043,428	71,811,895	164,400,262	163,779,885
Increase (decrease) in net position before transfer	3,792,013	4,335,252	9,279,365	7,217,566	13,071,378	11,552,818
Transfers	3,329,927	3,451,074	(3,329,927)	(3,451,074)	-	-
Increase (decrease) in net position	7,121,940	7,786,326	5,949,438	3,766,492	13,071,378	11,552,818
Net position, beginning of						-
period, as previously reported	59,236,347	51,450,021	102,213,070	98,446,578	161,449,417	149,896,599
Change in method of accounting for other postemployement benefits	(1,573,684)	-	(592,865)	-	(2,166,549)	-
Correction of error	38,004	-	-	-	38,004	-
Net postion, beginning of period, as restated	57,700,667	51,450,021	101,620,205	98,446,578	159,320,872	149,896,599
Net position, end of period	$ 64,822,607	$ 59,236,347	$ 107,569,643	$ 102,213,070	$ 172,392,250	$ 161,449,417


Expenses and Program Revenues - Governmental Activities
60,000,000
50,000,000
40,000,000
30,000,000
20,000,000
10,000,000
-
General Government
Public Safety
Public Works
Community Services
Education
Grants
Interest and Fiscal Charges
Expenses
Program Revenues

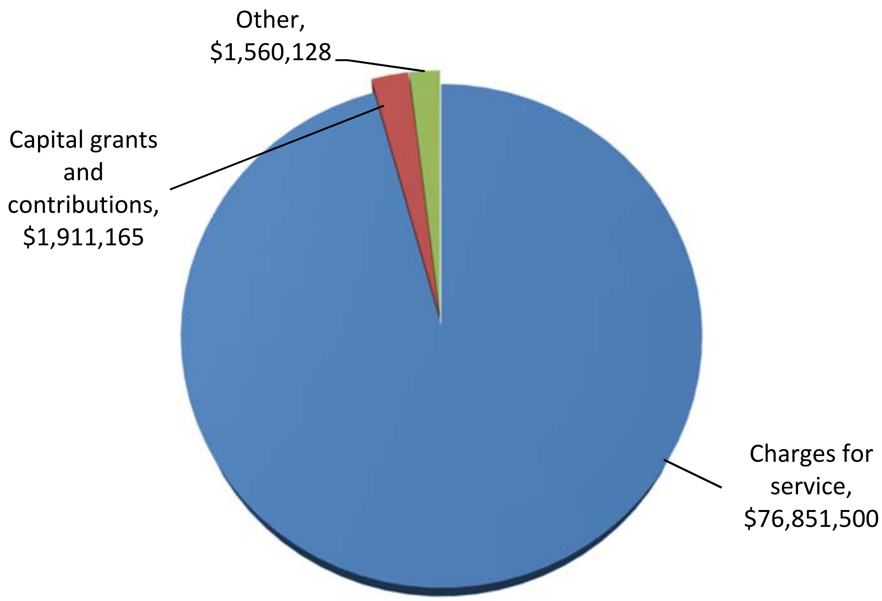

Revenues by Source - Governmental Activities
Other, $2,757,925
Charges for service, $5,739,191
Local sales taxes, $11,878,456
Other taxes, $9,045,811
Property taxes, $20,233,329
Capital grants and contributions, $175,332
Operating grants and contributions, $47,318,803

Business-type activities. Business-type activities during fiscal 2018 increased the City's net position by $5,949,438. The beginning net position was reduced by $183,663 in the Electric Fund and $409,202 in the Waterworks Fund due to the adoption of GASB Statement No. 75. Total revenues increased $1,293,332 in comparison to the prior year. Revenues from capital grants and contributions increased $827,522, primarily from the utilization of grant proceeds to purchase a new radio system accounted for in the Emergency Communications District Fund. Charges for services increased $263,197 due to electric and wastewater rate increases during fiscal 2018. There were no operating grants and contributions during fiscal 2018. Total expenses decreased $768,467 compared to the prior fiscal year, with decreases of $398,072 in Electric, $262,236 in Waterworks and $108,159 in Emergency Communications expenses. Maintenance and administrative expenses in the Electric Fund and Waterworks Fund are down $438,548 and $326,484, respectively, compared to fiscal 2017. Reductions are related to several factors including pension expense, employee turnover and utility charges. Depreciation expense went down $114,596 compared to fiscal 2017 in the Emergency Communication Fund due to certain radio system upgrades from a previous year becoming fully depreciated in fiscal year 2017. $1,690,000 of the Series 2017 General Obligation Bond proceeds are being utilized to purchase a new radio system.

Expenses and Program Revenues – Business-type Activities



Revenues by Source – Business-type Activities



The net position of the electric fund increased by $2,002,410. The City is a distributor of electrical power that is purchased from the Tennessee Valley Authority (TVA) and then transmitted and sold by the City to its residential and commercial customers. In October 2006, TVA began adjusting the wholesale power costs to the City for a fuel cost adjustments (FCA). These FCA's are passed through in electric rate adjustments to the City's customers each month and can fluctuate the City's electric rates either up or down. In October 2017, electric rates increased approximately 1.5% to pass-through an increase in wholesale power costs to the City by TVA.

The net position of the waterworks fund increased by $3,017,096. A series of water and wastewater rate increases have occurred since 2012 to fund debt related to capital needs for the water and wastewater infrastructure. Water rates increased 6% in October 2017 and wastewater rates increased 6% in January 2018.

The net position of the Emergency Communications Fund increased $929,932 primarily related to revenue from grants.

Financial Analysis of the Government's Funds

As noted earlier, the City uses fund accounting to ensure and demonstrate compliance with finance-related legal requirements.

Governmental funds. The focus of the City of Oak Ridge's *governmental funds* is to provide information on near-term inflows, outflows, and balances of *spendable* resources. Such information is useful in assessing the City's financing requirements. In particular, *unassigned fund balance* may serve as a useful measure of a government's net resources available for spending at the end of the fiscal year.

As of the end of the current fiscal year, the City's governmental funds reported combined ending fund balances of $39,499,178, an increase of $6,643,727 in comparison to the prior year primarily due to remaining bond proceeds on hand in the Capital Projects Fund at fiscal year-end. Of this amount, $1,126,694 is nonspendable and is comprised of a $476,190 long-term interfund note receivable and inventory and prepaid items. $13,735,726, primarily in the Capital Projects, Debt Service and State Street Aid Funds, is restricted with externally enforceable limitations on use. $871,708 is committed, $13,970,113 is assigned as designated usage and $9,794,937 is unassigned.

The general fund is the chief operating fund of the City. At the end of the current fiscal year, the unassigned fund balance of the general fund was $9,794,937, while total fund balance was $11,578,074. As a measure of the general fund's liquidity, it may be useful to compare unassigned fund balance to total fund expenditures. Unassigned fund balance represents 44.9% of total general fund expenditures. However, unassigned fund balance represents 21.9% when compared to total fund expenditures and transfers to other funds (e.g. school and debt service funds).

The fund balance of the City's general fund increased by $203,236 during the current fiscal year. The general fund had a budgeted fund balance decrease of $416,789, which when compared to actual, resulted in an increase of $620,025 above budgeted expectations. An additional $585,197 in unspent budgeted funds was encumbered as of fiscal year-end, including $451,520 in unspent budgeted funds encumbered in fiscal 2018 for projects in fiscal 2019.

$908,377 of the $1,279,660 General Fund budgeted expenditure variance is related to timing differences in budgeted and actual grant expenditures. The City was awarded a $500,000 HOME grant that was budgeted for fiscal 2018, however, no expenditures occurred before the end of fiscal 2018. Similar timing variances occurred in other grants between the budget and actual expenditures. Many grant awards cross multiple City fiscal years. Correspondingly, grant revenues were also below budget.

Non-grant revenues were $405,108 above budget. Interest earnings were $145,488 above budget due to higher interest rates. State-shared revenues were $183,709 above budget primarily due to higher state-shared sales tax collections.

Non-grant related expenditures were $371,283 below budget. Departmental expenditures that were below budget in fiscal 2018 included Public Works by $142,313, Recreation by $66,682 and Public Library by $75,386. Overall, the City has been experiencing cost savings from the retirement of long-term higher paid employees. Reductions in expenditures from employee turnover not only come from staff vacancies and salary differentials in outgoing and incoming employees, but it generally causes delays in projects which creates a gap in the timing between budget and actual expenditures. The City has been undergoing energy efficiency upgrades to City facilities over the past two years and the impact of the utility savings began to occur in fiscal 2018.

Operating transfers in to the General Fund from the Electric and Waterworks Fund was $168,423 below budget. The Electric and Waterworks Funds pay a tax equivalent payment to the General Fund as outlined and allowed under Tennessee State Law. The amount paid for fiscal 2018 was at the amount allowed under State law. Transfers out to other City Funds was $155,731 over budget. During fiscal 2018, City Council approved an additional $250,000 operating transfer from the General Fund to the Golf Course Fund.

There were no budgetary amendments to governmental activities during the fiscal year.

The debt service fund has a total fund balance of $7,941,004, of which $5,265,123 is restricted to debt service on Oak Ridge High School debt issuances and $2,675,881 is assigned for the payment of debt service. The net decrease in fund balance of the debt service fund during the current year was $154,414 due to the planned use of restricted reserves to fund debt service.

The capital projects fund has a total fund balance of $7,358,532, of which $5,831,199 is restricted from unused bond proceeds and $1,527,333 is assigned for capital projects. The net increase in fund balance during the year was $4,726,034, which resulted from the remaining bond proceeds on hand at fiscal year end from the issuance of the Series 2017 General Obligation Bonds.

Proprietary funds. The City of Oak Ridge's proprietary funds provide the same type of information found in the government-wide financial statements, but in more detail.

Unrestricted net position at the end of the year amounted to $3,019,129 for the Electric Fund, $10,180,865 for the Waterworks Fund, and $1,315,062 for the Emergency Communications District Fund. Unrestricted net position increased $826,465 in the Electric Fund. Unrestricted net position decreased $470,078 in the Waterworks Fund primarily due to utilization of bond proceeds for capital projects. The unrestricted net position of the Emergency Communications Dstrict Fund increased by $297,637.

There were budgetary amendments during the fiscal year to the Emergency Communications District Fund to reflect the issuance of long-term debt, an increase in capital expenditures for a radio system upgrade, and an increase in revenue due to additional funding from the State of Tennessee and recognition of federal grant revenues.

Capital Asset and Debt Administration

Capital assets. The City's investment in capital assets for its governmental and business type activities as of June 30, 2018, amounts to $298,468,899 (net of accumulated depreciation), which is a $8,461,941 increase over last fiscal year. This investment in capital assets includes land, buildings and systems, improvements, machinery and equipment, park facilities, construction in progress and infrastructure.

City of Oak Ridge's Capital Assets

	Governmental activities		Business-type activities		Total	
	FY2018	FY2017	FY2018	FY2017	FY2018	FY2017
Land	$ 3,253,059	$ 3,151,115	$ 900,643	$ 900,643	$ 4,153,702	$ 4,051,758
Construction in progress	3,344,042	48,752	2,601,749	2,953,388	5,945,791	3,002,140
Buildings	72,664,907	72,646,794	-	-	72,664,907	72,646,794
Improvements	6,950,625	7,341,791	-	-	6,950,625	7,341,791
Infrastructure	27,423,502	27,734,533	-	-	27,423,502	27,734,533
Equipment	10,480,365	11,108,974	7,178,902	4,200,531	17,659,267	15,309,505
Electric Plant	-	-	53,223,619	50,033,772	53,223,619	50,033,772
Waterworks Plant	-	-	110,447,486	109,886,665	110,447,486	109,886,665
Total	$124,116,500	$122,031,959	$174,352,399	$ 167,974,999	$298,468,899	$290,006,958

Fiscal 2018, capital asset activities totals increased $2,084,541 in governmental activities and $6,377,400 in business-type activities.

Major capital asset events during the current fiscal year included the following:

- Community services and development activities added $1,134,147; $62,858 for the purchase of blighted properties for demolition and revitalization for efforts in the City's "Not In Our City" program; $285,063 for energy efficiency improvements to recreation/library facilities; $291,079 for recreation infrastructure reinforcement/replacement; $275,564 for design and initial construction of a Peace Bell Structure in Bissell Park; $139,818 for design of a new Senior Center; and $79,765 for vehicles and equipment.
- Public safety added $776,503 of which $188,201 was added for police vehicles and $325,017 for fire vehicles, which included a new Sutphen Fire pumper truck. $112,038 was expended toward renovations at Fire Station 4, $66,667 for energy efficiencies at police and fire facilities, $61,530 for software, $16,000 for a public address system and $7,050 for a portable storage shed.
- General government added $71,670 in computer/technology equipment.
- Public works added $2,193,195 in capital assets, which included $1,041,792 for public infrastructure, $889,445 for energy efficiency improvements to City facilities, and $261,958 for vehicles/equipment.
- Educational activities increased $4,801,609 primarily for energy efficiency improvements to school facilities and design of a new Preschool facility.
- Business-type activities added $14,228,246 in completed capital assets. $5,162,121 in electrical capital assets were added, primarily for routine replacement of overhead and underground distribution systems and equipment and upgrading of street lights to LED. $5,646,588 in waterworks capital assets were added, which included $2,225,319 in water infrastructure improvements and $3,421,269 in wastewater infrastructure improvements. $253,215 in electric and $564,807 in waterworks vehicles/equipment was spent during the fiscal year. $2,601,515 was spent in the Emergency Communications Disctrict Fund for a new radio tower and equipment that is expected to become operational in fiscal 2019.

Additional information on the City of Oak Ridge's capital assets can be found in Note 13 on pages C-67 and C-68 of this report.

Long-term debt. At the end of the current fiscal year, the City had total long-term debt outstanding of $168,034,357. Of this amount, $86,472,614 comprises debt backed solely by the full faith and credit of the City. $81,561,743 in long-term debt is secured by specified revenue sources (electric, waterworks, and emergency communications district debt); however, in the event of default, the full faith and credit of the City are irrevocably pledged.

Outstanding Debt

	Governmental Activities		Business-type Activities		Total	
	FY2018	FY2017	FY2018	FY2017	FY2018	FY2017
General obligation and Revenue bonds	$ 47,500,147	$ 42,444,785	$57,085,680	$55,140,859	$104,585,827	$ 97,585,644
Qualified Zone Academy Bonds (QZAB)	1,528,255	2,037,673	-	-	1,528,255	2,037,673
Long-term notes and loans	36,349,575	33,911,705	24,476,063	25,196,388	60,825,638	59,108,093
Capital leases	1,094,637	1,566,776	-	-	1,094,637	1,566,776
Total	$ 86,472,614	$ 79,960,939	$81,561,743	$80,337,247	$168,034,357	$160,298,186

The City's total debt increased by $7,736,171 (4.83%) during the current fiscal year.

In June 2017, a $2,000,000 State Revolving Fund Loan (SRF) was approved by the State for rehabilitation of approximately 30,000 linear feet of sewer line. This loan contains a 7% principal forgiveness. In August 2017, a $3,100,000 SRF Loan was approved by the State for improvements to the Turtle Park Wastewater Pumping Station. Funds are drawn after expenditures occur. The balance of those loans at June 30, 2018 was $985,297.

In October 2017, the City obtained a $3,000,000 Energy Efficient School Initiative (EESI) loan from the State of Tennessee to make energy efficient improvements to various school buildings. The interest rate on the 12 year loan is 1%. Funds are drawn after expenditures occur. The balance of this loan at June 30, 2018 was $2,508,196.

In November 2017, the City issued $19,125,000 in General Obligation Refunding Bonds, Series 2017. The bonds were sold at a premium of $2,055,564, with issuance costs of $297,620, resulting in a final True Interest Cost (TIC) of 2.2639056%. $6,220,000 of the bond proceeds along with $628,888 in City contributions were used for the advance refunding of $6,970,000 in Electric Fund debt for the outstanding 2020 to 2025 maturities of the General Obligation Refunding Bonds 2009. The remaining proceeds are being used for energy efficiency improvements to public buildings, roof replacements, the purchase of software, including utility billing and financial software, and the purchase of a Motorola P25 Mission-Critical Radio System and related equipment.

In December 2018, the City issued $13,285,000 in General Obligation Bonds Series 2018 for the design and construction of a new Preschool and new Senior Center, relocation and redevelopment of Scarboro Park and other public building improvements. The bonds were issued at a premium of $476,317. The underwriters discount was $109,398 with an additional $116,919 in other issuance costs. The interest rate ranges from 3.25% to 5% with maturity in 2043.

Effective November 1, 2010, the Waterworks Fund entered into a $5,000,000 interfund loan with the General Fund. Under Tennessee State Law, this is in the form of a capital outlay note issuance by the Waterworks Fund. The note will be repaid over a 9 year period. The balance at June 30, 2018 was $476,190.

The City has $25,675,000 in outstanding debt for which the City has entered into an interest rate swap agreement. Under terms of the swap agreements, the City effectively pays a fixed rate on the debt plus or minus the difference between the variable interest due to the bondholders and the variable rate received from the counterparty. For additional information regarding these swaps refer to Note 15 on pages C-81 to C-86 of this report.

Additional information on the City's long-term debt can be found in Note 14 on pages C-69 through C-81 of this report.

The City currently maintains an "AA+" rating from Standard & Poor's for general obligation debt. State statutes do not limit the amount of general obligation debt a governmental entity may issue.

Economic Factors and Next Year's Budgets and Rates

- The unemployment rate for the City in census year 2010 was 8.2%. Data for the City is only available in census years. The City's unemployment rate has historically been well below that of Anderson County, State and national levels.

- Property tax collections for fiscal 2018 were slightly below budget of $32,741 due to the timing of tax payments. In fiscal 2019, property tax collections were budgeted at a 1.0% increase over budget 2018 levels. The fiscal 2019 property tax rate was increased by 2-cents from the fiscal 2018 level of $2.52 per $100 of assessed valuation. The 2-cent increase will be used to pay debt service on the bonds that were issued in December 2018 to construct a new Preschool and Senior Center.
- Since 2013, the City has experienced a resurgence in retail growth within the City. The redevelopment of the 58 acre Oak Ridge mall site into the Main Street development began in September 2016. In the summer of 2017, the newly constructed Dick's Sporting Goods, T.J. Maxx, Ulta, Rack Room Shoes, Rue 21, Maurices, Pet Smart and Electronic Express opened. New retail establishments adjacent to the Main Street site include a Panda Express that opened in the summer of 2017 and a retail space. Recently opened is a new 90-room Marriott Townplace hotel and a Freddy's Custard restaurant.
- The Main Street Phase II portion is yielding an additional 100,000 square-feet of retail space with soon to be announced national retailers. Planning processes also include a new 217 unit apartment complex. Also, in a public/private/non-profit partnership with the Department of Energy, the City has organized a land transfer in return for a newly remodeled American Museum of Science and Energy within the Main Street project, with 15 years of free rent and $1.6 million in remodeling. The Museum opened in October 2018. The 18 acre tract of land is being planned for seven more acres of adjacent grocery, restaurant and retail facilities to add to the shopping mix. Additional unanticipated facilities will add a projected $30-40 million in new construction for the land transfer site. The tax increment financing district has also seen a significant amount of upgrade and improvements in the building stock in adjacent and interior properties.
- The above development has and will continue to bring in new retail businesses and sales tax dollars to the City. Fiscal 2018 sales tax collections in the Anderson County portion of the City were $668,341 above budget in the General Fund due to retail development and increased spending by federal contractors related to the Uranium Processing Facility (UPF) project. A portion of the Oak Ridge sales tax collections in Anderson County are restricted to funding the debt service that was issued to renovate and expand the Oak Ridge High School. These funds are accounted for in the Debt Service Fund and collections were $252,480 above budget in fiscal 2018.
- Fiscal 2018 sales tax collections in the Roane County portion of Oak Ridge were $781,365 below budget in the General Fund, due to the usage by federal contractors of a 2015 state law for economic development incentives that exempted sales tax on research and development machinery and equipment. A major long-term financial impact on the City was avoided with an amendment to the law in spring 2018, which only allowed sales tax exemption for two major federal projects: the Summit Supercomputer and the Spallation Neutron Source in Oak Ridge. Sales taxes in the Oak Ridge portion of Roane County are now more normalized and stable.
- For fiscal 2019, local sales and use tax collections accounted for in the General Fund were budgeted to remain at actual 2018 levels for the Anderson County portion of Oak Ridge and to return to a more normalized level in the Roane County portion of Oak Ridge. Overall, the 2019 budget for these sales tax collection is up $648,295 from budget 2018.
- Additionally, from a longer view perspective, the $6.5 billion UPF at the Y-12 Complex in Oak Ridge has just begun the construction phase, which is not projected to be completed until 2025. The project is anticipated to bring additional sales tax dollars from both the materials and additional jobs required during the construction period.

- Inflationary trends in the region compare with national indices. Pressures generally come from drivers such as medical, retirement, and utilities. Medical costs, while still increasing, have stabilized somewhat due to a restructuring of plans offered by the City. Retirement rates now change annually, rather than biennially, as they have done in the past. A modest increase was budgeted for these in fiscal 2019. It is anticipated that larger increases may be required in future fiscal years.
- The City recently had an engineering firm review options regarding whether to perform major renovations to the existing water treatment plant or to build a new water treatment plant. The construction of a new $43 million water plant close to the raw water intake station is the recommended option due to the significant slope issues at the existing water plant site. Improvements also include the raw water intake system, including electrical system replacement. DOE would be a financial partner to the City in the construction of the new water treatment plant. The City has applied and is currently under review for an approximate $20.9 million Water Infrastructure Finance and Innovation Act (WIFIA) loan. The WIFIA program was enacted in 2014 and is administered by EPA headquarters. The City was one of 12 entities nationwide that were invited to apply for a WIFIA loan in its first year of loan awards. The City is also currently under review for an engineering loan with the State of Tennessee revolving loan fund (SRF). The City plans to match the WIFIA loan with SRF loans which will provide the funding for the total water treatment plant project.
- TVA is continuing to restructure wholesale rates, which is anticipated to result in annual rate increases over the next few years in the 1.5% to 3% range. A 6% wastewater rate increase was adopted effective January 1, 2017 and January 1, 2018. A 6% water rate increase has been adopted effective October 2017 and an additional 4% increase effective January 1, 2019. Annual rate increases are anticipated to continue in the near term for both these services due to major capital and debt requirements to maintain these systems.
- $365,383 in fund balance is budgeted to be drawn in fiscal 2019. The City has historically used conservative budgeting practices and salary budgets are based on full employment. Typically, a fund balance draw does not occur and if it does it is a reduced amount from budget. Future property taxes would be impacted by approximately 4-cents if revenue growth or expenditure reduction does not occur to offset the budgeted fund balance draw in future fiscal years. Property tax rate increase are anticipated in future fiscal years related to the construction of a new Preschool and a new Senior Center.

All of these factors were considered in preparing the City's budget for the 2019 fiscal year.

During the fiscal 2018, the unassigned fund balance in the general fund increased by $278,857 to $9,794,937. This increase was primarily from the annual payment of the $5,000,000 interfund loan from the Waterworks Fund to the General Fund of $238,096. This $5,000,000 loan amount is classified as nonspendable fund balance at year end in the General Fund. It will be repaid by the Waterworks Fund over a nine year period through November 2019. The interfund loan balance at June 30, 2018, is $476,190.

Requests for Information

This financial report is designed to provide a general overview of the City of Oak Ridge's finances for all those with an interest in the government's finances. Questions concerning any of the information provided in this report or requests for additional financial information should be addressed to the City of Oak Ridge, Office of the Finance Director, P.O. Box 1, Oak Ridge, TN 37831-0001.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF NET POSITION
June 30, 2018

	Primary Government			Component Units		
	Governmental Activities	Business-type Activities	Total	Oak Ridge Land Bank	Convention and Visitors Bureau	Education Foundation
Assets						
Cash and cash equivalents	$ 33,907,583	$ 15,466,838	$ 49,374,421	$ 141,413	$ 221,740	$ 154,898
Investments	-	-	-	-	-	4,840,872
Receivables, net	23,229,482	9,592,031	32,821,513	244	112,535	-
Unconditional promises to give, net	-	-	-	-	-	119,358
Due from other governments	6,133,039	-	6,133,039	-	-	-
Property inventory	-	-	-	840,360	-	-
Inventory, at cost	502,026	2,761,705	3,263,731	-	-	-
Prepaid items	213,377	9,375	222,752	-	-	-
Restricted assets:						
Cash and cash equivalents	12,285,875	3,723,422	16,009,297	45,006	-	-
Long-term interfund note receivable (payable)	476,190	(476,190)	-	-	-	-
Net pension asset	470,386	-	470,386	-	-	-
Capital assets nondepreciable	6,597,101	3,502,392	10,099,493	-	-	-
Capital assets depreciable, net	117,519,399	170,850,007	288,369,406	-	-	-
Total assets	201,334,458	205,429,580	406,764,038	1,027,023	334,275	5,115,128
Deferred outflows of resources						
Deferred pension outflows	9,710,754	2,258,688	11,969,442	-	-	-
Deferred OPEB outflows	365,315	-	365,315	-	-	-
Total deferred outflows of resources	10,076,069	2,258,688	12,334,757	-	-	-

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF NET POSITION (continued)
June 30, 2018

	Primary Government			Component Units		
	Governmental Activities	Business-type Activities	Total	Oak Ridge Land Bank	Convention and Visitors Bureau	Education Foundation
Liabilities						
Accounts payable	$ 2,464,229	$ 9,012,931	$ 11,477,160	$ -	$ 31,928	$ -
Accrued liabilities	4,761,484	1,395	4,762,879	-	-	571
Deposits payable	706,479	3,107,204	3,813,683	-	-	-
Contracts payable	246,068	153,570	399,638			
Accrued interest payable	243,713	195,633	439,346	-	-	-
Unearned revenue	20,950	-	20,950			
Long-term liabilities:						
Due within one year	8,781,729	4,605,019	13,386,748	25,965	-	-
Due in more than one year	80,751,015	77,263,752	158,014,767	88,512	-	-
Total other postemployment benefits liability	9,785,651	883,563	10,669,214	-	-	-
Net pension liability	6,932,752	4,498,002	11,430,754	-	-	-
Total liabilities	114,694,070	99,721,069	214,415,139	114,477	31,928	571
Deferred inflows of resources						
Deferred property taxes	20,994,304	-	20,994,304	-	-	-
Derivative instruments - interest rate swaps	4,871,904	-	4,871,904	-	-	-
Deferred inflows on bond refunding	76,343	212,259	288,602	-	-	-
Deferred other postemployment benefits inflows	361,426	18,793	380,219	-	-	-
Deferred pension inflows	5,569,832	166,504	5,736,336	-	-	-
Advance payments	20,041	-	20,041	-	11,367	-
Total deferred inflows of resources	31,893,850	397,556	32,291,406	-	11,367	-
Net position						
Net investment in capital assets	37,567,543	93,054,587	130,622,130	-	-	-
Restricted for:						
Drug enforcement	401,348	-	401,348	-	-	-
Street improvements	1,548,839	-	1,548,839	-	-	-
Public transportation	61,392	-	61,392			
Pension	470,386	-	470,386	-	-	-
Education	627,825	-	627,825	-	-	1,901,397
Other	-	-	-	45,006	-	-
Unrestricted	24,145,274	14,515,056	38,660,330	867,540	290,980	3,213,160
Total net position	$ 64,822,607	$ 107,569,643	$ 172,392,250	$ 912,546	$ 290,980	$ 5,114,557

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF ACTIVITIES
For the Year Ended June 30, 2018

		Program Revenues			Net (Expense) Revenue and Changes in Net Position					
					Primary Government			Component Units		
	Expenses	Charges for Services	Operating Grants and Contributions	Capital Grants and Contributions	Governmental Activities	Business-type Activities	Total	Oak Ridge Land Bank	Convention and Visitors Bureau	Education Foundation
Functions/Programs										
Primary government:										
Governmental activities:										
General government	$ 1,744,227	$ 954,611	$ -	$ -	$ (789,616)	$ -	$ (789,616)	$ -	$ -	$ -
Public safety	13,730,548	441,554	3,159,021	-	(10,129,973)	-	(10,129,973)	-	-	-
Public works	7,141,870	2,027,568	-	84,802	(5,029,500)	-	(5,029,500)	-	-	-
Community services	11,571,106	1,173,372	59,013	-	(10,338,721)	-	(10,338,721)	-	-	-
Education	55,417,869	1,142,086	43,365,970	-	(10,909,813)	-	(10,909,813)	-	-	-
Grants	1,049,353	-	734,799	90,530	(224,024)	-	(224,024)	-	-	-
Interest and fiscal charges	2,701,861	-	-	-	(2,701,861)	-	(2,701,861)	-	-	-
Total governmental activities	93,356,834	5,739,191	47,318,803	175,332	(40,123,508)	-	(40,123,508)	-	-	-
Business-type activities:										
Electric	52,842,797	54,838,283	-	458,766	-	2,454,252	2,454,252	-	-	-
Waterworks	17,679,002	21,456,117	-	604,114	-	4,381,229	4,381,229	-	-	-
Emergency communication district	521,629	557,100	-	848,285	-	883,756	883,756	-	-	-
Total business-type activities	71,043,428	76,851,500	-	1,911,165	-	7,719,237	7,719,237	-	-	-
Total primary government	$ 164,400,262	$ 82,590,691	$ 47,318,803	$ 2,086,497	(40,123,508)	7,719,237	(32,404,271)	-	-	-
Component units:										
Oak Ridge Land Bank	80,704	50,234	234,702	-	-	-	-	204,232	-	-
Convention and Visitors Bureau	434,042	69,806	404,679	-	-	-	-	-	40,443	-
Education Foundation	558,005	-	-	256,844	-	-	-	-	-	(301,161)
Total component units	$ 1,072,751	$ 120,040	$ 639,381	$ 256,844	-	-	-	204,232	40,443	(301,161)
General revenues:										
Property taxes					20,233,329	-	20,233,329	-	-	-
In-lieu of tax payments					2,120,755	-	2,120,755	-	-	-
Sales taxes					11,878,456	-	11,878,456	-	-	-
Unrestricted state shared taxes					4,645,451	-	4,645,451	-	-	-
Business taxes					799,572	-	799,572	-	-	-
Occupancy taxes					590,093	-	590,093	-	-	-
Wholesale beer and liquor taxes					889,940	-	889,940	-	-	-
Investment earnings					482,564	285,659	768,223	404	524	513,693
Investment earnings - change in fair value of interest rate swaps					995,446	-	995,446	-	-	-
Miscellaneous					1,279,915	1,274,469	2,554,384	-	725	-
Transfers					3,329,927	(3,329,927)	-	-	-	-
Total general revenues and transfers					47,245,448	(1,769,799)	45,475,649	404	1,249	513,693
Change in net position					7,121,940	5,949,438	13,071,378	204,636	41,692	212,532
Net position - beginning, as previously reported					59,236,347	102,213,070	161,449,417	707,910	249,288	4,902,025
Change in method of accounting for other postemployment benefits					(1,573,684)	(592,865)	(2,166,549)	-	-	-
Correction of an error					38,004	-	38,004	-	-	-
Net position - beginning, as restated					57,700,667	101,620,205	159,320,872	707,910	249,288	4,902,025
Net position - ending					$ 64,822,607	$ 107,569,643	$ 172,392,250	$ 912,546	$ 290,980	$ 5,114,557

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
BALANCE SHEET
GOVERNMENTAL FUNDS
June 30, 2018

	General	General Purpose School	Capital Projects	Debt Service	Nonmajor Governmental Funds	Total Governmental Funds
Assets						
Cash and cash equivalents	$ 9,357,406	$ 8,837,548	$ 2,453,504	$ 2,331,070	$ 4,587,413	$ 27,566,941
Receivables, net	22,444,490	628,699	-	-	156,293	23,229,482
Due from other funds	-	618,337	-	-	-	618,337
Due from other governments	3,227,345	1,519,041	83,929	343,846	958,878	6,133,039
Inventories, at cost	250,000	-	-	-	238,942	488,942
Prepaid items	44,975	112,824	-	-	12,477	170,276
Long-term interfund note receivable	476,190	-	-	-	-	476,190
Total unrestricted assets	35,800,406	11,716,449	2,537,433	2,674,916	5,954,003	58,683,207
Restricted assets:						
Cash and cash equivalents	-	-	5,831,199	5,266,088	-	11,097,287
Total assets	$ 35,800,406	$ 11,716,449	$ 8,368,632	$ 7,941,004	$ 5,954,003	$ 69,780,494
Liabilities, deferred inflows of resources and fund balances						
Liabilities:						
Accounts payable	$ 561,257	$ 274,416	$ 764,032	$ -	$ 714,068	$ 2,313,773
Accrued liabilities	925,117	3,285,255	-	-	115,817	4,326,189
Deposits	706,479	-	-	-	-	706,479
Contracts payable	-		246,068	-	-	246,068
Due to other funds	-	-	-	-	618,337	618,337
Unearned revenue	-	-	-	-	20,950	20,950
Total liabilities	2,192,853	3,559,671	1,010,100	-	1,469,172	8,231,796
Deferred inflows of resources:						
Deferred property tax	22,029,479	-	-	-	-	22,029,479
Advance payments	-	65	-	-	19,976	20,041
Total deferred inflows of resources	22,029,479	65	-	-	19,976	22,049,520
Fund balances:						
Nonspendable	771,165	112,824	-	-	242,705	1,126,694
Restricted	61,392	3,004	5,831,199	5,265,123	2,575,008	13,735,726
Committed	-	770,491	-	-	101,217	871,708
Assigned	950,580	7,270,394	1,527,333	2,675,881	1,545,925	13,970,113
Unassigned	9,794,937	-	-	-	-	9,794,937
Total fund balances	11,578,074	8,156,713	7,358,532	7,941,004	4,464,855	39,499,178
Total liabilities, deferred inflows of resources and fund balances	$ 35,800,406	$ 11,716,449	$ 8,368,632	$ 7,941,004	$ 5,954,003	$ 69,780,494

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
RECONCILIATION OF THE BALANCE SHEET OF GOVERNMENTAL FUNDS TO THE STATEMENT OF NET POSITION
June 30, 2018

Amounts reported for governmental activities in the statement of net position are different because:

Total fund balances - governmental funds		$ 39,499,178
Capital assets used in governmental activities are not financial resources and, therefore, are not reported in the governmental funds.		121,126,394
Internal service funds are used by management to charge the costs of insurance and equipment replacement to individual funds. The assets and liabilities of the internal service funds are included in governmental activities in the statement of net position.		7,562,244
Property tax revenues and in-lieu of property tax revenues that have been deferred in the balance sheet of the governmental funds because they were not available to pay current liabilities of the period are recognized as revenue in the statement of activities and therefore are not included in the statement of net position.		1,035,175
Long-term liabilities are not due and payable in the current period and therefore are not reported in the governmental funds:		
General obligation debt	(44,210,000)	
Qualified zone academy bonds (QZAB)	(1,528,255)	
Capital lease obligation	(411,754)	
Notes payable	(36,349,575)	
Discounts and premiums (net)	(1,802,814)	
Compensated absences	(2,489,150)	
Termination benefits	(505,068)	
Total other postemployment benefits liability	(9,722,943)	
Accrued interest	(224,573)	
Net pension asset	470,386	
Net pension liability	(6,730,428)	(103,504,174)
Deferred outflows of resources are reported on the statement of net position for future outflow of resources that are not reported on the balance sheet of the governmental funds:		
Deferred other postemployment benefits outflows	365,315	
Deferred pension outflows	9,609,156	9,974,471
Deferred inflows of resources are reported on the statement of net position for future inflows of resources that are not reported on the balance sheet of the governmental funds:		
Derivative instrument - interest rate swaps	(4,871,904)	
Bond refunding	(76,343)	
Deferred other postemployment benefit inflows	(360,092)	
Deferred pension inflows	(5,562,342)	(10,870,681)
Net position of governmental activities		$ 64,822,607

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES
GOVERNMENTAL FUNDS
For the Year Ended June 30, 2018

	General	General Purpose School	Capital Projects	Debt Service	Nonmajor Governmental Funds	Total Governmental Funds
Revenues						
Taxes	$ 23,044,252	$ -	$ -	$ 2,332,480	$ -	$ 25,376,732
Licenses and permits	348,300	-	-	-	-	348,300
Intergovernmental	15,086,053	38,204,019	84,802	-	8,991,661	62,366,535
Charges for services	1,207,009	275,126	-	-	3,478,681	4,960,816
Fines and forfeitures	357,228	-	-	-	72,847	430,075
Grants	825,329	-	-	-	-	825,329
Investment earnings	187,631	-	41,610	120,922	39,488	389,651
Miscellaneous	568,498	348,450	132,034	402,939	169,578	1,621,499
Total revenues	41,624,300	38,827,595	258,446	2,856,341	12,752,255	96,318,937
Expenditures						
Current:						
General government	1,894,168	-	-	-	-	1,894,168
Public safety	11,290,299	-	-	-	2,710,160	14,000,459
Public works	2,036,572	-	-	-	3,860,843	5,897,415
Community services	5,530,905	-	-	-	818,570	6,349,475
Grants	1,049,353	-	-	-	-	1,049,353
Education	-	53,527,739	-	-	5,931,365	59,459,104
Capital outlay	-	-	7,734,269	-	-	7,734,269
Debt service:						
Principal	-	-	-	4,793,265	-	4,793,265
Interest	-	-	-	2,867,490	-	2,867,490
Bond issuance costs	-	-	121,839	-	-	121,839
Total expenditures	21,801,297	53,527,739	7,856,108	7,660,755	13,320,938	104,166,837
Excess (deficiency) of revenues over expenditures	19,823,003	(14,700,144)	(7,597,662)	(4,804,414)	(568,683)	(7,847,900)
Other financing sources (uses)						
Transfers in	3,329,927	15,630,487	1,200,000	4,650,000	1,674,939	26,485,353
Transfers out	(22,949,694)	(69,208)	-	-	(136,524)	(23,155,426)
Notes payable issued	-	-	2,508,196	-	-	2,508,196
Bonds issued	-	-	7,870,000	-	-	7,870,000
Premium on bonds issued	-	-	745,500	-	-	745,500
Net other financing sources (uses)	(19,619,767)	15,561,279	12,323,696	4,650,000	1,538,415	14,453,623
Net change in fund balances	203,236	861,135	4,726,034	(154,414)	969,732	6,605,723
Fund balances - beginning, as previously reported	11,374,838	7,295,578	2,632,498	8,095,418	3,457,119	32,855,451
Correction of an error	-	-	-	-	38,004	38,004
Fund balance - beginning, as restated	11,374,838	7,295,578	2,632,498	8,095,418	3,495,123	32,893,455
Fund balances - ending	$ 11,578,074	$ 8,156,713	$ 7,358,532	$ 7,941,004	$ 4,464,855	$ 39,499,178

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
RECONCILIATION OF THE STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES OF GOVERNMENTAL FUNDS TO THE STATEMENT OF ACTIVITIES
For the Year Ended June 30, 2018

Amounts reported for governmental activities in the statement of activities are different because:

Net change in fund balances - total governmental funds	$ 6,605,723
Governmental funds report capital outlays as expenditures. However, in the statement of activities the cost of those assets is allocated over their estimated useful lives and reported as depreciation expense. This is the amount by which capital outlays from the capital projects fund ($7,734,269) and other governmental funds ($4,631,141) exceeded depreciation expense ($6,254,621) in the current period.	6,110,789
The net effect of various miscellaneous transactions involving capital assets (i.e., sales, donations an expensed capital outlays) is to increase net position.	(4,419,483)
Tax revenues in the statement of activities that do not provide current financial resources are not reported as revenues in the funds.	83,135
The issuance of long-term debt (e.g. bonds, leases) provides current financial resources to governmental funds, while the repayment of the principal of long-term debt consumes the current financial resources of governmental funds. Neither transaction, however, has any effect on net position. Also, governmental funds report the effect of issuance costs, premiums, discounts, and similar items when debt is first issued, whereas these amounts are deferred and amortized in the statement of activities. This amount is the net effect of these differences in the treatment of long-term debt and related items.	(5,606,149)
Change in fair value of ineffective derivative - interest rate swap	995,446
Expenses reported in the statement of activities for changes in the net pension liability, deferred outflows related to pensions, and deferred inflows related to pensions are not reported in the funds.	3,156,533
Expenses reported in the statement of activities for changes in the total other postemployment benefits liability, deferred outflows related to other postemployment benefits, and deferred inflows related to other postemployment benefits are not reported in the funds.	(330,268)
Accrued interest associated with long-term liabilities that are not due and payable in the current period and therefore are not reported in the funds.	(16,361)
The internal service funds are used by management to charge the costs of insurance and equipment replacement to individual funds. The net revenue of certain activities of internal service funds is reported with governmental activities.	542,575
Change in net position of governmental activities	$ 7,121,940

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
GENERAL FUND
For the Year Ended June 30, 2018

	Original Budget	Final Budget	Actual	Adjustment to Budgetary Basis	Actual on Budgetary Basis	Variance With Final Positive (Negative)
Revenues						
Taxes	$ 23,092,695	$ 23,092,695	$ 23,044,252	$ -	$ 23,044,252	$ (48,443)
Licenses and permits	306,000	306,000	348,300	-	348,300	42,300
Intergovernmental	14,831,743	14,831,743	15,086,053	-	15,086,053	254,310
Charges for services	1,216,782	1,216,782	1,207,009	-	1,207,009	(9,773)
Fines and forfeitures	344,500	344,500	357,228	-	357,228	12,728
Grants	1,704,345	1,704,345	825,329	-	825,329	(879,016)
Investment earnings	42,143	42,143	187,631	-	187,631	145,488
Miscellaneous	560,000	560,000	568,498	-	568,498	8,498
Total revenues	42,098,208	42,098,208	41,624,300	-	41,624,300	(473,908)
Expenditures						
Current:						
General government	2,120,250	2,120,250	1,894,168	49,307	1,943,475	176,775
Public safety	11,177,918	11,177,918	11,290,299	-	11,290,299	(112,381)
Public works	2,268,005	2,268,005	2,036,572	89,120	2,125,692	142,313
Community services	5,695,481	5,695,481	5,530,905	-	5,530,905	164,576
Grants	1,957,730	1,957,730	1,049,353	-	1,049,353	908,377
Total expenditures	23,219,384	23,219,384	21,801,297	138,427	21,939,724	1,279,660
Excess (deficiency) of revenues over (under) expenditures	18,878,824	18,878,824	19,823,003	(138,427)	19,684,576	805,752
Other financing sources (uses)						
Transfers in	3,498,350	3,498,350	3,329,927	-	3,329,927	(168,423)
Transfers out	(22,793,963)	(22,793,963)	(22,949,694)	-	(22,949,694)	(155,731)
Net other financing uses	(19,295,613)	(19,295,613)	(19,619,767)	-	(19,619,767)	(324,154)
Net change in fund balances	(416,789)	(416,789)	203,236	(138,427)	64,809	481,598
Fund balance - beginning	11,374,838	11,374,838	11,374,838	-	11,374,838	-
Fund balance - ending	$ 10,958,049	$ 10,958,049	$ 11,578,074	$ (138,427)	$ 11,439,647	$ 481,598

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF REVENUES, EXPENDITURES AND CHANGES IN FUND BALANCES - BUDGET AND ACTUAL
GENERAL PURPOSE SCHOOL FUND
For the Year Ended June 30, 2018

	Original Budget	Final Budget	Actual on Budgetary Basis	Variance With Final Positive (Negative)
Revenues				
Intergovernmental	$ 37,180,525	$ 37,180,525	$ 38,204,019	$ 1,023,494
Charges for services	230,000	230,000	275,126	45,126
Other	150,113	150,113	348,450	198,337
Total revenues	37,560,638	37,560,638	38,827,595	1,266,957
Expenditures				
Current:				
Education	54,379,677	54,379,677	53,527,739	851,938
Total expenditures	54,379,677	54,379,677	53,527,739	851,938
(Deficiency) excess of revenues (under) over expenditures	(16,819,039)	(16,819,039)	(14,700,144)	2,118,895
Other financing sources (uses)				
Transfers in	15,493,963	15,493,963	15,630,487	136,524
Transfers out	(69,328)	(69,328)	(69,208)	120
Net other financing source	15,424,635	15,424,635	15,561,279	136,644
Net change in fund balances	(1,394,404)	(1,394,404)	861,135	2,255,539
Fund balance - beginning	7,295,578	7,295,578	7,295,578	-
Fund balance - ending	$ 5,901,174	$ 5,901,174	$ 8,156,713	$ 2,255,539

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF NET POSITION
PROPRIETARY FUNDS
June 30, 2018

	Business-type Activities				Governmental Activities
	Electric	Waterworks	Nonmajor Enterprise Fund - Emergency Communications	Total Enterprise Funds	Internal Service Funds
Assets and deferred outflows of resources					
Current assets:					
Cash and cash equivalents	$ 5,645,365	$ 8,664,286	$ 1,157,187	$ 15,466,838	$ 6,340,642
Receivables, net	6,827,962	2,764,069	-	9,592,031	-
Prepaid items	-	-	9,375	9,375	43,101
Inventories, at cost	1,563,889	1,197,816	-	2,761,705	13,084
Restricted assets:					
Cash and cash equivalents	1,798,396	1,707,664	217,362	3,723,422	1,188,588
Total current assets	15,835,612	14,333,835	1,383,924	31,553,371	7,585,415
Noncurrent assets:					
Capital assets, net	57,021,604	114,238,064	3,092,731	174,352,399	2,990,106
Total noncurrent assets	57,021,604	114,238,064	3,092,731	174,352,399	2,990,106
Total assets	72,857,216	128,571,899	4,476,655	205,905,770	10,575,521
Deferred outflows of resources:					
Deferred pension outflows	974,651	1,284,037	-	2,258,688	101,598
Total deferred outflows of resources	974,651	1,284,037	-	2,258,688	101,598
Liabilities and deferred inflows of resources					
Current liabilities:					
Accounts payable	8,117,679	832,410	62,842	9,012,931	150,456
Accrued liabilities	1,395	-	-	1,395	435,295
Deposits	3,037,204	70,000	-	3,107,204	-
Current portion of noncurrent liabilities	1,503,300	3,304,616	35,198	4,843,114	521,395
Contracts payable	26,800	126,770	-	153,570	-
Accrued interest payable	75,507	114,106	6,020	195,633	19,140
Total current liabilities	12,761,885	4,447,902	104,060	17,313,847	1,126,286
Noncurrent liabilities:					
Compensated absences	65,492	148,041	-	213,533	17,970
Notes payable	1,323,296	21,148,894	-	22,472,190	-
Interfund note payable	-	238,095	-	238,095	-
Bonds payable	14,585,603	38,137,320	1,855,106	54,578,029	1,089,586
Capital lease payable	-	-	-	-	607,177
Total other postemployment benefits liability	273,717	609,846	-	883,563	62,708
Net pension liability	1,940,942	2,557,060	-	4,498,002	202,324
Total noncurrent liabilities	18,189,050	62,839,256	1,855,106	82,883,412	1,979,765
Total liabilities	30,950,935	67,287,158	1,959,166	100,197,259	3,106,051
Deferred inflows of resources:					
Deferred pension inflows	71,849	94,655	-	166,504	7,490
Deferred other postemployment benefit inflows	5,822	12,971	-	18,793	1,334
Deferred inflows on bond refunding	212,259	-	-	212,259	-
Total deferred inflows of resources	289,930	107,626	-	397,556	8,824
Net position					
Net investment in capital assets	39,571,873	52,280,287	1,202,427	93,054,587	819,890
Unrestricted	3,019,129	10,180,865	1,315,062	14,515,056	6,742,354
Total net position	$ 42,591,002	$ 62,461,152	$ 2,517,489	$ 107,569,643	$ 7,562,244

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF REVENUES, EXPENSES AND CHANGES IN NET POSITION
PROPRIETARY FUNDS
For the Year Ended June 30, 2018

	Business-type Activities				Governmental Activities
	Electric	Waterworks	Nonmajor Enterprise Fund - Emergency Communications	Total Enterprise Funds	Internal Service Funds
Operating revenues:					
Charges for services	$ 54,838,283	$ 21,456,117	$ 557,100	$ 76,851,500	$ 6,853,567
Miscellaneous	1,104,916	169,553	-	1,274,469	-
Employer's contributions	-	-	-	-	4,008,027
Employees' contributions	-	-	-	-	964,393
Total operating revenues	55,943,199	21,625,670	557,100	78,125,969	11,825,987
Operating expenses:					
Maintenance and administrative	8,245,366	10,755,927	381,980	19,383,273	1,135,308
Purchased power and water	41,407,722	1,200	-	41,408,922	-
Depreciation	2,361,511	5,344,534	78,916	7,784,961	498,046
Materials	-	-	-	-	366,161
Medical/liability claims	-	-	-	-	330,226
Insurance premiums	-	-	-	-	5,085,189
Other benefits	-	-	-	-	3,950,838
Total operating expenses	52,014,599	16,101,661	460,896	68,577,156	11,365,768
Operating income	3,928,600	5,524,009	96,204	9,548,813	460,219
Nonoperating revenues (expenses):					
Gain on disposal of capital assets	-	-	-	-	61,355
Revenue from other governments	-	-	848,285	848,285	-
Investment earnings	88,734	150,749	46,176	285,659	92,913
Interest expense	(710,241)	(1,562,169)	(34,569)	(2,306,979)	(55,424)
Bond issuance costs	(117,957)	(15,172)	(26,164)	(159,293)	(16,488)
Net nonoperating (expenses) revenues	(739,464)	(1,426,592)	833,728	(1,332,328)	82,356
Income before capital contributions and transfers	3,189,136	4,097,417	929,932	8,216,485	542,575
Transfers out	(1,645,492)	(1,684,435)	-	(3,329,927)	-
Capital contributions	458,766	604,114	-	1,062,880	-
Change in net position	2,002,410	3,017,096	929,932	5,949,438	542,575
Net position - beginning, as previously reported	40,772,255	59,853,258	1,587,557	102,213,070	7,061,746
Prior period restatement	(183,663)	(409,202)	-	(592,865)	(42,077)
Net position - beginning, as restated	40,588,592	59,444,056	1,587,557	101,620,205	7,019,669
Net position - ending	$ 42,591,002	$ 62,461,152	$ 2,517,489	$ 107,569,643	$ 7,562,244

The notes to the financial statements are an integral part of these financial statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF CASH FLOWS
PROPRIETARY FUNDS
For the Year Ended June 30, 2018

	Business-type Activities				Governmental Activities
	Electric	Waterworks	Nonmajor Enterprise Fund - Emergency Communications	Total Enterprise Funds	Internal Service Funds
Cash flows from operating activities					
Receipts from customers	$ 55,798,833	$ 21,091,991	$ 557,100	$ 77,447,924	$ 11,825,987
Payments to employees for salaries and benefits	(3,135,815)	(3,435,474)	-	(6,571,289)	(524,405)
Payments to suppliers and service providers	(46,161,525)	(6,938,204)	(327,131)	(53,426,860)	(10,348,760)
Net cash provided by operating activities	6,501,493	10,718,313	229,969	17,449,775	952,822
Cash flows from noncapital financing activities					
Transfers to other funds	(1,645,492)	(1,684,435)	-	(3,329,927)	-
Grant proceeds	-	-	2,665	2,665	-
Net cash (used in) provided by noncapital financing activities	(1,645,492)	(1,684,435)	2,665	(3,327,262)	-
Cash flows from capital and related financing activities					
Proceeds from the issuance of long-term debt	8,246,141	2,074,959	1,875,922	12,197,022	1,177,557
Proceeds from the sale of capital assets	-	-	-	-	61,355
Contributed capital	458,766	588,312	-	1,047,078	-
Acquisition and construction of capital assets	(3,530,082)	(7,920,126)	(2,601,515)	(14,051,723)	(891,281)
Payments on capital lease	-	-	-	-	(73,215)
Principal paid on capital debt	(8,175,000)	(2,696,459)	-	(10,871,459)	-
Interest paid on capital debt	(868,886)	(1,681,125)	(40,331)	(2,590,342)	(60,807)
Net cash (used in) provided by capital and related financing activities	(3,869,061)	(9,634,439)	(765,924)	(14,269,424)	213,609
Cash flows from investing activities					
Interest on investments	88,734	150,749	46,176	285,659	92,913
Net cash provided by investing activities	88,734	150,749	46,176	285,659	92,913
Net increase (decrease) in cash and cash equivalents	1,075,674	(449,812)	(487,114)	138,748	1,259,344
Cash and cash equivalents - beginning	6,368,087	10,821,762	1,861,663	19,051,512	6,269,886
Cash and cash equivalents - ending	$ 7,443,761	$ 10,371,950	$ 1,374,549	$ 19,190,260	$ 7,529,230
Cash and cash equivalents are classified as:					
Current assets	$ 5,645,365	$ 8,664,286	$ 1,157,187	$ 15,466,838	$ 6,340,642
Restricted assets	1,798,396	1,707,664	217,362	3,723,422	1,188,588
Total cash and cash equivalents - ending	$ 7,443,761	$ 10,371,950	$ 1,374,549	$ 19,190,260	$ 7,529,230

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF CASH FLOWS (continued)
PROPRIETARY FUNDS
For the Year Ended June 30, 2018

	Business-type Activities				Governmental Activities
	Electric	Waterworks	Nonmajor Enterprise Fund - Emergency Communications	Total Enterprise Funds	Internal Service Funds
Reconciliation of operating income to net cash provided by operating activities					
Operating income	$ 3,928,600	$ 5,524,009	$ 96,204	$ 9,548,813	$ 460,219
Adjustments to reconcile operating income to net cash provided by operating activities:					
Depreciation	2,361,511	5,344,534	78,916	7,784,961	498,046
Changes in assets and liabilities					
Receivables	(231,743)	(533,679)	-	(765,422)	-
Prepaid items	-	-	-	-	(6,021)
Inventories	14,368	(15,927)	-	(1,559)	117,001
Due from other governments	121,658	-	-	121,658	-
Deferred outflows	56,492	95,039	-	151,531	1,516
Accounts payable	237,340	693,977	54,849	986,166	36,423
Accrued liabilities	(104,172)	(129,260)	-	(233,432)	(163,577)
Compensated absences	(43,550)	(99,378)	-	(142,928)	9,282
Customer deposits	87,377	-	-	87,377	-
Total other postemployment benefits liability	(101)	(528)	-	(629)	25
Net pension liability	(79,485)	(145,109)	-	(224,594)	280
Deferred inflows	153,198	(15,365)	-	137,833	(372)
Total adjustments	2,572,893	5,194,304	133,765	7,900,962	492,603
Net cash provided by operating activities	$ 6,501,493	$ 10,718,313	$ 229,969	$ 17,449,775	$ 952,822
Schedule of non-cash capital and related financing activities:					
Forgiveness of long-term debt	$ -	$ 74,162	$ -	$ 74,162	$ -

The notes to the financial statements are an integral part of these statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF NET POSITION
FIDUCIARY FUNDS
June 30, 2018

	Private Purpose Trust - Scholarship Fund	Internal School Funds
Assets		
Cash and cash equivalents	$ 103,186	$ 946,831
Inventory	-	3,147
Prepaid expenses	8,271	-
Total assets	111,457	949,978
Liabilities		
Accounts payable	8,271	-
Liability for student activities	-	949,978
Total liabilities	8,271	949,978
Net Position		
Held in trust for scholarships	103,186	-
Total net position	$ 103,186	$ -

The notes to the financial statements are an integral part of these statements.

CITY OF OAK RIDGE, TENNESSEE
STATEMENT OF CHANGES IN NET POSITION
FIDUCIARY FUNDS
For the Year Ended June 30, 2018

	Private Purpose Trust - Scholarship Fund
Additions	
Investment income	$ 887
Contributions	6,000
Total additions	6,887
Deductions	
Scholarship awards	159,216
Total deductions	159,216
Change in net position	(152,329)
Total net position - beginning	255,515
Total net position - ending	$ 103,186

The notes to the financial statements are an integral part of these statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The accounting policies of the City of Oak Ridge, Tennessee (the City), conform to accounting principles generally accepted in the United States of America applicable to governmental units. The following is a summary of the more significant policies:

a. Reporting Entity

The City was incorporated June 16, 1959, under Chapters 30 through 36 of Title 6, Tennessee Code Annotated (TCA), which chapters became the Home Rule Charter of the City, as the result of an election held November 7, 1962. The City operates under a Modified City Manager-Council form of government and provides services as authorized by its charter.

The basic criteria for determining whether another governmental organization should be included in a primary governmental unit's reporting entity for basic financial statements is financial accountability. Financial accountability includes (1) the appointment of a voting majority of the organization's governing body, (2) the ability of the primary government to impose its will on the organization, or (3) if there is a financial benefit/burden relationship. In addition, an organization that is fiscally dependent on the primary government should be included in its reporting entity.

These financial statements present the City (the primary government) and its component units, entities for which the City is considered to be financially accountable. The operations of the Oak Ridge Schools (the Schools) are included as a part of the primary government. Discretely presented component units are reported in separate columns in the government-wide financial statements to emphasize they are legally separate from the City. The accounting principles and policies utilized by the discretely presented component units are the same as those of the City unless stated otherwise in the following Notes to the Financial Statements.

Discretely Presented Component Units

Oak Ridge Land Bank. The Oak Ridge Land Bank Corporation (the Land Bank) was developed to support economic revitalization by returning vacant, abandoned and tax delinquent properties to productive use and is a not-for profit organization exempt from federal income taxes under Internal Revenue Code Section 501(c)(3). The Land Bank’s Board of Directors consists of seven directors who assume all managerial responsibilities and are appointed by City Council, one of which is a member of City Council. The City periodically transfers properties to the Land Bank.

The Oak Ridge Land Bank Corporation publishes separate financial statements, which may be obtained at the following address:

Oak Ridge Land Bank Corporation
P.O. Box 1
Oak Ridge, TN 37831-0001

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

   a. Reporting Entity (continued)

Oak Ridge Convention and Visitors Bureau. The Convention and Visitors Bureau (the Bureau) promotes tourism activities and operates a tourist information center within the City. The Bureau's seven Board members are appointed by City Council. Bureau operations are virtually entirely funded from City appropriations. Complete financial statements for the Oak Ridge Convention and Visitors Bureau may be obtained at the entity's administrative offices at the following address:

Oak Ridge Convention and Visitors Bureau
1400 Oak Ridge Turnpike
Oak Ridge, TN 37830

Oak Ridge Public Schools Education Foundation, Inc. The Oak Ridge Public Schools Education Foundation, Inc. (the Foundation) is a not-for profit organization exempt from federal income taxes under Internal Revenue Code Section 501(c)(3). The Foundation's primary mission is to enhance, promote and support the City of Oak Ridge Schools. The Foundation receives donations and pledges from individuals, corporations and other donors. The City does not appoint or approve the Foundation's budget or Board of Directors. However, the Foundation's main purpose is to provide financial support to the Schools.

The Foundation has been audited by a separate certified public accounting firm for the year ended December 31, 2017. The Foundation's results have been presented with a different year-end.

The Foundation publishes separate financial statements, which may be obtained from:

Ms. Jessica Steed
Oak Ridge Public Schools Education Foundation, Inc.
MS-22, P.O. Box 117
Oak Ridge, TN 37831
(865) 241-3667

Related Organizations

Oak Ridge City Council is responsible for all board appointments of the Oak Ridge Housing Authority, Oak Ridge Utility District, Oak Ridge Industrial Development Board and the Oak Ridge Health and Education Facilities Board. However, the City has no further accountability for any of these organizations. The City cannot impose its will on these boards since it does not have the ability to modify or approve their budgets or overrule or modify decisions of the boards. The boards are fiscally independent and there is no financial benefit or burden relationship with the City. Therefore, they are not included in the City's financial statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b. Government-wide and Fund Financial Statements

Government-wide Statements: The statement of net position and the statement of activities display information about the primary government and its component units. These statements include the financial activities of the overall government. Eliminations have been made to minimize the double counting of internal activities. These statements distinguish between the governmental and business-type activities of the City. Governmental activities generally are financed through taxes, intergovernmental revenues, and other non-exchange transactions. Business-type activities are financed in whole or in part by fees charged to external parties.

The statement of activities presents a comparison between direct expenses and program revenues for the different business-type activities of the City and for each function of the City's governmental activities. Direct expenses are those that are specifically associated with a program or function and, therefore, are clearly identifiable to a particular function. Indirect expense allocations that have been made in the funds have been reversed for the statement of activities. Program revenues include (a) fees and charges paid by the recipients of goods or services offered by the programs and (b) grants and contributions that are restricted to meeting the operational or capital requirements of a particular program. Revenues that are not classified as program revenues, including all taxes, are presented as general revenues.

Fund Financial Statements: The fund financial statements provide information about the City's funds. Separate financial statements are provided for governmental funds, proprietary funds and fiduciary funds, although the fiduciary funds are excluded from the government-wide financial statements. The emphasis of fund financial statements is on major governmental and enterprise funds, each displayed in a separate column. All remaining governmental and enterprise funds are aggregated and reported as nonmajor funds.

Proprietary fund operating revenues, such as charges for services, result from exchange transactions associated with the principal activity of the fund. Exchange transactions are those in which each party receives and gives up essentially equal values. Nonoperating revenues, such as subsidies and investment earnings, result from non-exchange transactions or ancillary activities.

The City reports the following major governmental funds:

General Fund

The General Fund is the principal fund of the City and is used to account for all activities of the City not included in other specified funds. The General Fund accounts for the normal recurring activities of the City including police, fire, recreation, public works, and general government.

General Purpose School Fund

The General Purpose School Fund is the main operating fund of the Schools. This fund is used to account for all financial resources of the Schools, except those required to be accounted for in a separate fund. Revenues are received from local taxes, state and federal revenues and charges for services.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

b. Government-wide and Fund Financial Statements (continued)

Capital Projects Fund

The Capital Projects Fund is used to account for financial resources segregated for the acquisition, construction or renovation of major capital facilities other than those financed by proprietary operations. The primary funding source is proceeds from general obligation debt issuances and transfers from the General Fund.

Debt Service Fund

The Debt Service Fund is used to account for the payment of principal and interest on long-term general obligation debt. It does not include debt issued for services provided by a proprietary fund. Local taxes and transfers from the General Fund primarily service this debt obligation.

The City reports the following major enterprise funds:

Electric Fund

The Electric Fund is used to account for the provision of electric service to the residents of the City. All activities necessary to provide such service are accounted for in this fund, including, but not limited to, administration, operations, maintenance, financing, and billing and collection.

Waterworks Fund

The Waterworks Fund is used to account for the provision of water and sewer service to the residents of the City. All activities necessary to provide such service are accounted for in this fund, including, but not limited to, administration, operations, maintenance, financing, and billing and collection.

The City also reports the following fund types:

Internal Service Funds

Internal Service Funds are used to account for the financing of goods or services provided by one department to other departments of the City on a cost-reimbursement basis.

Activities accounted for in internal service funds include: (1) medical benefits and retirement plan contributions for City employees, unemployment, worker's compensation and general liability claims and premiums, (2) providing for the purchase and leasing of equipment and vehicles to City departments along with accounting for fuel and maintenance of these vehicles.

Fiduciary Funds

The Scholarship Fund, a private purpose trust fund, is used to account for resources legally held in trust for use of scholarship awards. All resources of the fund, including investment earnings, may be used for scholarship awards.

The Oak Ridge Schools Internal School Funds, an agency fund, is used to account for the funds held at individual schools for which all earnings and resources of the fund are used to benefit the students.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

c. Measurement Focus and Basis of Accounting

The government-wide financial statements are reported using the economic resources measurement focus and the accrual basis of accounting, as are the proprietary and fiduciary fund financial statements. Revenues are recorded when earned and expenses are recorded at the time liabilities are incurred, regardless of when the related cash flows take place. Non-exchange transactions, in which the City gives (or receives) value without directly receiving (or giving) equal value in exchange, include property taxes, grants and donations. On an accrual basis, revenue from property taxes is recognized in the fiscal year for which the taxes are levied. Revenue from grants and donations is recognized in the fiscal year in which all eligibility requirements have been satisfied.

Generally, the effect of interfund activity has been removed from the government-wide financial statements, with the exception of interfund services provided and used which are not eliminated in the process of consolidation. Net interfund activity and balances between governmental activities and business-type activities are shown in the government-wide financial statements.

Governmental fund financial statements are reported using the current financial resources measurement focus and the modified accrual basis of accounting. Under this method, revenues are recognized when they are both measurable and available. Expenditures are recorded when the related fund liability is incurred, except for principal and interest on general long-term debt, claims and judgments, and compensated absences, which are recorded only when payment is due. General capital asset acquisitions are reported as expenditures in governmental funds. Proceeds of general long-term debt and acquisitions under capital leases are reported as other financing sources.

The City considers certain revenues available if collected within 60 days after year-end. Sales, gasoline and motor fuel, beer and liquor wholesale, room occupancy and mixed drink taxes are considered "measurable" at the point of sale and are recognized as revenue at that time. All other non-grant intergovernmental revenues, licenses and permits, charges for services, fines and forfeitures, and other revenues are measurable when received and are recorded as revenue at that time.

Grant revenues, which are unearned at year-end, are recorded as unearned revenues. Under the terms of grant agreements, the City funds certain programs by a combination of specific cost-reimbursement grants, categorical block grants, and general revenues. Thus, when program expenses are incurred, there are both restricted and unrestricted net position available to finance the program. It is the City’s policy to first apply cost-reimbursement grant resources to such programs, followed by categorical block grants, and then by general revenues.

Proprietary funds distinguish *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 proprietary fund’s principal ongoing operation. The principal ongoing operating revenues of the City’s enterprise and internal service funds are charges to customers for sales and services provided. Operating revenues in the Waterworks Fund includes the portion of the tap fees intended to cover the cost of connecting new customers to the system. Operating expenses for enterprise funds and internal service funds include the costs of sales and services, administrative expenses and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

d. Budgets and Budgetary Accounting

The City follows the procedures outlined below in establishing the budgetary data reflected in the financial statements.

1. By early-June, the City Manager submits to the City Council a proposed operating budget for the fiscal year commencing the following July 1. The operating budget includes proposed expenditures and the means of financing them. Also, a six-year capital budget is developed and presented to City Council prior to preparation of the upcoming annual operating budget.

2. A public hearing is conducted at the Municipal Building to obtain taxpayer comments.

3. Prior to July 1, the budgets for all governmental funds are legally enacted through passage of an ordinance by City Council.

4. The City Manager is authorized to transfer budgeted amounts between departments within any fund; however, any revisions that alter the total expenditures of any fund must be approved by the City Council. Expenditures may not exceed appropriations at the fund level.

5. Formal budgetary integration is employed as a management control device during the year for the General Fund, Special Revenue Funds, Debt Service Fund, and Capital Projects Fund. Budgetary control is also achieved for the Debt Service Fund through general obligation bond indenture provisions.

6. The budgets for all governmental funds are legally adopted on a basis consistent with accounting principles generally accepted in the United States of America (GAAP), except that in the General, Special Revenue, and Capital Projects Funds, encumbrances are treated as budgeted expenditures in the year the commitment to purchase is incurred. The adjustments necessary to convert the basis of budgeting to GAAP represent the net change in encumbrances outstanding at the beginning and ending of the fiscal year.

7. All appropriations which are not expended or encumbered lapse at year end.

e. Cash and Cash Equivalents

Cash and cash equivalents include deposits in the State of Tennessee's Local Government Investment Pool (LGIP) as well as cash on hand and on deposit. The LGIP is a SEC 2a-7-like fund and the amount stated is based on the LGIP share price. Investments in the LGIP are reported at amortized cost.

For purposes of the Statement of Cash Flows, the City considers all highly liquid investments with maturity of three months or less when purchased to be a cash equivalent.

f. Investments

Investments are stated at the fair value based upon quoted market price.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

g. Unbilled Accounts Receivable

In the Electric Fund and Waterworks Funds, both enterprise funds, an estimated amount has been recorded for electric, water and wastewater services rendered but not yet billed as of the close of the fiscal year. The receivable was computed by taking the cycle billings the City sent to customers in July and prorating the amount of days applicable to the current fiscal year.

h. Allowances for Doubtful Accounts

All receivables that historically experience uncollectible accounts are shown net of an allowance for doubtful accounts. This amount is estimated by analyzing the percentage of receivables that were written off in prior years.

i. Unconditional Promises to Give

Unconditional promises to give of the Oak Ridge Education Foundation, a component unit, are recognized as contribution revenue in the period that it is, in substance, unconditional. The Foundation uses the allowance method to determine an uncollectible amount based upon prior years' experience and management's estimates.

Unconditional pledges that are expected to be collected within one year are recorded at net realizable value. Unconditional receivables that are expected to be collected in future years are recorded at the present value of their estimated future cash flows. The discounts on those amounts are computed using risk-free interest rates applicable to the years in which the pledges are received. Amortization of the discounts is included in contribution revenue.

j. Inventories

Inventories are valued, maintained and issued using the average cost method. The costs of inventories are recorded as expenditures when consumed.

k. Prepaid Items

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items. The cost of prepaid items is recorded as an expenditure when consumed rather than when purchased. Prepaids are offset in the nonspendable fund balance account in governmental funds.

l. Commodities

The Schools receive commodities for school cafeterias from the U.S. Department of Agriculture. The value of the commodities received is reported as revenue, and the value of such commodities used is reported as cost of food in the accompanying financial statements.

m. Restricted Assets

Assets are reported as restricted when limitations on their use are either imposed by creditors, contributors, grantors or imposed by enabling legislation.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

n. Capital Assets

Capital assets are defined by the City as assets with an initial, individual cost greater than $5,000. Purchased or constructed capital assets are reported at cost or estimated historical cost. Donated capital assets are recorded at their acquisition value at the date of donation. General infrastructure assets acquired prior to July 1, 2002, consist of the road network and storm water system assets that were acquired or that received substantial improvements subsequent to July 1, 1980, and are reported at estimated historical cost using deflated replacement cost. The cost of normal maintenance and repairs that do not add to the value of the asset or materially extend the assets' lives are not capitalized.

Depreciation has been provided over the estimated useful lives using the straight-line method for assets used by all governmental activities. The composite method is primarily being used for other City assets. The estimated useful lives are as follows:

Infrastructure	40 - 50 years	2% - 2.5% composite method
Buildings	20 - 50 years	2% - 5% composite method
Improvements	15 - 40 years	2.5% - 6.667% composite method
Equipment	3 - 20 years	

Property under capital leases is stated at the lower of the present value of minimum lease payments or the fair market value at the inception of the lease. Once placed in use, such property is amortized using the straight-line method over the shorter of the economic useful life of the asset or the remaining term of the lease.

For proprietary fund assets, interest is capitalized on construction costs incurred with tax-exempt debt using the interest rate on borrowed funds. The amount of interest cost incurred on tax-exempt debt is reduced by the amount of interest earnings for the year. Interest is capitalized on construction costs incurred with taxable debt using the average interest rate on the borrowed funds. The capitalization period is from the date of the borrowing until the construction period is complete. Capitalized interest in the City's business type funds totaled $168,999 for fiscal year 2018.

o. Compensated Absences

Employees of the City are granted general (vacation) and emergency (sick) leave in varying amounts. In the event of termination, an employee is paid for accumulated general (vacation) leave; however, accumulated emergency (sick) leave is not paid. Upon retirement, the accumulated emergency (sick) leave is credited to time of employment for calculating years of service under Tennessee Consolidated Retirement System benefits.

For the government-wide and proprietary funds, an expense and a liability for compensated absences and the salary-related payments are recorded as the leave is earned. The City has assumed a first-in, first-out method of using accumulated compensated time. The portion of that time that is estimated to be used in the next fiscal year has been designated as a current liability in the government-wide financial statements. In the fund financial statements, governmental fund types expense compensated absences as they are paid. The compensated liability is not reported in their respective fund financial statements because it is not expected to be liquidated with available financial resources.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

p. Pensions

For purposes of measuring the net pension liability, net pension asset, deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the City's participation in the Public Employee Retirement Plan, the Teacher Retirement Plan, and the Teacher Legacy Pension Plan of the Tennessee Consolidated Retirement System (TCRS), and additions to or deductions from the plans' fiduciary net position have been determined on the same basis as they are reported by the TCRS for the Public Employee Benefit Plan, the Teacher Retirement Plan, and the Teacher Legacy Pension Plan. For this purpose, benefits (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms of the Public Employee Retirement Plan, the Teacher Retirement Plan, and the Teacher Legacy Pension Plan of the TCRS. Investments are reported at fair value.

q. Long-term Obligations

In the government-wide financial statements and proprietary fund types in the fund financial statements, long-term debt and other long-term obligations are reported as liabilities in the applicable governmental activities, business-type activities, or proprietary fund type statement of net position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the straight-line method that approximates the effective interest method. Bonds payable are reported net of the applicable bond premiums or discount. Debt issuance costs are recorded as an expense in the current period.

In the fund financial statements, governmental fund types recognize bond premiums and discounts during the current period. The face amount of debt issued is reported as other financing sources. Premiums received on debt issuances are reported as other financing sources while discounts on debt issuances are reported as other financing uses. Issuance costs, whether or not withheld from the actual debt proceeds received, are reported as debt service expenditures.

r. Interfund Transactions

Transactions between funds that are representative of lending/borrowing arrangements outstanding at the end of the fiscal year which are not due within one year are referred to as "advances to/from other funds" (i.e., the noncurrent portion of interfund loans). All other outstanding balances between funds are reported as "due to/from other funds".

Advances between funds are recorded as nonspendable fund balance in applicable governmental funds to indicate they are not available for appropriation and are not expendable available financial resources. All other interfund transfers are treated as transfers and are included in the results of operations of both governmental and proprietary funds.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

s. Net Position

The City's net position is classified as follows:

Net Investment in Capital Assets: This represents the City's total investment in capital assets, net of outstanding debt obligations related to those capital assets. To the extent debt has been incurred, but not yet expended for capital assets, such amounts are not included as a component of net investment in capital assets.

Restricted Net Position: Restricted net position reflects the resources that are subject to restricted use and have been externally imposed by creditors, grantors or contributors, or by law through constitutional provisions or enabling legislation.

Unrestricted Net Position: Unrestricted net position includes resources that are available for transactions relating to the general operations of the City and may be used at the discretion of the City to meet current expenses for any purpose.

t. Fund Balance

Governmental funds report fund balance in classifications based primarily on the extent to which the City is bound to honor constraints on the specific purposes for which amounts in the funds can be spent. Fund balances of the City's governmental funds are classified into the following categories:

Nonspendable Fund Balance – This is comprised of amounts that cannot be spent due to their form or funds that legally or contractually are required to be maintained intact. Fund balances reported as nonspendable in the accompanying financial statements represent amounts for inventory, prepaid expenditures, advances to other funds and noncurrent notes receivables.

Restricted Fund Balance – Fund balances reported as restricted are the result of externally imposed restrictions placed upon current resources by external parties, constitutional provisions or enabling legislations. Examples include state statutes, creditors, bond covenants, donors or grantors.

When both restricted and unrestricted resources are available for use, it is the School's policy and the City's practice to expend any available restricted, committed or assigned resources, in that order, prior to expending unassigned resources.

Committed Fund Balance – This is comprised of amounts that are set aside for specific purposes by the City's highest level of decision making authority (City Council or Board of Education for the Schools) through its highest level of formal action (Ordinance adoption by City Council or formal approval by Board of Education for the Schools). Formal action must be taken prior to the end of the fiscal year. Commitments may be changed or removed by the same authority taking the same formal action that imposed the constraint originally.

Assigned Fund Balance – Fund balances reported as assigned are intended to be used by the City for specific purposes that are neither restricted nor committed. Intent is expressed by City Council for the City. The Board of Education has a fund balance policy that allows assigned amounts to be re-assigned by the Board of Education or School management.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

t. Fund Balance (continued)

Unassigned Fund Balance – The general fund is the only governmental fund that reports an unassigned fund balance. The unassigned fund balance has not been restricted, committed or assigned to a specific purpose within the general fund. In governmental funds other than the general fund, if expenditures incurred for specific purposes exceed the amounts that are in restricted, committed or assigned, it may be necessary to report a negative unassigned fund balance for those governmental funds.

When committed, assigned or unassigned fund balance amounts are available for use, it is the School's policy and the City's practice to use the committed fund balance first; the assigned fund balance second; and then the unassigned fund balance as it is needed.

State statutes require the General Purpose School Fund to maintain a minimum unrestricted fund balance of 3% of current year's expenditures. For the current fiscal year ended June 30, 2018, the General Purpose School Fund met the minimum fund balance as required by state law.

u. Encumbrances

Encumbrance accounting, under which purchase orders, contracts, and other commitments for the expenditure of monies are recorded in order to reserve that portion of the applicable appropriation, is employed as an extension of formal budgetary integration in the governmental funds. Encumbrances outstanding at year-end are reported as assigned fund balances. City Council adopted a resolution to encumber all remaining unspent budgeted funds at the end of fiscal year 2018 for Information Services, Finance, and Stormwater activities in the General Fund. Accordingly, unspent budgeted funds at the end of fiscal year 2018 of $585,195 were encumbered.

v. Deferred Outflows/Inflows of Resources

The statement of net position will sometimes report a separate section for deferred outflows of resources, in addition to assets. 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. In addition to liabilities, the statement of net 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) so will not be recognized as inflow of resources (revenue) until that time.

w. Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates. Those estimates and assumptions affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported revenues and expenses.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

x. New GASB Standards

In January 2017, the GASB issued GASB Statement No. 84, *Fiduciary Activities*. The objective of this Statement is to improve guidance regarding the identification of fiduciary activities for accounting and financial reporting purposes and how those activities should be reported. Statement No. 84 is effective for fiscal years beginning after December 15, 2018. The City has not elected early implementation of this standard and has not determined the impact of this statement on its financial statements.

In June 2017, the GASB issued GASB Statement No. 87, *Leases*. This Statement requires recognition of certain lease assets and liabilities for leases that were previously classified as operating leases and recognized based on the payment provisions of the contract. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use asset. This Statement is effective for fiscal years beginning after December 15, 2019. The City has not elected early implementation of this standard and has not determined the impact of this statement on its financial statements.

In April 2018, the GASB issued GASB Statement No. 88, *Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements*. The primary objective of this Statement is to improve the information that is disclosed in notes to government financial statements related to debt, including direct borrowings and direct placements. This Statement is effective for periods beginning after June 15, 2018. The Authority has not elected early implementation of this standard and has not determined the impact of this statement on its financial statements.

In June 2018, the GASB issued GASB Statement No. 89, *Accounting for Interest Cost Incurred before the End of a Construction Period*. This Statement requires that interest cost incurred before the end of a construction period be recognized as expense in the period in which the cost is incurred for financial statements prepared using the economic resources measurement focus. This Statement is effective for fiscal years beginning after December 15, 2019. The City has not elected early implementation of this standard and has not determined the impact of this statement on its financial statements.

y. Restatement

The City adopted Governmental Accounting Standards Board (GASB) Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other than Pensions*, in the year ended June 30, 2018. The objective of this Statement is to address accounting and financial reporting by state and local governments for postemployment benefits other than pensions (OPEB). The adoption of this standard resulted in a restatement to decrease beginning net position in the Statement of Activities for the governmental activities and business-type activities of $1,573,684 and $592,865, respectively. In addition, a restatement to decrease the beginning net position of the Electric Fund and the Waterworks Fund of $183,663 and $409,202, respectively, has been recognized in the Proprietary Funds Statement of Revenues, Expenses and Changes in Net Position as business-type activities. A restatement to decrease the beginning net position of the City Equipment Replacement Fund of $42,077 has been recognized in the Proprietary Funds Statement of Revenues, Expenses and Changes in Net Position as governmental-type activities.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

z. Prior Period Adjustment

An adjustment to beginning net position has been recorded to recognize inventory which was previously unreported for the year ended June 30, 2017. Therefore, an adjustment to increase the City's net position totaling $38,004 for governmental activities in the Statement of Activities and to increase the fund balance totaling $38,004 for other nonmajor funds in the Statement of Revenues, Expenditures and Changes in Fund Balances for Governmental Funds.

2. PROPERTY TAX

All property taxes are assessed on January 1 of each year. Property taxes receivable are recorded at this lien date. The City's 2017 property tax roll, which funded fiscal year 2018, was levied on July 1, 2017, on the assessed value as listed by the applicable County Assessor's Office and was delinquent on September 1, 2017. The revenue from that levy was recognized in the fiscal year beginning July 1, 2017, the year which it is intended to finance. The revenue from the City's 2018 levy will be recognized in the fiscal year beginning July 1, 2018, the year which it is intended to finance. The amount of deferred property taxes recorded in the General Fund at June 30, 2018, is $22,029,479. The City's 2018 property tax roll, which funds fiscal year 2019, was levied on July 1, 2018, and was delinquent on September 1, 2018.

Assessed values are reviewed and approved by the State of Tennessee at the following rates of assumed market value:

Public Utility Property	55%
Telecommunications and Railroads	40%
Industrial and Commercial Property	
Real	40%
Personal	30%
Residential Property	25%

The City is on a 5 year reappraisal cycle. The last reappraisal was completed for the 2016 fiscal year. The assessed value for the 2018 fiscal year list was $802,730,017. The appraised value was $2,641,221,992 making the total assessed value approximately 30% of the total appraised value.

Taxes were levied at a rate of $2.52 per $100 of assessed value for the 2017 property tax year. Taxes were levied at a rate of $2.54 per $100 of assessed value for the 2018 property tax year. Current tax collections of $19,596,550 for the fiscal year ended June 30, 2018, were approximately 96.9% of the tax levy.

3. DEPARTMENT OF ENERGY

The Department of Energy (DOE) has three major facilities in Oak Ridge that represent the largest activity at any one location within the nationwide DOE complex. Oak Ridge National Laboratory (ORNL), one of the nation's largest multipurpose research centers, develops safe, economic, and environmentally acceptable technologies for efficient production and use of energy. ORNL enhances area wide economic growth and development through its technology transfer program to private sector industries, as well as, sophisticated needs and uses for federal and private environmental/hazardous waste management, metals and ceramics technologies, and space-age tool and die industries. The former Oak Ridge K-25 Gaseous Diffusion Plant site, now known as East Tennessee Technology Park (ETTP), is a focal point for developing hazardous waste management impoundment and storage. Oak Ridge Y-12 plant is a highly sophisticated manufacturing and developmental engineering organization engaged primarily in programs vital to national defense. UT-Battelle, URS/CH2M Oak Ridge LLC (UCOR), and Consolidated Nuclear Security LLC, the contractors that operate the three major facilities, are the major employers in Oak Ridge. DOE plants account for 23% of total water sales and 17% of wastewater revenues. Since DOE purchases electricity directly from TVA, DOE does not purchase power from the City. The City receives financial assistance and in-lieu of tax payments from DOE. The City received $1,795,988 from DOE in tax payments in fiscal 2018. The annual payments are subject to congressional appropriation.

The City has an agreement with DOE and DOE's ETTP site contractor to assume fire and emergency medical response duties for the ETTP site. On October 1, 2007, DOE transferred 2.23 acres of land, the ETTP fire station and firefighting and ambulance vehicles and equipment to the City to operate this facility. The City added additional employees to man this station, which serves the west end of Oak Ridge. The West End Fund, a special revenue fund, accounts for the operations of the ETTP fire station. The contract has been extended through September 30, 2019. The City received $2,782,239 from DOE in fiscal 2018.

4. GENERAL INFORMATION ABOUT THE PENSION PLANS

City Employees – Public Employee Retirement Plan of the TCRS

Plan Description

Employees of the City are provided a defined benefit pension plan through the Public Employee Retirement Plan, an agent multiple-employer pension plan administered by the TCRS. The TCRS was created by state statute under TCA, Title 8, Chapters 34-37. The TCRS Board of Trustees is responsible for the proper operation and administration of the TCRS. The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS. The TCRS issues a publicly available financial report that can be obtained at www.treasury.state.tn.us/tcrs.

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City Employees – Public Employee Retirement Plan of the TCRS (continued)

Benefits Provided

TCA, Title 8, Chapters 34-37, establishes the benefit terms and can be amended only by the Tennessee General Assembly. The chief legislative body may adopt the benefit terms permitted by statute. Members are eligible to retire with an unreduced benefit at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Benefits are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Reduced benefits for early retirement are available at age 55 and vested. Members vest with five years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria.

Member and beneficiary annuitants are entitled to automatic cost of living adjustments (COLAs) after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the consumer price index (CPI) during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. A member who leaves employment may withdraw their employee contributions, plus any accumulated interest.

Employees Covered by Benefit Terms

At the measurement date of June 30, 2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	258
Inactive employees entitled to but not yet receiving benefits	175
Active employees	367
Total employees	800

Contributions

Contributions for employees are established in the statutes governing the TCRS and may only be changed by the Tennessee General Assembly. Employees contribute 5 percent of salary. The City makes employer contributions at the rate set by the Board of Trustees as determined by an actuarial valuation. For the year ended June 30, 2018, the employer contributions for the City were $2,951,548 based on a rate of 15.39 percent of covered payroll. By law, employer contributions are required to be paid. The TCRS may intercept the City's state shared taxes if required employer contributions are not remitted. The employer's actuarially determined contribution (ADC) and member contributions are expected to finance the costs of benefits earned by members during the year, the cost of administration, as well as an amortized portion of any unfunded liability.

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City School Employees – Public Employee Retirement Plan of the TCRS

Plan Description

Employees of the Schools are provided a defined benefit pension plan through the Public Employee Retirement Plan, an agent multiple-employer pension plan administered by the TCRS. The TCRS was created by state statute under TCA, Title 8, Chapters 34-37. The TCRS Board of Trustees is responsible for the proper operation and administration of the TCRS. The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS. The TCRS issues a publicly available financial report that can be obtained at www.treasury.state.tn.us/tcrs.

Benefits Provided

TCA, Title 8, Chapters 34-37 establishes the benefit terms and can be amended only by the Tennessee General Assembly. The chief legislative body may adopt the benefit terms permitted by statute. Members are eligible to retire with an unreduced benefit at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Benefits are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Reduced benefits for early retirement are available at age 55 and vested. Members vest with five years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria.

Member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. A member who leaves employment may withdraw their employee contributions, plus any accumulated interest.

Employees Covered by Benefit Terms

At the measurement date of June 30, 2017, the following employees were covered by the benefit terms:

Inactive employees or beneficiaries currently receiving benefits	219
Inactive employees entitled to but not yet receiving benefits	209
Active employees	160
Total employees	588

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City School Employees – Public Employee Retirement Plan of the TCRS (continued)

Contributions

Contributions for employees are established in the statutes governing the TCRS and may only be changed by the Tennessee General Assembly. Employees contribute 5 percent of salary. The Schools make employer contributions at the rate set by the Board of Trustees as determined by an actuarial valuation. For the year ended June 30, 2018, the employer contributions for the Schools were $565,948 based on a rate of 10.05 percent of covered payroll. By law, employer contributions are required to be paid. The TCRS may intercept the Schools' state shared taxes if required employer contributions are not remitted. The employer's ADC and member contributions are expected to finance the costs of benefits earned by members during the year, the cost of administration, as well as an amortized portion of any unfunded liability.

City School Employees – Teacher Retirement Plan of the TCRS

Plan Description

Teachers of the Schools with membership in the TCRS before July 1, 2014, are provided with pensions through the Teacher Legacy Pension Plan, a cost-sharing multiple-employer pension plan administered by the TCRS. The Teacher Legacy Pension Plan closed to new membership on June 30, 2014, but will continue providing benefits to existing members and retirees. Beginning July 1, 2014, the Teacher Retirement Plan became effective for teachers employed by Local Education Agencies (LEAs) after June 30, 2014. The Teacher Retirement Plan is a separate cost-sharing, multiple-employer defined benefit plan. The TCRS was created by state statute under TCA, Title 8, Chapters 34-37. The TCRS Board of Trustees is responsible for the proper operation and administration of all employer pension plans in the TCRS. The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS. The TCRS issues a publically available financial report that can be obtained at www.treasury.state.tn.us/tcrs/.

Benefits Provided

TCA Title 8, Chapters 34-37 establishes the benefit terms and can be amended only by the Tennessee General Assembly. Members of the Teacher Retirement Plan are eligible to retire with an unreduced benefit at age 65 with 5 years of service credit or pursuant to the rule of 90 in which the member's age and service credit total 90. Benefits are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. A reduced early retirement benefit is available at age 60 and vested or pursuant to the rule of 80. Members are vested with five years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria.

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City School Employees – Teacher Retirement Plan of TCRS (continued)

Benefits Provided (continued)

Member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. A member who leaves employment may withdraw their employee contributions, plus any accumulated interest. Under the Teacher Retirement Plan, benefit terms and conditions, including COLAs, can be adjusted on a prospective basis. Moreover, there are defined cost controls and unfunded liability controls that provide for the adjustment of benefit terms and conditions on an automatic basis.

Contributions

Contributions for teachers are established in the statutes governing the TCRS and may only be changed by the Tennessee General Assembly or by automatic cost controls set out in law. Teachers contribute 5 percent of salary. The LEAs make employer contributions at the rate set by the Board of Trustees as determined by an actuarial valuation. Per the statutory provisions governing the TCRS, the employer contribution rate cannot be less than 4 percent, except in years when the maximum funded level, as established by the TCRS Board of Trustees, is reached. By law, employer contributions for the Teacher Retirement Plan are required to be paid. The TCRS may intercept the state shared taxes of the sponsoring governmental entity of the LEA if the required employer contributions are not remitted. Employer contributions by the Schools for the year ended June 30, 2018, to the Teacher Retirement Plan were $81,209 which is 4 percent of covered payroll. The employer rate, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, the cost of administration, as well as an amortized portion of any unfunded liability.

City School Employees – Teacher Legacy Pension Plan of the TCRS

Plan Description

Teachers of the Schools with membership in the TCRS before July 1, 2014, are provided with pensions through the Teacher Legacy Pension Plan, a cost-sharing multiple-employer pension plan administered by the TCRS. The Teacher Legacy Pension Plan closed to new membership on June 30, 2014, but will continue providing benefits to existing members and retirees. Beginning July 1, 2014, the Teacher Retirement Plan became effective for teachers employed by LEAs after June 30, 2014. The Teacher Retirement Plan is a separate cost-sharing, multiple-employer defined benefit plan. The TCRS was created by state statute under TCA, Title 8, Chapters 34-37. The TCRS Board of Trustees is responsible for the proper operation and administration of all employer pension plans in the TCRS. The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS. The TCRS issues a publically available financial report that can be obtained at www.treasury.state.tn.us/tcrs/.

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City School Employees – Teacher Legacy Pension Plan of TCRS (continued)

Benefits Provided

TCA, Title 8, Chapters 34-37 establishes the benefit terms and can be amended only by the Tennessee General Assembly. Members of the Teacher Legacy Pension Plan are eligible to retire with an unreduced benefit at age 60 with 5 years of service credit or after 30 years of service credit regardless of age. Benefits are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. A reduced early benefit is available at age 55 and vested. Members are vested with five years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria.

Member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. A member who leaves employment may withdraw their employee contributions, plus any accumulated interest. Under the Teacher Legacy Pension Plan, benefit terms and conditions, including COLAs, can be adjusted on a prospective basis. Moreover, there are defined cost controls and unfunded liability controls that provide for the adjustment of benefit terms and conditions on an automatic basis.

Contributions

Contributions for teachers are established in the statutes governing the TCRS and may only be changed by the Tennessee General Assembly. Teachers contribute 5 percent of salary. The LEAs make employer contributions at the rate set by the Board of Trustees as determined by an actuarial valuation. By law, employer contributions for the Teacher Legacy Pension Plan are required to be paid. The TCRS may intercept the state shared taxes of the sponsoring governmental entity of the LEA if the required employer contributions are not remitted. Employer contributions by the Schools for the year ended June 30, 2018, to the Teacher Legacy Pension Plan were $2,318,331 which is 9.08 percent of covered payroll. The employer rate, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, the cost of administration, as well as an amortized portion of any unfunded liability.

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls

Plan Description

Employees of the Oak Ridge Board of Education Hybrid with Cost Controls are provided a defined benefit pension plan through the Public Employee Retirement Plan, an agent multiple-employer pension plan administered by the TCRS. The TCRS was created by state statute under TCA, Title 8, Chapters 34-37. The TCRS Board of Trustees is responsible for the proper operation and administration of the TCRS. The Tennessee Treasury Department, an agency in the legislative branch of state government, administers the plans of the TCRS. The TCRS issues a publically available financial report that can be obtained at www.treasury.state.tn.us/tcrs.

Benefits Provided

TCA, Title 8, Chapters 34-37 establishes the benefit terms and can be amended only by the Tennessee General Assembly. The chief legislative body may adopt the benefit terms permitted by statute. Members are eligible to retire with an unreduced benefit at age 65 with 5 years of service credit or pursuant to the rule of 90 in which the member's age and service credit total 90. Benefits are determined by a formula using the member's highest five consecutive year average compensation and the member's years of service credit. Reduced benefits for early retirement are available at age 60 and vested or pursuant to the rule of 80 in which the member's age and service credit total 80. Members vest with five years of service credit. Service related disability benefits are provided regardless of length of service. Five years of service is required for non-service related disability eligibility. The service related and non-service related disability benefits are determined in the same manner as a service retirement benefit but are reduced 10 percent and include projected service credits. A variety of death benefits are available under various eligibility criteria.

Member and beneficiary annuitants are entitled to automatic COLAs after retirement. A COLA is granted each July for annuitants retired prior to the 2nd of July of the previous year. The COLA is based on the change in the CPI during the prior calendar year, capped at 3 percent, and applied to the current benefit. No COLA is granted if the change in the CPI is less than one-half percent. A one percent COLA is granted if the CPI change is between one-half percent and one percent. A member who leaves employment may withdraw their employee contributions, plus any accumulated interest. Moreover, there are defined cost controls and unfunded liability controls that provide for the adjustment of benefit terms and conditions on an automatic basis.

Employees Covered by Benefit Terms

At the measurement date of June 30, 2017, the following employees were covered by benefit terms:

Inactive employees entitled to but not yet receiving benefits	4
Active employees	44
Total employees	48

4. GENERAL INFORMATION ABOUT THE PENSION PLANS (continued)

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls (continued)

Contributions

Contributions for employees are established in the statutes governing the TCRS and may only be changed by the Tennessee General Assembly or by automatic cost controls set out in law. Employees contribute 5 percent of salary. Oak Ridge Board of Education Hybrid with Cost Controls makes employer contributions at the rate set by the Board of Trustees as determined by an actuarial valuation. Per the statutory provisions governing the TCRS, the employer contribution rate cannot be less than 4 percent, except in years when the maximum funded level, as established by the TCRS Board of Trustees, is reached. By law, employer contributions are required to be paid. The TCRS may intercept Oak Ridge Board of Education Hybrid with Cost Controls' state shared taxes if required employer contributions are not remitted. Employer contributions by Oak Ridge Board of Education Hybrid with Cost Controls for the year ended June 30, 2018 to the Public Employee Retirement Plan were $61,156, based on a rate of 4 percent of covered payroll. The employer rate, when combined with member contributions, is expected to finance the costs of benefits earned by members during the year, the cost of administration, as well as an amortized portion of any unfunded liability.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS

For the year ended June 30, 2018, the City recognized a net pension asset, a net pension liability, deferred outflows of resources related to pensions, deferred inflows of resources related to pensions, and pension expense as follows:

Pension Plan	Net Pension Asset	Net Pension Liability	Deferred Outflows of Resources Related to Pensions	Deferred Inflows of Resources Related to Pensions	Pension Expense
Public Employee Retirement Plan of the TCRS	$ -	$11,430,754	$ 5,739,995	$ 423,137	$2,432,029
Public Employee Retirement Plan of the TCRS (Schools)	134,619	-	1,144,648	384,090	137,951
Teacher Retirement Plan of the TCRS	70,154	-	90,927	14,729	31,450
Teacher Legacy Pension Plan of the TCRS	232,072	-	4,898,457	4,912,039	103,805
Board of Education Hybrid with Cost Controls	33,541	-	95,415	2,341	(9,458)
Total	$470,386	$11,430,754	$11,969,442	$5,736,336	$2,695,777

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City Employees – Public Employee Retirement Plan of the TCRS

The City's net pension liability was measured as of June 30, 2017, and the total pension liability used to calculate net pension liability was determined by an actuarial valuation as of that date.

Actuarial Assumptions

The total pension liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5 percent
Salary increases	Graded salary ranges from 8.75 to 3.45 percent based on age, including inflation, averaging 4.00 percent
Investment rate of return	7.25 percent, net of pension plan investment expenses, including inflation
Cost-of-living adjustment	2.25 percent

Mortality rates were based on actual experience including an adjustment for some anticipated improvement.

The actuarial assumptions used in the June 30, 2017 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2012 through June 30, 2016. The demographic assumptions were adjusted to more closely reflect actual and expected future experience.

Changes of Assumptions

In 2017, the following assumptions were changed: decreased inflation rate from 3.00 percent to 2.50 percent; decreased the investment rate of return from 7.50 percent to 7.25 percent; decreased the COLA from 2.50 percent to 2.25 percent; decreased salary growth graded ranges from an average of 4.25 percent to an average of 4.00 percent; and modified mortality assumptions.

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2016 actuarial experience study. A blend of future capital market projections and historical market returns was used in a building-block method in which a best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) is developed for each major asset class. These best-estimates 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 of 2.5 percent.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City Employees – Public Employee Retirement Plan of the TCRS (continued)

Changes of Assumptions (continued)

The best-estimates of geometric real rates of return and the TCRS investment policy target asset allocation for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
U.S. equity	5.69%	31%
Developed market international equity	5.29%	14%
Emerging market international equity	6.36%	4%
Private equity and strategic lending	5.79%	20%
U.S. fixed income	2.01%	20%
Real estate	4.32%	10%
Short-term securities	0.00%	1%
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 7.25 percent based on a blending of the factors described above.

Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current rate and that contributions from the City will be made at the actuarially determined contribution rate pursuant to an actuarial valuation in accordance with the funding policy of the TCRS Board of Trustees and as required to be paid by state statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City Employees – Public Employee Retirement Plan of the TCRS (continued)

Changes in the Net Pension Liability

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (a) – (b)
Balance at June 30, 2016	$101,470,614	$89,075,356	$12,395,258
Changes for the year:			
Service cost	1,428,844	-	1,428,844
Interest	7,500,104	-	7,500,104
Differences between expected and actual experience	66,941	-	66,941
Contributions – employer	-	2,819,050	(2,819,050)
Net investment income	-	9,922,995	(9,922,995)
Benefit payments, including refunds of employee contributions	(5,796,141)	(5,796,141)	-
Administrative expenses	-	(30,795)	30,795
Net changes	5,950,605	6,915,109	(964,504)
Balance at June 30, 2017	$107,421,219	$95,990,465	$11,430,754

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

The following presents the net pension liability of the City calculated using the discount rate of 7.25 percent, as well as what the net pension liability would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
City's net pension liability	$24,626,372	$11,430,754	$379,374

Pension Expense

For the year ended June 30, 2018, the City recognized pension expense of $2,432,029.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City Employees – Public Employee Retirement Plan of the TCRS (continued)

Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, the City reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 465,754	$423,137
Net difference between projected and actual earnings on pension plan investments	30,312	-
Changes of assumptions	2,292,381	-
Contributions subsequent to the measurement date of June 30, 2017	2,951,548	-
Total	$5,739,995	$423,137

The amount shown above for "contributions subsequent to the measurement date of June 30, 2017," will be recognized as a reduction to the net pension liability in the following measurement period.

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:	
2019	$ 40,143
2020	1,436,881
2021	565,503
2022	(146,850)
2023	469,633

Payable to the Pension Plan

At June 30, 2018, there was no payable outstanding for contributions to the pension plan required for the year ended June 30, 2018.

City School Employees – Public Employee Retirement Plan of the TCRS

The School's net pension liability (asset) was measured as of June 30, 2017, and the total pension liability used to calculate net pension liability (asset) was determined by an actuarial valuation as of that date.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Public Employee Retirement Plan of the TCRS (continued)

Actuarial Assumptions

The total pension liability in the June 30, 2017, actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5 percent
Salary increases	Graded salary ranges from 8.75 to 3.45 percent based on age, including inflation, averaging 4.00 percent
Investment rate of return	7.25 percent, net of pension plan investment expenses, including inflation
Cost-of-living adjustment	2.25 percent

Mortality rates were based on actual experience including an adjustment for some anticipated improvement.

The actuarial assumptions used in the June 30, 2017 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2012 through June 30, 2016. The demographic assumptions were adjusted to more closely reflect actual and expected future experience.

Changes of Assumptions

In 2017, the following assumptions were changed: decreased inflation rate from 3.00 percent to 2.50 percent; decreased the investment rate of return from 7.50 percent to 7.25 percent; decreased the COLA from 2.50 percent to 2.25 percent; decreased salary growth graded ranges from an average of 4.25 percent to an average of 4.00 percent; and modified mortality assumptions.

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2016 actuarial experience study. A blend of future capital market projections and historical market returns was used in a building-block method in which a best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) is developed for each major asset class. These best-estimates 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 of 2.5 percent.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Public Employee Retirement Plan of the TCRS (continued)

Changes of Assumptions (continued)

The best-estimates of geometric real rates of return and the TCRS investment policy target asset allocation for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
U.S. equity	5.69%	31%
Developed market international equity	5.29%	14%
Emerging market international equity	6.36%	4%
Private equity and strategic lending	5.79%	20%
U.S. fixed income	2.01%	20%
Real estate	4.32%	10%
Short-term securities	0.00%	1%
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 7.25 percent based on a blending of the factors described above.

Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current rate and that contributions from the Schools will be made at the actuarially determined contribution rate pursuant to an actuarial valuation in accordance with the funding policy of the TCRS Board of Trustees and as required to be paid by state statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Public Employee Retirement Plan of the TCRS (continued)

Changes in the Net Pension Liability (Asset)

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) – (b)
Balance at June 30, 2016	$27,808,308	$27,470,749	$ 337,559
Changes for the year:			
Service cost	553,182	-	553,182
Interest	2,070,010	-	2,070,010
Differences between expected and actual experience	177,442	-	177,442
Changes of assumptions	685,078	-	685,078
Contributions – employer	-	597,818	(597,818)
Contributions – employees	-	297,422	(297,422)
Net investment income	-	3,076,562	(3,076,562)
Benefit payments, including refunds of employee contributions	(1,522,704)	(1,522,704)	-
Administrative expenses	-	(13,912)	13,912
Net changes	1,963,008	2,435,186	(472,178)
Balance at June 30, 2017	$29,771,316	$29,905,935	$ (134,619)

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

The following presents the net pension liability (asset) of the Schools calculated using the discount rate of 7.25 percent, as well as what the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Schools' net pension liability (asset)	$3,339,298	$(134,619)	$(3,052,070)

Pension Expense

For the year ended June 30, 2018, the Schools recognized pension expense of $137,951.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Public Employee Retirement Plan of the TCRS (continued)

Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, the Schools reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 118,295	$384,090
Net difference between projected and actual earnings on pension plan investments	3,686	-
Changes of assumptions	456,719	-
Contributions subsequent to the measurement date of June 30, 2017	565,948	-
Total	$1,144,648	$384,090

The amount shown above for "contributions subsequent to the measurement date of June 30, 2017," will be recognized as a reduction (increase) to net pension liability (asset) in the following measurement period.

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:	
2019	$(130,194)
2020	478,660
2021	54,203
2022	(208,059)

Payable to the Pension Plan

At June 30, 2018, the Schools reported a payable of $1,110 for the outstanding amount of contributions to the pension plan required for the year ended June 30, 2018.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Retirement Plan of the TCRS

Pension Liabilities (Assets)

At June 30, 2018, the Schools reported an asset of $70,154 for its proportionate share of the net pension asset. The net pension asset was measured as of June 30, 2017, and the total pension asset used to calculate the net pension asset was determined by an actuarial valuation as of that date. The Schools' proportion of the net pension asset was based on the Schools' share of contributions to the pension plan relative to the contributions of all participating LEAs. At the measurement date of June 30, 2017, the Schools' proportion was 0.265898 percent. The proportion measured as of June 30, 2016, was 0.214610 percent.

Pension Expense

For the year ended June 30, 2018, the Schools recognized pension expense of $31,450.

Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, the Schools reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 2,459	$ 5,276
Net difference between projected and actual earnings on pension plan investments	-	3,775
Changes of assumptions	6,163	-
Changes in proportion of net pension asset	1,096	5,678
Contributions subsequent to the measurement date of June 30, 2017	81,209	-
Total	$90,927	$14,729

The Schools' employer contributions of $81,209, reported as pension related deferred outflows of resources subsequent to the measurement date, will be recognized as an increase of net pension asset in the year ended June 30, 2019. 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:	
2019	$ (705)
2020	(705)
2021	(921)
2022	(1,892)
2023	(112)
Thereafter	(676)

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Retirement Plan of the TCRS (continued)

Actuarial Assumptions

The total pension liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5 percent
Salary increases	Graded salary ranges from 8.75 to 3.45 percent based on age, including inflation, averaging 4.00 percent
Investment rate of return	7.25 percent, net of pension plan investment expenses, including inflation
Cost-of-living adjustment	2.25 percent

Mortality rates were based on actual experience including an adjustment for some anticipated improvement.

The actuarial assumptions used in the June 30, 2016 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2012 through June 30, 2016. The demographic assumptions were adjusted to more closely reflect actual and expected future experience.

Changes of Assumptions

In 2017, the following assumptions were changed: decreased inflation rate from 3.00 percent to 2.50 percent; decreased the investment rate of return from 7.50 percent to 7.25 percent; decreased the COLA from 2.50 percent to 2.25 percent; and decreased salary growth graded ranges from an average of 4.25 percent to an average of 4.00 percent.

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2016 actuarial experience study. A blend of future capital market projections and historical market returns was used in a building-block method in which a best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) is developed for each major asset class. These best-estimates 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 of 2.5 percent.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Retirement Plan of the TCRS (continued)

Changes of Assumptions (continued)

The best-estimates of geometric real rates of return and the TCRS investment policy target asset allocation for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
U.S. equity	5.69%	31%
Developed market international equity	5.29%	14%
Emerging market international equity	6.36%	4%
Private equity and strategic lending	5.79%	20%
U.S. fixed income	2.01%	20%
Real estate	4.32%	10%
Short-term securities	0.00%	1%
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 7.25 percent based on a blending of the factors described above.

Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current rate and that contributions from all LEAs will be made at the actuarially determined contribution rate pursuant to an actuarial valuation in accordance with the funding policy of the TCRS Board of Trustees and as required to be paid by state statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

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

The following presents the Schools' proportionate share of the net pension liability (asset) calculated using the discount rate of 7.25 percent, as well as what the Schools' proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Schools' proportionate share of the net pension liability (asset)	$13,996	$(70,154)	$(131,878)

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Retirement Plan of the TCRS (continued)

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in a separately issued TCRS financial report.

Payable to the Pension Plan

At June 30, 2018, the Schools reported a payable of $5,945 for the outstanding amount of contributions to the pension plan required for the year ended June 30, 2018.

City School Employees – Teacher Legacy Pension Plan of the TCRS

Pension Liabilities (Assets)

At June 30, 2018, the Schools reported an asset of $232,072 for its proportionate share of the net pension asset. The net pension asset was measured as of June 30, 2017, and the total pension liability used to calculate the net pension asset was determined by an actuarial valuation as of that date. The Schools' proportion of the net pension asset was based on the Schools' share of contributions to the pension plan relative to the contributions of all participating LEAs. At the measurement date of June 30, 2017, the Schools' proportion was 0.709296 percent. The proportion measured as of June 30, 2016 was 0.714582 percent.

Pension Expense

For the year ended June 30, 2018, the Schools recognized pension expense of $103,805.

Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, the Schools reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$ 139,908	$4,791,147
Changes of assumptions	1,965,495	-
Net difference between projected and actual earnings on pension plan investments	35,228	-
Changes in proportion of net pension liability (asset)	439,495	120,892
Contributions subsequent to the measurement date of June 30, 2017	2,318,331	-
Total	$4,898,457	$4,912,039

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Legacy Pension Plan of the TCRS (continued)

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

The Schools' employer contributions of $2,318,331, reported as pension related deferred outflows of resources subsequent to the measurement date, will be recognized as an increase of net pension asset in the year ended June 30, 2019. 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:	
2019	$(1,559,455)
2020	814,661
2021	(496,953)
2022	(1,090,166)

Actuarial Assumptions

The total pension liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5 percent
Salary increases	Graded salary ranges from 8.75 to 3.45 percent based on age, including inflation, averaging 4.00 percent
Investment rate of return	7.25 percent, net of pension plan investment expenses, including inflation
Cost-of-living adjustment	2.25 percent

Mortality rates were based on actual experience including an adjustment for some anticipated improvement.

The actuarial assumptions used in the June 30, 2017 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2012 through June 30, 2016. The demographic assumptions were adjusted to more closely reflect actual and expected future experience.

Changes of Assumptions

In 2017, the following assumptions were changed: decreased inflation rate from 3.00 percent to 2.50 percent; decreased the investment rate of return from 7.50 percent to 7.25 percent; decreased the COLA from 2.50 percent to 2.25 percent; decreased salary growth graded ranges from an average of 4.25 percent to an average of 4.00 percent; and modified mortality assumptions.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Legacy Pension Plan of the TCRS (continued)

Changes of Assumptions (continued)

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2016 actuarial experience study. A blend of future capital market projections and historical market returns was used in a building-block method in which a best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) is developed for each major asset class. These best-estimates 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 of 2.5 percent.

The best-estimates of geometric real rates of return and the TCRS investment policy target asset allocation for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
U.S. equity	5.69%	31%
Developed market international equity	5.29%	14%
Emerging market international equity	6.36%	4%
Private equity and strategic lending	5.79%	20%
U.S. fixed income	2.01%	20%
Real estate	4.32%	10%
Short-term securities	0.00%	1%
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 7.25 percent based on a blending of the factors described above.

Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current rate and that contributions from all LEAs will be made at the actuarially determined contribution rate pursuant to an actuarial valuation in accordance with the funding policy of the TCRS Board of Trustees and as required to be paid by state statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Teacher Legacy Pension Plan of the TCRS (continued)

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

The following presents the Schools' proportionate share of the net pension liability (asset) calculated using the discount rate of 7.25 percent, as well as what the Schools' proportionate share of the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Schools' proportionate share of the net pension liability (asset)	$20,823,259	$(232,072)	$(17,635,686)

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in a separately issued TCRS financial report.

Payable to the Pension Plan

At June 30, 2018, the Schools reported a payable of $192,678 for the outstanding amount of contributions to the pension plan required at the year ended June 30, 2018.

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls

Oak Ridge Board of Education Hybrid with Cost Controls' net pension liability (asset) was measured as of June 30, 2017, and the total pension liability used to calculate the net pension liability (asset) was determined by an actuarial valuation as of that date.

Actuarial Assumptions

The total pension liability in the June 30, 2017 actuarial valuation was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	2.5 percent
Salary increases	Graded salary ranges from 8.75 to 3.45 percent based on age, including inflation, averaging 4.00 percent
Investment rate of return	7.25 percent, net of pension plan investment expenses, including inflation
Cost-of-living adjustment	2.25 percent

Mortality rates were based on actual experience including an adjustment for some anticipated improvement.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls (continued)

Actuarial Assumptions (continued)

The actuarial assumptions used in the June 30, 2016 actuarial valuation were based on the results of an actuarial experience study performed for the period July 1, 2012 through June 30, 2016. The demographic assumptions were adjusted to more closely reflect actual and expected future experience.

Changes of Assumptions

In 2017, the following assumptions were changed: decreased inflation rate from 3.00 percent to 2.50 percent; decreased the investment rate of return from 7.50 percent to 7.25 percent; decreased the COLA from 2.50 percent to 2.25 percent; and decreased salary growth graded ranges from an average of 4.25 percent to an average of 4.00 percent; and modified mortality assumptions.

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees in conjunction with the June 30, 2016 actuarial experience study. A blend of future capital market projections and historical market returns was used in a building-block method in which a best-estimate of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) is developed for each major asset class. These best-estimates 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 of 2.5 percent.

The best-estimates of geometric real rates of return and the TCRS investment policy target asset allocation for each major asset class are summarized in the following table:

Asset Class	Long-Term Expected Real Rate of Return	Target Allocation
U.S. equity	5.69%	31%
Developed market international equity	5.29%	14%
Emerging market international equity	6.36%	4%
Private equity and strategic lending	5.79%	20%
U.S. fixed income	2.01%	20%
Real estate	4.32%	10%
Short-term securities	0.00%	1%
		100%

The long-term expected rate of return on pension plan investments was established by the TCRS Board of Trustees as 7.25 percent based on a blending of the factors described above.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls (continued)

Discount Rate

The discount rate used to measure the total pension liability was 7.25 percent. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current rate and that contributions from Oak Ridge Board of Education Hybrid with Cost Controls will be made at the actuarially determined contribution rate pursuant to an actuarial valuation in accordance with the funding policy of the TCRS Board of Trustees and as required to be paid by state statute. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make projected future benefit payments of current active and inactive members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Changes in the Net Pension Liability (Asset)

	Increase (Decrease)		
	Total Pension Liability (a)	Plan Fiduciary Net Position (b)	Net Pension Liability (Asset) (a) – (b)
Balance at June 30, 2016	$24,587	$ 28,938	$ (4,351)
Changes for the year:			
Service cost	33,725	-	33,725
Interest	4,373	-	4,373
Differences between expected and actual experience	20,560	-	20,560
Changes of assumptions	2,798	-	2,798
Contributions – employer	-	37,547	(37,547)
Contributions – employees	-	46,935	(46,935)
Net investment income	-	7,928	(7,928)
Administrative expenses	-	(3,234)	3,234
Other changes	-	1,470	(1,470)
Net changes	61,456	90,646	(29,190)
Balance at June 30, 2017	$86,043	$119,584	$(33,541)

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls (continued)

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

The following presents the net pension liability (asset) of Oak Ridge Board of Education Hybrid with Cost Controls calculated using the discount rate of 7.25 percent, as well as what the net pension liability (asset) would be if it were calculated using a discount rate that is 1-percentage-point lower (6.25 percent) or 1-percentage-point higher (8.25 percent) than the current rate:

	1% Decrease (6.25%)	Current Discount Rate (7.25%)	1% Increase (8.25%)
Oak Ridge Board of Education Hybrid with Cost Controls' net pension liability (asset)	$(12,792)	$(33,541)	$(49,635)

Negative Pension Expense

For the year ended June 30, 2018, Oak Ridge Board of Education Hybrid with Cost Controls recognized negative pension expense of $9,458.

Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, Oak Ridge Board of Education Hybrid with Cost Controls reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Differences between expected and actual experience	$31,694	$ 680
Net difference between projected and actual earnings on pension plan investments	-	1,661
Changes of assumptions	2,565	-
Contributions subsequent to the measurement date of June 30, 2017	61,156	-
Total	$95,415	$2,341

The amount shown above for "contributions subsequent to the measurement date of June 30, 2017," will be recognized as a reduction (increase) to net pension liability (asset) in the following measurement period.

5. NET PENSION LIABILITY (ASSET), PENSION EXPENSE AND DEFERRED OUTFLOWS OF RESOURCES AND DEFERRED INFLOWS OF RESOURCES RELATED TO PENSIONS (continued)

City School Employees – Oak Ridge Board of Education Hybrid with Cost Controls (continued)

Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

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:	
2019	$2,887
2020	2,887
2021	2,878
2022	2,729
2023	3,260
Thereafter	17,277

Payable to the Pension Plan

At June 30, 2018, Oak Ridge Board of Education Hybrid with Cost Controls reported a payable of $516 for the outstanding amount of contributions to the pension plan required for the year ended June 30, 2018.

6. OTHER POSTEMPLOYMENT BENEFITS

Local Government OPEB Plan

Plan Description

Employees of the City who were hired prior to July 1, 2015, are provided with pre-65 retiree health insurance benefits through the closed Local Government OPEB Plan (LGOP) administered by the Tennessee Department of Finance and Administration. This plan is considered to be a multiple-employer defined benefit plan that is used to provide OPEB. However, for accounting purposes, this plan will be treated as a single-employer plan. All eligible pre-65 retired employees and disability participants of local governments, who choose coverage, participate in the LGOP. This plan is closed to the employees of all participating employers that were hired on or after July 1, 2015. It is the City's responsibility to assist ineligible retirees and their dependents with finding other coverage.

Benefits Provided

The City offers the LGOP to provide health insurance coverage to eligible pre-65 retirees and disabled participants of local governments. Insurance coverage is the only postemployment benefit provided to retirees. An insurance committee created in accordance with TCA 8-27-701 establishes and amends the benefit terms of the LGOP. All members have the option of choosing between the premier preferred provider organization (PPO), standard PPO, limited PPO or the wellness healthsavings consumer-driven health plan (CDHP) for healthcare benefits. Retired plan members, of the LGOP, receive the same plan benefits as active employees, at a blended premium rate that considers the cost of all participants. This creates an implicit subsidy for retirees. The LGOP is funded on a pay-as-you-go basis and there are no assets accumulating in a trust that meets the criteria of paragraph 4 of GASB Statement No. 75.

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Local Government OPEB Plan (continued)

Eligibility

The City will pay 50% of the medical insurance premium for eligible retired employees and their spouses for 7 years or until the employee/spouse becomes Medicare eligible, whichever is earlier. To be eligible, employees must have 30 years of service and must have been on the insurance plan for one full year prior to retirement or 20 years of service and age 55 and on the insurance plan one full year prior to retirement or 10 years of service and age 55 and on the insurance plan three full years prior to retirement. The City will pay 100% of a surviving spouse's medical premium for 6 months.

Employees Covered by Benefit Terms

At July 1, 2016, the following employees of the City were covered by the benefit terms of the LGOP:

Inactive employees currently receiving benefit payments	22
Inactive employees entitled to but not yet receiving benefit payments	-
Active employees	358
Total employees	380

Actuarial Assumptions

Calculations are based on the types of benefits provided under the terms of the substantive plan at the time of each valuation and on the pattern of sharing costs between employer and plan members to that point. Actuarial calculations reflect a long-term perspective. The amounts reported as of June 30, 2018 are based on an actuarial valuation performed as of July 1, 2016 and updated to June 30, 2018. In the July 1, 2016 actuarial valuation, the entry age normal actuarial cost method was used. The actuarial assumptions include an annual healthcare trend rate of 8.0%. The healthcare trend rate will decrease by 0.5% annually to an ultimate medical cost trend rate of 5.0% by 2022. Participant salary increases are expected to be 3.5% annually with annual payroll growth rate assumed to be 2.5%. Mortality rates are based on the RP-2000 Combined Fully Generational Mortality Table with projection scale AA.

Discount Rate

The discount rate used to measure the total OPEB liability was 3.87% as of June 30, 2018 and was based on the Bond Buyer's 20 Bond Index.

Changes in Total OPEB Liability

Total OPEB liability at June 30, 2017	$2,965,905
Changes for the year:	
Service cost	174,349
Interest	108,763
Changes in assumptions and other inputs	(70,834)
Benefit payments	(206,224)
Net changes	6,054
Total OPEB liability at June 30, 2018	$2,971,959

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Local Government OPEB Plan (continued)

Changes in Assumptions

The discount rate was changed from 3.58% as of June 30, 2017 to 3.87% as of June 30, 2018.

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the total OPEB liability related to the LGOP, as well as what the total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.87%) or 1-percentage-point higher (4.87%) than the current discount rate.

1% Decrease (2.87%)	Discount Rate (3.87%)	1% Increase (4.87%)
$3,222,360	$2,971,959	$2,739,380

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rate

The following presents the total OPEB liability related to the LGOP, as well as what the total OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower (6.5% decreasing to 4%) or 1-percentage-point higher (8.5% decreasing to 6%) than the current healthcare cost trend rate.

1% Decrease (6.5% decreasing to 4%)	Discount Rate (7.5% decreasing to 5%)	1% Increase (8.5% decreasing to 6%)
$2,593,966	$2,971,959	$3,426,598

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, the City recognized OPEB expense of $275,487. At June 30, 2018, the City reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	$ -	$63,209
Total	$ -	$63,209

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Local Government OPEB Plan (continued)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended June 30:	
2019	$7,625
2020	7,625
2021	7,625
2022	7,625
2023	7,625
Thereafter	25,084

Teacher Group OPEB Plan

Plan Description

Employees of the Schools who were hired prior to July 1, 2015 are provided with pre-65 retiree health insurance benefits through the closed Teacher Group OPEB Plan (TGOP) administered by the Tennessee Department of Finance and Administration. This plan is considered to be a multiple-employer defined benefit plan that is used to provide OPEB. However, for accounting purposes, this plan will be treated as a single-employer plan. All eligible pre-65 retired teachers, support staff and disability participants of local education agencies, who choose coverage, participate in the TGOP. This plan is closed to the employees of all participating employers that were hired on or after July 1, 2015.

Benefits Provided

The Schools offer the TGOP to provide health insurance coverage to eligible pre-65 retired teachers, support staff and disabled participants of local education agencies. Insurance coverage is the only postemployment benefit provided to retirees. An insurance committee created in accordance with TCA 8-27-301 establishes and amends the benefit terms of the TGOP. All members have the option of choosing between the partnership promise preferred provider organization (PPO), no partnership promise PPO, standard PPO, limited PPO or the wellness health savings consumer-driven health plan (CDHP) for healthcare benefits. Retired plan members of the TGOP receives the same plan benefits as active employees at a blended premium rate that considers the cost of all participants. This creates an implicit subsidy for retirees. Participating employers determine their own policy related to direct subsidies provided for the retiree premiums. The Schools pay 85% of the retirees' individual health insurance premium for five years or until the retirees reach age 65. The state, as a governmental nonemployer contributing entity, provides a direct subsidy for eligible retirees' premiums, based on years of service. Therefore, retirees with 30 or more years of service will receive 45%; 20 but less than 30 years, 35%; and less than 20 years, 20% of the scheduled premium. No subsidy is provided for enrollees of the health savings CDHP. The TGOP is funded on a pay-as-you-go basis and there are no assets accumulating in a trust.

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Teacher Group OPEB Plan (continued)

Employees Covered by Benefit Terms

At July 1, 2017, the following employees of the Schools were covered by the benefit terms of the TGOP:

Inactive employees currently receiving benefit payments	43
Inactive employees entitled to but not yet receiving benefit payments	-
Active employees	555
Total employees	598

An insurance committee, created in accordance with TCA 8-27-301, establishes the required payments to the TGOP by member employers and employees through the blended premiums established for active and retired employees. Claims liabilities of the plan are periodically computed using actuarial and statistical techniques to establish premium rates. Administrative costs are allocated to plan participants. Employers contribute towards employee costs based on their own developed policies. During the current reporting period, the Schools paid $365,315 to the TGOP for OPEB benefits as they came due.

Actuarial Assumptions

The collective total OPEB liability in the June 30, 2018 actuarial valuation was determined using the following actuarial assumptions and other inputs, applied to all periods included in the measurement, unless otherwise specified:

Inflation	2.25 percent
Salary increases	Graded salary ranges from 3.44 to 8.72 percent based on age, including inflation, averaging 4.00 percent.
Healthcare cost trend rates	7.5 percent for 2018, decreasing annually to an ultimate rate of 3.71 percent for 2050 and later years.
Retiree’s share of benefit-related costs	Members are required to make monthly contributions in order to maintain their coverage. For the purpose of this valuation, a weighted average has been used with weights derived from the current distribution of members among plans offered.

Unless noted otherwise, the actuarial demographic assumptions used in the June 30, 2017, valuations were the same as those employed in the July 1, 2017 Pension Actuarial Valuation of the TCRS. These assumptions were developed by TCRS based on the results of an actuarial experience study for the period July 1, 2012 through June 30, 2016. The demographic assumptions were adjusted to more closely reflect actual and expected future experience. Mortality tables are used to measure the probabilities of participants dying before and after retirement. The mortality rates employed in this valuation are taken from the RP-2014 Healthy Participant Mortality Table for Annuitants for non-disabled post-retirement mortality, with mortality improvement projected to all future years using Scale MP-2016. Post-retirement tables are Blue Collar and adjusted with a 2% load for males and a -3% load for females. Mortality rates for impaired lives are the same as those used by TCRS and are taken from a gender distinct table published in the IRS Ruling 96-7 for disabled lives with a 10% load.

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Teacher Group OPEB Plan (continued)

Discount Rate

The discount rate used to measure the total OPEB liability was 3.56%. This rate reflects the interest rate derived from yields on 20-year, tax-exempt general obligation municipal bonds, prevailing on the measurement date, with an average rating of AA/Aa as shown on the Fidelity 20-Year Municipal GO AA index.

Changes in Collective Total OPEB Liability

Total OPEB liability at June 30, 2016	$10,643,068
Changes for the year:	
Service cost	623,425
Interest	322,788
Changes in assumptions and other inputs	(490,174)
Benefit payments	(424,234)
Net changes	31,805
Total OPEB liability at June 30, 2018	$10,674,873
Nonemployer contributing entities proportionate share of the collective total OPEB liability	$ 2,977,617
Employer's proportionate share of the collective total OPEB liability	$ 7,697,256
Employer's proportion of the collective total OPEB liability	72.11%

The Schools have a special funding situation related to benefits paid by the State of Tennessee for its eligible retired employees participating in the TGOP. The Schools' proportionate share of the collective total OPEB liability was based on a projection of the employer's long-term share of benefit payments to the OPEB plan relative to the projected share of benefit payments of all participating employers and nonemployer contributing entities, actuarially determined. The proportion changed 0.03% from the prior measurement date. The Schools recognized $249,838 in revenue for subsidies provided by nonemployer contributing entities for benefits paid by the TGOP for School retirees.

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Teacher Group OPEB Plan (continued)

Sensitivity of the Proportionate Share of the Collective Total OPEB Liability to Changes in the Discount Rate

The following presents the proportionate share of the collective total OPEB liability related to the TGOP, as well as what the proportionate share of the collective total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower (2.56%) or 1-percentage-point higher (4.56%) than the current discount rate.

1% Decrease (2.56%)	Discount Rate (3.56%)	1% Increase (4.56%)
$8,253,840	$7,697,256	$7,166,404

Sensitivity of the Proportionate Share of the Collective Total OPEB Liability to Changes in the Healthcare Cost Trend Rate

The following presents the proportionate share of the collective total OPEB liability related to the LGOP, as well as what the proportionate share of the collective total OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1-percentage-point lower (6.5% decreasing to 2.71%) or 1-percentage-point higher (8.5% decreasing to 4.71%) than the current healthcare cost trend rate.

1% Decrease (6.5% decreasing to 2.71%)	Discount Rate (7.5% decreasing to 3.71%)	1% Increase (8.5% decreasing to 4.71%)
$6,843,113	$7,697,256	$8,698,334

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources

For the year ended June 30, 2018, the Schools recognized OPEB expense of $895,680. At June 30, 2018, the Schools reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources
Changes of assumptions	$ -	$317,009
Employer payments subsequent to the measurement date of June 30, 2017	365,315	-
Total	$365,315	$317,009

The amounts shown above for "employer payments subsequent to the measurement date" will be included as a reduction to total OPEB liability in the following measurement period.

6. OTHER POSTEMPLOYMENT BENEFITS (continued)

Teacher Group OPEB Plan (continued)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources (continued)

Amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended June 30:	
2019	$(36,436)
2020	(36,436)
2021	(36,436)
2022	(36,436)
2023	(36,436)
Thereafter	(134,829)

7. ON-BEHALF PAYMENTS

The State of Tennessee makes a contribution (on-behalf payment) for retired teachers who participate in the State-administered Teacher Group Insurance Plan through TCRS as described in Note 6. The on-behalf payment for 2018 was $119,897 and has been recorded as a revenue and expenditure in the General Purpose School Fund.

8. TERMINATION BENEFITS

Retired employees from the City, excluding employees working in the school system, may continue their individual or family hospitalization insurance coverage through the City. The City will pay 50% of the premium costs, up to 7 years after retirement or until the retiree reaches age 65. To receive this benefit at retirement, the employee must be age 55 with 10 years of service and at least three full years of insurance coverage immediately prior to retirement or age 55 with 20 years of service and one full year of insurance coverage. The election to continue insurance coverage must be made at the time of retirement from the City. During fiscal 2018, the City contributed $115,917 toward retiree's insurance premium costs with 20 retirees receiving the benefit at fiscal year-end. At fiscal year-end, there were 312 active members in the plan. The City funds its contribution of the retiree's insurance premiums on a pay-as-you-go basis.

The Schools provide voluntary termination benefits for professional employees who agree to retire before age 65. For employees who retire at age 60, or after 30 years of creditable service in the TCRS with at least 10 years of service with the Schools, the Schools pay 85% of the retirees' individual health insurance premiums for five years or until the retiree reaches age 65. The Schools fund their contributions on a pay-as-you-go basis. During 2018, the Schools paid approximately $73,082 to 53 retirees, which has been recorded as an expenditure in the General Purpose School Fund.

The estimated liability and expense of school employee termination benefits reported in the government-wide financial statements is $505,068. Termination benefits are measured at the discounted present value of expected future benefit payments. The Schools used a discount rate of 1.62% and a projected annual healthcare cost trend rate of 10% to estimate the effect of making these payments over a five-year period.

9. ACCOUNTS RECEIVABLE

Customers are billed for electric and waterworks services monthly on a cyclical basis. Unbilled revenue for utility services rendered but not yet billed as of the close of the fiscal year in the amount of $1,461,442 was recorded in the Electric Fund and $472,846 in Waterworks Fund at June 30, 2018.

Receivables at June 30, 2018, consist of the following:

Fund	Taxes	Customer Accounts	Interest & Penalties	Gross Receivables	Allowance for Uncollectibles	Net Receivables
General	$22,341,958	$ 475,742	$485,480	$23,303,180	$ (858,690)	$22,444,490
General Purpose School	-	628,699	-	628,699	-	628,699
Electric	-	8,201,132	-	8,201,132	(1,373,170)	6,827,962
Waterworks	-	2,764,069	-	2,764,069	-	2,764,069
Nonmajor	-	156,293	-	156,293	-	156,293
Total	$22,341,958	$12,225,935	$485,480	$35,053,373	$(2,231,860)	$32,821,513

10. DEPOSITS AND INVESTMENTS

The unrestricted cash of the City's various funds, excluding the School funds, are pooled for investment purposes as described in Note 11.

Deposits

At year-end, the carrying amount of the City’s deposits, excluding investments in the LGIP, was $11,589,487. Deposit policies authorize the City to maintain their operating and excess funds in bank accounts and certificates of deposit with banks or credit unions that have a branch located within the Oak Ridge city limits. Banks or credit unions shall be fully insured by the Federal Depository Insurance Corporation (FDIC) or the National Credit Union Administration (NCUA). In addition, accounts with balances in excess of FDIC or NCUA insurance levels must participate in the bank collateral pool administered by the Treasurer of the State of Tennessee.

At June 30, 2018, all deposits were fully insured or held in financial institutions that participate in the Tennessee Bank Collateral Pool administered by the Treasurer’s Office of the State of Tennessee. Banks may use one of three different security pledges (90%, 100% or 105%) depending on the specific bank holding the deposit. Financial institutions participating in the bank collateral pool determine the aggregate balance of their public funds and report that to the Treasurer’s Office. Participating financial institutions pledge the collateral securities required to protect their public fund accounts to the State Treasurer on behalf of the bank collateral pool. The securities pledged to protect these accounts are pledged in the aggregate rather than against each individual account. The members of the pool may be required by agreement to pay an assessment to cover any deficiency.

The Schools’ policy authorizes the investment of excess operating funds in various bank accounts, savings accounts or certificates of deposits with a local bank or credit union located within the City limits. Banks or credit unions shall be fully insured by the FDIC or NCUA. In addition, local banks shall participate in the bank collateral pool administered by the Treasurer of the State of Tennessee.

10. DEPOSITS AND INVESTMENTS (continued)

Investments

The City's investments at fiscal year-end were in the LGIP. The responsibility for conducting the LGIP's investment program resides with the State Treasurer and investments are made in instruments authorized by TCA, Section 9-4-602. The LGIP is a SEC 2a-7-like fund and the carrying value of the City's investment held by the LGIP at fiscal year-end of $53,794,230 is based on the LGIP share price and is classified as cash and cash equivalents. The shares in the LGIP are constant dollar. Therefore, the fair value of the position in the LGIP is the same as the value of the LGIP shares.

As of June 30, 2018, the City had the following investments and maturities:

		Investment Maturities	
	Fair Value	Less than 1 year	More than 1 year
State of Tennessee Local Government Investment Pool	$53,794,230	$53,794,230	$ -

Investment income in the Scholarship Fund for the year ended June 30, 2018, consisted of the following:

Interest and Dividends	$ 887

Investment Policies

The City and Oak Ridge Schools maintain similar investment policies with any variances between policies noted below. The City's investment policies are in accordance with state law which outlines authorized municipal government investments in TCA, Section 6-56-106. The investment policies exclude investment of bond proceeds held by trustees.

Interest Rate Risk: Investments are based upon prevailing market conditions at the time of the transaction with the intent to hold the instrument until maturity. If the yield of the portfolio can be improved upon by the sale of an investment prior to its maturity, with the reinvestment of the proceeds, then this provision is allowed. The City restricts investment length as outlined in TCA 6-56-106, which generally restricts maturity of not greater than four years from date of investment. The Schools manage its interest rate risk by limiting the weighted-average maturity of its investment portfolio to one year or less. No security at the time of purchase shall have a maturity exceeding one year. The Schools manage its interest rate risk by limiting the weighted-average maturity of its investment portfolio in the Scholarship Fund to ten years or less. No security, at the time of purchase in the Scholarship Fund, shall have maturity exceeding ten years.

Credit Risk: State statutes authorize the City and Schools to invest in obligations of the United States Treasury; Certificates of Deposit; the LGIP; bonds of any state or political subdivision rated A or higher by any nationally recognized rating service; and nonconvertible debt securities of the following government sponsored entities: Federal Home Loan Bank, Federal National Mortgage Association, Federal Home Loan Mortgage Corporation and Federal Farm Credit Bank.

10. DEPOSITS AND INVESTMENTS (continued)

Investment Policies (continued)

Custodial Credit Risk: All safekeeping receipts for investment instruments are to be held in accounts in the City's name. The School's investment policy requires that investment securities be registered in the name of the Oak Ridge Schools. All safekeeping receipts for investment instruments are held in accounts in the Schools' name and all securities are registered in the Schools' name.

Concentration of Credit Risk: The City, excluding the Schools, limits its investment concentration to 40% of the total portfolio in any one investment type, excluding US Treasury securities and the State Local Government Investment Pool (LGIP), which may be at 100%. The City also restricts investment purchases from any one financial institution to 60% or less of the City's total portfolio. The Schools may choose to maintain between 0% to 100%, or any portion thereon, of its investment portfolio in any approved investment type.

Component Unit – Education Foundation

At December 31, 2017, the Education Foundation had the following deposits and investments:

Bank Deposits:	
Bank Deposits and Certificates of Deposit	$ 154,898
Investments at Fair Value:	
Money Market Accounts	42,967
U.S. Treasury Bonds	1,211,871
Mutual Funds	3,586,034
Total Investments	4,840,872
Total	$4,995,770

Short-term investments held in money market accounts are reported as investments instead of cash equivalents because the Foundation holds those funds for restricted purposes.

Investment gains (losses) for 2018 consisted of the following:

Interest and dividends	$165,638
Realized gains on investments	96,157
Unrealized gains on investments	271,625
Net	$533,420

11. POOLED CASH AND INVESTMENTS

The City maintains a pooled cash and investment account that is available for use by all funds, except the School funds and those restricted by State statutes or other legal requirements. Each fund's positive equity in the pooled cash and investment account is presented as "Cash and Cash Equivalents" or "Investments" on the balance sheet as applicable. Negative equity balances have been reclassified and are reflected as due to/from other funds. Interest income and expense are allocated to the various funds based upon their average monthly equity balances.

12. RESTRICTED ASSETS

The $5,266,088 in restricted assets in the Debt Service Fund is from the portion of local sales tax collections that resulted from a .50% increase in the sales tax approved by Oak Ridge voters at referendum. The Capital Projects Fund has $5,585,131 in remaining bond proceeds from the December 2017 bond issuance. The City Equipment Replacement Rental Fund, an internal service fund, has $1,188,588 in remaining bond proceeds from the December 2017 bond issuance. The Electric Fund has $1,457,152 in remaining bond proceeds from the December 2017 bond issuance and deposits of $314,444 in a bond escrow account. The Waterworks Fund has $481,023 in remaining bond proceeds from the December 2016 bond issuance and $1,099,871 in remaining bond proceeds from the December 2017 bond issuance. The Emergency Communication District Fund has $217,362 in remaining bond proceeds from the December 2017 bond issuance. Restricted assets include $246,068, $26,800 and $126,770 in contractor retainage deposits for the Capital Projects Fund, Electric Fund and Waterworks Fund, respectively. A corresponding liability amount of $246,068, $26,800 and $126,770 is included in contracts payable on the balance sheet of the Capital Projects Fund, Electric Fund and Waterworks Fund, respectively.

The governmental and proprietary funds restricted assets at June 30, 2018, are as indicated below:

	Governmental-type Activities			Business-type Activities			
	Debt Service Fund	Capital Projects	Internal Service Funds	Electric Fund	Waterworks Fund	Emergency Communication District Fund	Total
Capital Projects Bond Proceeds	$ -	$5,585,131	$1,188,588	$1,457,152	$1,580,894	$217,362	$10,029,127
Bond Escrow				314,444	-		314,444
Retainage	-	246,068	-	26,800	126,770	-	399,638
Debt Service	5,266,088	-	-	-	-	-	5,266,088
Total	$5,266,088	$5,831,199	$1,188,588	$1,798,396	$1,707,664	$217,362	$16,009,297

13. CAPITAL ASSETS

Capital asset activity for the governmental activities for the year ended June 30, 2018, is as follows:

	Beginning Balances	Increases	Decreases and Reclassification	Ending Balances
Capital Assets Not Being Depreciated:				
Land	$ 3,151,115	$ 241,859	$(139,915)	$ 3,253,059
Construction in Progress	48,752	3,295,290	-	3,344,042
Total Capital Assets Not Being Depreciated	3,199,867	3,537,149	(139,915)	6,597,101
Capital Assets Being Depreciated:				
Infrastructure	53,373,675	771,881	-	54,145,556
Buildings	133,863,970	3,058,839	-	136,922,809
Improvements Other than Buildings	17,073,741	338,773	(295,679)	17,116,835
Machinery and Equipment	34,141,621	1,270,481	(675,499)	34,736,603
Total Capital Assets Being Depreciated	238,453,007	5,439,974	(971,178)	242,921,803
Less Accumulated Depreciation:				
Infrastructure	(25,639,142)	(1,082,912)	-	(26,722,054)
Buildings	(61,217,176)	(3,040,726)	-	(64,257,902)
Improvements Other than Buildings	(9,731,950)	(729,939)	295,679	(10,166,210)
Machinery and Equipment	(23,032,647)	(1,899,090)	675,499	(24,256,238)
Total Accumulated Depreciation	(119,620,915)	(6,752,667)	971,178	(125,402,404)
Total Capital Assets Being Depreciated, Net	118,832,092	(1,312,693)	-	117,519,399
Governmental Activities Capital Assets, Net	$122,031,959	$ 2,224,456	$(139,915)	$ 124,116,500

Depreciation was charged to functions of the primary government as follows:

General government	$ 94,675
Public safety	492,508
Public works	1,513,192
Community service	986,522
Education	3,665,770
Total depreciation expense	$6,752,667

13. CAPITAL ASSETS (continued)

Capital asset activity for the business-type activities for the year ended June 30, 2018, was as follows:

	Beginning Balances	Increases	Decreases	Ending Balances
Capital Assets Not Being Depreciated:				
Land	$ 900,643	$ -	$ -	$ 900,643
Construction in Progress	2,953,388	10,884,218	(11,235,857)	2,601,749
Total Capital Assets Not Being Depreciated	3,854,031	10,884,218	(11,235,857)	3,502,392
Capital Assets Being Depreciated:				
Electric Plant in Service				
Transmission	11,517,713	155,264	-	11,672,977
Distribution	77,916,995	5,006,857	(363,790)	82,560,062
Water Plant in Service	73,207,333	2,225,319	(51,762)	75,380,890
Wastewater Plant in Service	110,460,144	3,421,269	-	113,881,413
Equipment	10,755,693	3,419,537	(234,741)	13,940,489
Total Capital Assets Being Depreciated	283,857,878	14,228,246	(650,293)	297,435,831
Less Accumulated Depreciation:				
Electric Plant in Service				
Transmission	(5,464,201)	(336,618)	-	(5,800,819)
Distribution	(33,936,735)	(1,873,631)	601,765	(35,208,601)
Water Plant in Service	(33,999,206)	(2,382,946)	105,043	(36,277,109)
Wastewater Plant in Service	(39,781,606)	(2,756,102)	-	(42,537,708)
Equipment	(6,555,162)	(435,664)	229,239	(6,761,587)
Total Accumulated Depreciation	(119,736,910)	(7,784,961)	936,047	(126,585,824)
Total Capital Assets Being Depreciated, Net	164,120,968	6,443,285	285,754	170,850,007
Business-type Activities Capital Assets, Net	$ 167,974,999	$ 17,327,503	$(10,950,103)	$ 174,352,399

Depreciation was charged to business-type activities of the primary government as follows:

Electric	$ 2,361,511
Waterworks	5,344,534
Emergency Communications	78,916
Total depreciation expense	$ 7,784,961

14. LONG-TERM LIABILITIES

The following is a summary of changes in long-term liabilities for the governmental activities for the year ended June 30, 2018:

	Beginning Balances	Additions	Retirements/ Reductions	Ending Balances	Due Within One Year
General Fund:					
General Obligation Bonds	$40,660,000	$7,870,000	$(4,320,000)	$44,210,000	$4,690,000
Qualified Zone Academy Bonds	2,037,673	-	(509,418)	1,528,255	509,418
Notes Payable	33,911,705	2,508,196	(70,326)	36,349,575	124,495
Unamortized Debt Premium	1,294,728	745,500	(237,414)	1,802,814	257,454
Capital Lease Obligations	810,677	-	(398,923)	411,754	411,754
Compensated Absences	2,389,180	3,083,389	(2,983,419)	2,489,150	2,180,615
School Termination Benefits	570,623	7,528	(73,083)	505,068	86,598
City Equipment Replacement Rental Fund:					
General Obligation Bonds	300,000	1,065,000	-	1,365,000	385,000
Unamortized Bond Premium	956	129,045	(7,668)	122,333	12,747
Capital Lease Obligations	756,099	-	(73,216)	682,883	75,706
Compensated Absences	56,630	54,207	(44,925)	65,912	47,942
Total Long-Term Liabilities – Governmental Activities	$82,788,271	$15,462,865	$(8,718,392)	$89,532,744	$8,781,729

The following is a summary of changes in long-term liabilities for the business-type activities for the year ended June 30, 2018:

	Beginning Balances	Additions	Retirements/ Reductions	Ending Balances	Due Within One Year
Electric Fund:					
Bonds	$15,665,000	$ 7,520,000	$ (8,175,000)	$15,010,000	$1,220,000
Notes Payable	1,358,296	-	-	1,358,296	35,000
Unamortized Bond Premium	145,569	844,099	(120,492)	869,176	73,573
Compensated Absences	283,769	347,205	(390,755)	240,219	174,727
Waterworks Fund:					
General Obligation Bonds	38,600,000	980,000	(1,065,000)	38,515,000	1,120,000
Notes Payable	4,754,999	-	(620,674)	4,134,325	628,949
Interfund Note Payable	714,286	-	(238,096)	476,190	238,095
State Revolving Fund Loan	18,368,807	985,297	(846,852)	18,507,252	863,734
Unamortized Bond Premium	730,290	124,835	(53,925)	801,200	58,880
Compensated Absences	642,377	591,709	(691,087)	542,999	394,958
Emergency Communications Fund:					
Bonds	-	1,690,000	-	1,690,000	15,000
Unamortized Bond Premium	-	212,086	(11,782)	200,304	20,198
Total Long-Term Liabilities – Business-type Activities	$81,263,393	$13,295,231	$(12,213,663)	$82,344,961	$4,843,114

Compensated absences are generally liquidated by the General Fund, General Purpose School Fund, City Equipment Replacement Rental Fund, Electric Fund and Waterworks Fund. The School termination benefits are liquidated by the General Purpose School Fund. The State of Tennessee makes on-behalf payments for the other postemployment benefits (OPEB) obligation for the school teachers as described in Note 7.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Governmental Activities

General Obligation Bonds – Debt Service Fund

In February 2009, the City issued $27,285,000 in General Obligation Refunding Bonds Series 2009 of which $17,215,000 included a current refunding of outstanding general obligation debt. The bonds mature in 2022 with interest rates ranging from 3.0% to 5.0%. The principal balance of the bonds is $9,180,000 at June 30, 2018.

In November 2009, the City issued $20,000,000 in taxable general obligation Build America Bonds (BABS) for various city and school capital projects, including $9,300,000 for the completion of the Oak Ridge High School renovation. The federal government provides a 35% subsidy on the interest payment due on these bonds. The bonds mature in 2041 with interest rates ranging from 5.63% to 6.5%, before the 35% federal subsidy is applied. The City has no assurance that the United States Government will continue to make the direct subsidy payments or that the United States Congress will not attempt to reduce the amount of the direct subsidy payments. The City's interest subsidy payments have been reduced since June 2014. The subsidy reduction is expected to continue into fiscal 2019. The treasury rebate amortized in the table below is based on a 6.6% subsidy reduction. Interest subsidies received totaled $194,295 during the year ended June 30, 2018. The principal balance of the bonds is $9,300,000 at June 30, 2018.

In April 2010, the City issued $5,240,000 in General Obligation Refunding Bonds Series 2010 for a current refunding of outstanding general obligation debt. The bonds mature in 2021 with interest rates ranging from 3.0% to 4.0%. The principal balance of the bonds is $1,720,000 at June 30, 2018.

In December 2015, the City issued $9,140,000 in General Obligation Refunding Bonds Series 2015A for a current refunding of General Obligation Series B-9-A Bonds. The interest rate ranges from 2% to 5% with maturity in 2024. The principal balance of the bonds is $6,850,000 at June 30, 2018.

In December 2015, the City issued $9,445,000 in General Obligation Refunding Bonds Series 2015B for a refunding of General Obligation Series B-9-A Bonds and General Obligation Series B-11-A Bonds. The interest rate ranges from 2% to 3% with maturity in 2032. The principal balance of the bonds outstanding at June 30, 2018, was $9,290,000.

In November 2017, the City issued $19,125,000 in General Obligation Bonds Series 2017, including $7,870,000 in the Debt Service Fund for various city and school capital projects. These bonds were issued at a premium of $745,500. The underwriters discount was $62,960 with an additional $58,879 in other issuance costs. The interest rate ranges from 2.25% to 5% with maturity in 2033. The principal balance of the bonds outstanding at June 30, 2018 was $7,870,000.

In December 2018, the City issued $13,285,000 in General Obligation Bonds Series 2018 for the design and construction of a new Preschool and Senior Center, relocation and redevelopment of Scarboro Park and other public building improvements. These bonds were issued at a premium of $476,317. The underwriters discount was $109,398 with an additional $116,919 in other issuance costs. The interest rate ranges from 3.25% to 5% with maturity in 2043.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Governmental Activities (continued)

General Obligation Bonds – Debt Service Fund (continued)

Debt service requirements to maturity for general obligation bonds as of June 30, 2018, are as follows:

Fiscal Year Ending June 30,	Principal	Coupon Interest	BABS Treasury Rebate	Net Interest	Total Requirements
2019	4,690,000	1,790,281	(188,723)	1,601,558	6,291,558
2020	4,755,000	1,592,894	(188,723)	1,404,171	6,159,171
2021	4,990,000	1,366,119	(188,723)	1,177,396	6,167,396
2022	4,560,000	1,127,287	(188,723)	938,564	5,498,564
2023	3,655,000	1,002,837	(188,723)	814,114	4,469,114
2024-2028	10,965,000	3,717,549	(877,317)	2,840,232	13,805,232
2029-2033	4,095,000	2,429,500	(693,928)	1,735,572	5,830,572
2034-2038	-	2,068,750	(676,275)	1,392,475	1,392,475
2039-2041	6,500,000	771,250	(252,123)	519,127	7,019,127
Total	$44,210,000	$15,866,467	$(3,443,258)	$12,423,209	$56,633,209

Qualified Zone Academy Bonds (QZAB) – Debt Service Fund

The City issued $7,049,360 in Qualified Zone Academy Bonds (QZAB) in fiscal year 2005 and $1,032,500 in fiscal year 2006. QZAB's are a federal program, administered through state departments of education, which provide interest free loans to finance eligible school renovations. The Tennessee Department of Education and the State Comptroller's Office are administrators of the loan. The Foundation funds the School's required private contribution. Immediately upon issuance, the debt proceeds were deposited with the State to be drawn by the Schools as expenditures occur. A $509,418 annual loan payment is scheduled each year through December 2020. The actual payment required by the City will be adjusted by the State each year, reflecting an adjustment for interest earned on the bond escrow account.

Projected amortization schedule for QZAB are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total Requirements
2019	$ 509,418	$2,445	$ 511,863
2020	509,418	2,445	511,863
2021	509,419	2,445	511,864
Total	$1,528,255	$7,335	$1,535,590

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Governmental Activities (continued)

Notes Payable – Debt Service Fund

In fiscal year 1995, the City executed a loan agreement with the Tennessee Municipal Bond Fund (TMBF) for $1,247,994 to fund a grant to the Roane State Foundation for the purpose of purchasing land for a permanent Roane State Community College campus in Oak Ridge and storm drainage improvements. Principal payments occur through 2023. The loan has a principal balance of $334,091 at June 30, 2018. Annual interest payments are amortized below using a 2.46% interest rate, which was the actual weekly rate at June 30, 2018.

On April 16, 2008, the City executed a loan agreement with the TMBF for $11,000,000 of which $7,752,288 was used to fund costs for renovation and new construction of the ORHS project and other school capital projects. At June 30, 2018, the outstanding principal balance of the loan is $7,632,288. Principal payments began in 2014 with maturity in 2027. Annual interest payments are amortized below using a 2.40% interest rate, which was the actual weekly rate at June 30, 2018.

In fiscal year 2009, the City issued Series VI-M-1 bonds for $4,735,000. The bonds were used in a current refunding of the 2006 Series VI-H-1 bonds. The bonds retain the interest rate swap agreements that were associated with the loan agreements that were refinanced. See Note 15. Principal payments begin in 2026 with maturity in 2029. Annual interest payments are amortized below using a 3.95% interest rate, which was the actual weekly rate at June 30, 2018.

In fiscal year 2009, the City issued Series VII-E-1 bonds for $21,140,000. The bonds were used to refinance a $10,000,000 loan agreement with the Public Building Authority of Sevier County as part of the TN-Loans program originally issued on December 1, 2004. The bonds were also used to refinance an $11,000,000 portion of the $15,675,000 loan agreement with the Public Building Authority of Sevier County as part of the TN-Loans program originally issued on November 22, 2006. The bonds retain the interest rate swap agreements that were associated with the loan agreements that were refinanced. See Note 15. Principal payments begin in 2029 with maturity in 2036. Annual interest payments are amortized below using a 4.00% interest rate, which was the actual weekly rate at June 30, 2017.

In October 2017, the City issued a $3,000,000 Energy Efficient Schools Capital Outlay Note to make energy efficient improvements to various school buildings. The interest rate on this loan is 1.00%. Funds of $2,508,196 have been drawn on this loan at June 30, 2018.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Governmental Activities (continued)

Notes Payable – Debt Service Fund (continued)

Projected debt service requirements to maturity for notes payable are as outlined below. The interest rate varies on a weekly basis and is paid monthly for the TMBF loans. Annual interest payments on variable interest rate loans are amortized using the actual weekly rate at June 30, 2018.

Fiscal Year Ending June 30,	Principal	Interest	Total Requirements
2019	$ 124,495	$ 1,293,354	$ 1,417,849
2020	353,724	1,308,796	1,662,520
2021	321,349	1,303,085	1,624,434
2022	764,398	1,297,239	2,061,637
2023	1,304,246	1,280,582	2,584,828
2024-2028	11,624,713	5,728,944	17,353,657
2029-2033	14,681,650	3,660,694	18,342,344
2034-2036	7,175,000	615,206	7,790,206
Total	$36,349,575	$16,487,900	$52,837,475

City Equipment Replacement Fund

In November 2009, the City issued $20,000,000 in taxable general obligation Build America Bonds (BABS) for various City capital projects. The debt amortized below includes $700,000 of the $20,000,000 BABS obligation used to purchase computer hardware. The federal government provides a 35% subsidy on the interest payment due on these bonds. The bonds mature in 2019 with interest rates ranging from 2.875% to 4.63%, before the 35% federal subsidy is applied. The City has no assurance that the United States Government will continue to make the direct subsidy payments or that the United States Congress will not attempt to reduce the amount of the direct subsidy payments. The City's interest subsidy payments have been reduced since 2014. The subsidy reduction is expected to continue into fiscal year 2019. The treasury rebate amortized in the table below is based on a 6.6% subsidy reduction. Interest subsidies received totaled $4,670 during the year ended June 30, 2018. The principal balance of the bonds is $300,000 at June 30, 2018.

In November 2017, the City issued $19,125,000 in General Obligation Bonds Series 2017, including $1,065,000 for the City Equipment Replacement Fund. These bonds were issued at a premium of $129,045. The underwriters discount was $8,520 with an additional $7,968 in other issuance costs. The interest rate ranges from 2.25% to 5% with maturity in 2028. The principal balance of the bonds outstanding at June 30, 2018 is $1,065,000.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Governmental Activities (continued)

City Equipment Replacement Fund (continued)

Debt service requirements to maturity for Equipment Replacement Rental Fund general obligation debt as of June 30, 2018, are as follows:

Fiscal Year Ending June 30,	Principal	Coupon Interest	BABS Treasury Rebate	Net Interest	Total Requirements
2019	$ 385,000	$ 59,987	$(4,536)	$ 55,451	$ 440,451
2020	90,000	41,862	-	41,862	131,862
2021	95,000	37,362	-	37,362	132,362
2022	100,000	32,612	-	32,612	132,612
2023	100,000	27,612	-	27,612	127,612
2024-2028	595,000	61,398	-	61,398	656,398
Total	$1,365,000	$260,833	$(4,536)	$256,297	$1,621,297

Capital Leases Obligations

On August 24, 2015, the Schools entered into a $1,511,253 capitalized lease purchase agreement with California First National Bank for the purchase of technology equipment. Of the technology equipment included in the lease purchase agreement, all $1,511,253 was capitalized. Terms of the lease require an initial payment of $313,000 and three annual payments of $425,000 at 3.217% interest through August 10, 2018. The principal balance is $411,754 at June 30, 2018.

In fiscal year 2014, the City entered into a $964,291 lease purchase for two fire pumper trucks which were delivered to the City in August 2014. Terms of the lease call for annual lease payments of $98,937 from November 2014 to November 2025. Interest is at 3.35%. The gross amount of assets recorded under the capital lease is $971,596 with $259,092 recorded in accumulated amortization at June 30, 2018. The City recorded $64,773 in depreciation expense on this capital lease in 2018. The principal balance is $682,883 at June 30, 2018.

Principal and interest requirements for governmental capital lease obligations for the fiscal year ended June 30, 2018 are as follows:

Year Ending June 30,	
2019	$ 548,937
2020	98,938
2021	98,938
2022	98,937
2023	98,937
2024-2026	296,811
Total Future Minimum Lease Payments	1,241,498
Less:	
Amount Representing Interest	146,861
Current Portion of Capital Leases	487,460
Long-Term Capitalized Lease Obligation	$607,177

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities

General Obligation Bonds – Electric Fund

In February 2009, the City issued $27,285,000 in General Obligation Refunding Bonds Series 2009 of which $10,070,000 included a current refunding of outstanding Electric Fund variable interest rate revenue debt. The bonds are to be repaid from Electric Fund revenues and accordingly, have been recorded as a long-term liability of the Electric Fund. Debt service payments for 2020 through 2025 were refunded in fiscal year 2018 by the General Obligation Refunding Bonds Series 2017. Remaining principal payments occur from 2018 through 2019. Interest rates on the remaining bonds range from 4% to 5%. The principal balance of the bonds is $1,055,000 at June 30, 2018.

In November 2009, the City issued $20,000,000 in taxable general obligation BABS for various city capital projects. The City used $5,000,000 of the bond proceeds for Electric Fund capital projects. The annual debt service requirement on this portion of the BABS is to be repaid from Electric Fund revenues and accordingly, have been recorded as a long-term liability of the Electric Fund. The federal government provides a 35% subsidy on the interest payment due on these bonds. Principal payments occur from 2028 to 2038 with interest rates ranging from 6% to 6.15%, before the 35% federal subsidy is applied. The City has no assurance that the United States Government will continue to make the direct subsidy payments or that the United States Congress will not attempt to reduce the amount of the direct subsidy payments. The City's interest subsidy payments have been reduced since 2014. The subsidy reduction is expected to continue into fiscal year 2019. The treasury rebate amortized in the table below is based on a 6.6% subsidy reduction. Interest subsidies received totaled $101,899 during the year ended June 30, 2018. The principal balance of the bonds relating to the Electric Fund is $5,000,000 at June 30, 2018.

In December 2016, the City issued $9,665,000 in General Obligation Refunding Bonds Series 2016. The City used $1,750,000 of the proceeds for the Electric Fund for a current refunding of $1,792,771 from TMBF 2006 Variable loans. The bonds are to be repaid from Electric Fund revenues and accordingly, have been recorded as a long-term liability of the Electric Fund. The interest rate ranges from 2.5% to 3% with maturity in 2026. The principal balance of the bonds relating to the Electric Fund is $1,435,000 at June 30, 2018.

In November 2017, the City issued $19,125,000 in General Obligation Refunding Bonds Series 2017. The City used $6,220,000 of the proceeds for the Electric Fund with $628,888 in City contributions for an advance refunding of $6,970,000 for the outstanding 2020 to 2025 maturities of the General Obligation Refunding Bonds Series 2009. The bonds are to be repaid from Electric Fund revenues and accordingly, have been recorded as a long-term liability of the Electric Fund. From the advance refunding, $7,431,400 was deposited with an escrow agent to be applied to interest payments through June 2019 and principal payment in June 2019 for the remaining outstanding principal balance. As of June 30, 2018, $6,970,000 of bonds outstanding are considered defeased. These bonds were issued at a premium of $680,344. The underwriters discount was $49,760 with an additional $48,071 in other issuance costs. The interest rate ranges from 2.25% to 5% with maturity in 2030. The goal of the refunding is to extend the term of the debt through 2030 to provide additional funding capacity for planned capital projects. The transaction resulted in an economic gain of $348,660 and a reduction of $87,349 in future debt service payments. The principal balance of the refunding bonds relating to the Electric Fund is $6,220,000 at June 30, 2018.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities (continued)

General Obligation Bonds – Electric Fund (continued)

The City also used $1,300,000 of the proceeds from the General Obligation Bonds Series 2017 for Electric Fund capital projects. The bonds are to be repaid from Electric Fund revenues and accordingly, have been recorded as a long-term liability of the Electric Fund. This portion of the bonds was issued at a premium of $163,754. The underwriters discount was $10,400 with an additional $9,726 in other issuance costs. The interest rate ranges from 2.25% to 5% with maturity in 2028. The principal balance of the bonds relating to the Electric Fund is $1,300,000 at June 30, 2018.

Debt service requirements to maturity for bonds funded by the Electric Fund for the fiscal year ended June 30, 2018, are as follows:

Fiscal Year Ending June 30,	Principal	Coupon Interest	BABS Treasury Rebate	Net Interest	Total Requirements
2019	$ 1,220,000	$ 690,612	$ (98,977)	$ 591,635	$1,811,635
2020	865,000	643,462	(98,977)	544,485	1,409,485
2021	860,000	603,612	(98,977)	504,635	1,364,635
2022	940,000	564,112	(98,977)	465,135	1,405,135
2023	985,000	521,612	(98,977)	422,635	1,407,635
2024-2028	4,315,000	2,077,923	(494,885)	1,583,038	5,898,038
2029-2033	3,525,000	1,166,775	(362,492)	804,283	4,329,283
2034-2038	2,300,000	428,287	(140,008)	288,279	2,588,279
Total	$15,010,000	$6,696,395	$(1,492,270)	$5,204,125	$20,214,125

Notes Payable – Electric Fund

In April 2008, the City executed an $11,000,000 loan agreement through the TMBF for school, electric and waterworks improvements. The outstanding principal balance of the Electric Fund loan liability was $1,358,296 at June 30, 2018. Principal payments occur through 2027. Annual interest payments are amortized below using a 2.40% interest rate, which was the actual weekly rate at June 30, 2018.

Projected debt service requirements to maturity as of June 30, 2018 are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total Requirements
2019	$ 35,000	$ 32,580	$ 67,580
2020	-	31,808	31,808
2021	40,000	31,729	71,729
2022	-	30,847	30,847
2023	-	30,847	30,847
2024-2027	1,283,296	76,743	1,360,039
Total	$1,358,296	$234,554	$1,592,850

Annual principal and interest payments on notes payable and general obligation bonds for the Electric Fund of $2,073,886 in 2018 were 33% of the net revenue available for debt service of $6,290,111.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities (continued)

General Obligation Bonds – Waterworks Fund

In November 2009, the City issued $20,000,000 in taxable general BABS for various city capital projects. The City used $5,000,000 of the bond proceeds for Waterworks Fund capital projects to be repaid from Waterworks Fund revenues. The federal government provides a 35% subsidy on the interest payment due on these bonds. Principal payments will occur from 2023 to 2030 with interest rates ranging from 5% to 6%, before the 35% federal subsidy is applied. The City has no assurance that the United States Government will continue to make the direct subsidy payments or that the United States Congress will not attempt to reduce the amount of the direct subsidy payments. The City's interest subsidy payments have been reduced since 2014. The subsidy reduction is expected to continue into fiscal year 2019. The treasury rebate amortized in the table below is based on a 6.6% subsidy reduction. Interest subsidies received totaled $98,315 during the year ended June 30, 2018. The principal balance of the bonds relating to the Waterworks Fund is $5,000,000 at June 30, 2018.

On September 29, 2011, the City issued $9,810,000 in General Obligation Bonds Series 2011B for capital improvements to the City's water and wastewater system. The annual debt service payments are to be funded through the applicable water and wastewater rates. Interest rates range from 2% to 3% with the bonds maturing in 2028. The principal balance of the bonds outstanding at June 30, 2018, is $9,010,000.

On August 15, 2013, the City issued $23,205,000 in General Obligation Bonds, Series 2013 which refunded the outstanding Series 2003 General Obligation Bonds and the 1997, 1998 and 2002 State Revolving Fund (SRF) Loans. The Series 2013 Bonds refunded $19,881,973 in outstanding debt, including $15,112,030 in SRF wastewater loans and provided an approximate $3,000,000 in additional funding for sewer projects and $600,000 for water projects. The annual debt service payments are to be funded through the applicable water and wastewater rates. Interest rates range from 2% to 4.375% with the bonds maturing in 2034. The principal balance of the bonds outstanding at June 30, 2018 is $16,780,000.

In December 2016, the City issued $9,665,000 in General Obligation Refunding Bonds Series 2016. The City used $7,915,000 of the proceeds for the Waterworks Fund for a current refunding of the TMBF 2006 and TMBF 2012 The interest rate ranges from 2.5% to 3% with maturity in 2033. The principal balance of the bonds relating to the Waterworks Fund is $6,745,000 at June 30, 2018.

In November 2017, the City issued $19,125,000 in General Obligation Bonds Series 2017, including $980,000 for the Waterworks Fund. These bonds were issued at a premium of $124,835. The underwriters discount was $7,840 with an additional $7,332 in other issuance costs. The interest rate ranges from 2.25% to 5% with maturity in 2028. The principal balance of the bonds outstanding at June 30, 2018 is $980,000.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities (continued)

General Obligation Bonds – Waterworks Fund (continued)

Debt service requirements to maturity for bonds funded by the Waterworks Fund for the fiscal year ended June 30, 2018, are as follows:

Fiscal Year Ending June 30,	Principal	Coupon Interest	BABS Treasury Rebate	Net Interest	Total Requirements
2019	$ 1,120,000	$ 1,426,662	$ (95,496)	$ 1,331,166	$ 2,451,166
2020	1,630,000	1,395,313	(95,496)	1,299,817	2,929,817
2021	2,010,000	1,346,862	(95,496)	1,251,366	3,261,366
2022	2,120,000	1,286,913	(95,496)	1,191,417	3,311,417
2023	2,340,000	1,216,275	(95,496)	1,120,779	3,460,779
2024-2028	14,630,000	4,794,140	(374,505)	4,419,635	19,049,635
2029-2033	12,860,000	1,961,249	(54,917)	1,906,332	14,766,332
2034	1,805,000	78,968	-	78,968	1,883,968
Total	$38,515,000	$13,506,382	$(906,902)	$12,599,480	$51,114,480

Notes Payable – Waterworks Fund

The City executed a loan agreement for $6,152,006 during fiscal 1995 with the TMBF to fund water and wastewater system rehabilitation and expansion. The 2003 to 2016 maturities of the loan were paid from the proceeds of the General Obligation Refunding Bonds Series 2003. The remaining portion of the loan matures in 2023. The outstanding principal balance at June 30, 2018, is $1,646,909. Annual interest payments are amortized below using a 2.46% interest rate which was the actual weekly rate at June 30, 2018.

The City executed a loan agreement for $3,000,000 during fiscal 2001 with the TMBF to fund water and wastewater system rehabilitation and expansion. The loan matures in 2022. The outstanding principal balance at June 30, 2018, is $853,000. Annual interest payments are amortized below using a 2.36% interest rate, which was the actual weekly rate at June 30, 2018.

In April 2008, the City executed an $11,000,000 loan agreement through the TMBF for school, electric and waterworks improvements. The outstanding principal balance of the Waterworks Fund portion of the loan was $1,634,416 at June 30, 2018. Principal payments occur through 2027. Annual interest payments are amortized below using a 2.40% interest rate, which was the actual weekly rate at June 30, 2018.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities (continued)

Notes Payable – Waterworks Fund (continued)

During fiscal 2011, the General Fund loaned the Waterworks Fund $5,000,000 for bridge financing of waterworks capital improvements. Under Tennessee State Law, loans between City funds are required to be in the form of capital outlay notes in accordance with the requirements of TCA, Title 9, Chapter 21, Part 6. On July 11, 2011, City Council retroactively authorized the issuance of $5,000,000 in capital outlay notes as of November 1, 2010, and on August 8, 2011 the City received notification of the retroactive approval of the capital outlay notes by the Comptroller's Office. The notes were originally issued for a three-year term. In June 2013, City Council approved an extension of the loan with the expectation that the loan will mature in November 2019. The Comptroller has approved two three-year extensions of the loan through November 2019. The loan has a 1% interest rate. The capital outlay notes were recorded as an advance to other funds in the City's General Fund and as a liability for notes payable in the Waterworks Fund. The capital outlay notes had an outstanding balance of $476,190 at June 30, 2018.

Projected debt service requirements to maturity as of June 30, 2018, for the TMBF loans and capital outlay notes are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total Requirements
2019	$ 867,044	$102,299	$ 969,343
2020	902,983	84,595	987,578
2021	702,655	67,203	769,858
2022	683,417	50,193	733,610
2023	160,000	34,644	194,644
2024-2027	1,294,416	77,431	1,371,847
Total	$4,610,515	$416,365	$5,026,880

Tennessee State Revolving Fund Loan (SRF) – Waterworks Fund

In June 2013, the State approved an $18,000,000 loan through the SRF to fund wastewater projects mandated to meet terms of an Administrative Order (AO) from the United States Environmental Protection Agency (EPA). The State approved issuance of a $14,000,000 SRF loan and a $4,000,000 SRF loan that contains a 10% principal forgiveness. These are draw loans whereby funding draws occur after expenditures for projects are made by the City. The outstanding principal balance of these loans is $11,658,352 and $3,389,021, respectively, at June 30, 2018. The interest rate, including fees, is 1.23%. Principal payments occur through 2037. Debt service payments will be funded by Waterworks Fund revenues from residential and commercial wastewater fees. The City pledged its State-shared tax revenues (state sales, gasoline, beer, TVA replacement, mixed drinks, alcoholic beverages and income tax) as collateral for the loans. It is not anticipated that revenues from these sources will be required to fund the debt service on these loans.

In June 2014, the State approved a $3,000,000 loan through the SRF to complete the capital projects required to meet the EPA AO. The interest rate on this loan is 1.81%. The outstanding principal balance of this loan was $2,474,582 at June 30, 2018. Principal payments occur through 2037.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities (continued)

Tennessee State Revolving Fund Loan (SRF) – Waterworks Fund (continued)

In June 2017, the State approved a $2,000,000 loan through the SRF to perform lining and replacement of sewer lines, manhole rehabilitation and replacement of manhole frames and covers. The loan contains a 7% principal forgiveness. The interest rate on this loan is 1.97%. Funds of $985,297 have been drawn on this loan at June 30, 2018. Principal payments will begin once the project is substantially complete.

In August 2017, the State approved a $3,100,000 loan through the SRF to perform improvements on the Turtle Park Wastewater Pumping Station. The interest rate on this loan is 1.77%. No funds were drawn from this loan at June 30, 2018. Principal payments will begin once the project is substantially complete.

Debt service requirements to maturity for outstanding SRF loans for the fiscal year ended June 30, 2018, are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total Requirements
2019	$ 863,734	$ 244,156	$ 1,107,890
2020	894,626	232,501	1,127,127
2021	907,001	220,536	1,127,537
2022	919,621	208,370	1,127,991
2023	932,482	196,049	1,128,531
2024-2028	4,864,594	788,586	5,653,180
2029-2033	5,228,494	450,348	5,678,842
2034-2038	3,834,728	102,976	3,937,704
2039	61,972	512	62,484
Total	$18,507,252	$2,444,034	$20,951,286

Annual principal and interest payments on notes payable and general obligation bonds for the Waterworks Fund of $4,377,584 in 2018 were 40% of the net revenue available for debt service of $10,868,543.

General Obligation Bonds – Emergency Communications District Fund

In November 2017, the City issued $19,125,000 in General Obligation Refunding Bonds Series 2017. $1,690,000 of the proceeds have been used by the Emergency Communications District Fund for replacement and upgrade of the City's radio system to be used primarily by the City's police and fire departments. This portion of the bonds were issued at a premium of $212,086. The underwriters discount was $13,520 with an additional $12,644 in other issuance costs. The interest rate ranges from 2.25% to 5% with maturity in 2028.

14. LONG-TERM LIABILITIES (continued)

Long-Term Debt – Business-type Activities (continued)

General Obligation Bonds – Emergency Communications District Fund (continued)

Debt service requirements to maturity for bonds funded by the Emergency Communications District Fund for the fiscal year ended June 30, 2018, are as follows:

Fiscal Year Ending June 30,	Principal	Interest	Total Requirements
2019	$ 15,000	$ 72,238	$ 87,238
2020	155,000	71,488	226,488
2021	160,000	63,738	223,738
2022	170,000	55,738	225,738
2023	175,000	47,238	222,238
2024-2028	1,015,000	104,952	1,119,952
Total	$1,690,000	$415,392	$2,105,392

Long-Term Debt – Component Units

Oak Ridge Land Bank

The Oak Ridge Land Bank has a $45,000 line of credit with a financial institution with $25,965 outstanding at June 30, 2018. Interest on any unpaid principal balance is 2.12%. The line of credit expires on May 22, 2019, and is secured by $45,000 in cash deposits.

The Oak Ridge Land Bank has received assistance through the Blight Elimination Program from the Tennessee Housing Development Agency (THDA). This program provides for assistance with the removal of blighted properties. The funding is provided through a loan amount for 3 years with the balance forgiven ratably over the 3 years. The Oak Ridge Land Bank has $88,512 in outstanding loans to the THDA as of June 30, 2018.

15. INTEREST RATE SWAPS

As of June 30, 2018, the City had the following derivative instruments outstanding:

Instrument	Type	Objective	Original Notional Amount	Maturity Date	Term
Series VI-D-3 – Refunded to Series VII-E-1	Pay-fixed Interest Rate Swap	Variable to Synthetic Fixed Rate	$10,000,000	6/1/2033	Pay 3.725% receive 63.5% of five year LIBOR
Series VI-H-1 – Refunded to Series VII-E-1 and Series VI-M-1	Pay-fixed Interest Rate Swap	Variable to Synthetic Fixed Rate	$15,675,000	6/1/2036	Pay 3.536% receive 63.0% of five year LIBOR

15. INTEREST RATE SWAPS (continued)

The fair value balance and notional amounts of derivative instruments outstanding at June 30, 2018, classified by type and the changes in fair value of such derivative instruments for the year then ended are as follows:

	Changes in Fair Value		Fair Value		
Type	Classification	Amount	Classification	Amount	Notional Amount
Investment Derivative:					
Series VI-D-3 – Refunded to Series VII-E-1	Investment Earnings	$402,161	Debt	$(2,093,671)	$10,000,000
Series VI-H-1 – Refunded to Series VII-E-1 and Series VI-M-1	Investment Earnings	593,284	Debt	(2,778,234)	$15,675,000
		$995,445		$(4,871,905)	

Swap - Local Government Improvement Bonds, Series VII-E-1 Bonds

On December 1, 2004, the City entered into a $10,000,000 loan agreement with the Public Building Authority of Sevier County as part of the TN-LOANs program to fund a portion of the costs for renovation and new construction of the Oak Ridge High School Project. Principal payments are to occur on the loan from 2031 to 2033. Under its loan agreement, the Public Building Authority of Sevier County, TN (the "Authority"), at the request of the City, has entered into an interest rate swap agreement for all of the outstanding Local Government Improvement Bonds, Series VI-D-3.

The swap Series VI-D-3 did not meet the criteria to be classified as a hedging derivative instrument, and therefore is classified as an investment derivative. Changes in fair value are recorded in the statement of activities as investment earnings.

Objective of the Interest Rate Swap: In order to protect against the potential of rising interest rates and to balance its mixture of variable and fixed rate debt, the City requested the Authority, on its behalf, to enter into an interest rate swap in connection with its $10,000,000 Series VI-D-3 variable-rate bonds. The intention of the swap was to effectively change the City's variable interest rate on the bonds to a synthetic fixed rate. The Series VI-D-3 bonds have since been refunded with a portion of the proceeds of the Series VII-E-1 bonds and the interest rate swap is now associated with the Series VII-E-1 bonds.

Terms: Under the swap, the Authority pays the counterparty a fixed payment of 3.725% and receives a variable payment computed as 63.50% of the five-year London Interbank Offered Rate (LIBOR). The swap has a notional amount of $10,000,000 and the associated variable-rate bond has a $10,000,000 principal amount. At no time will the notional amount on the interest rate swap agreement exceed the outstanding principal of the Series VII-E-1 Bonds. The bonds' variable-rates have historically approximated the Securities Industry and Financial Markets Association Index (the SIFMA). The bonds and the related swap agreement mature on June 1, 2033.

15. INTEREST RATE SWAPS (continued)

Swap - Local Government Improvement Bonds, Series VII-E-1 Bonds (continued)

As of June 30, 2018, rates were as follows:

	Terms	Rates
Fixed Payment to Counterparty	Fixed	3.725 %
Variable Payment to Counterparty	% LIBOR	(1.835)%
Net Interest Rate Swap Payments		1.890 %
Variable Rate Bond Coupon Payments		2.264 %
On-going Variable Rate Bond Payments		0.200 %
Effective Synthetic Interest Rate on Bonds		4.354 %

Fair Value: As of June 30, 2018 the swap had a negative fair value of $2,093,671. The negative fair value of the swap may be countered by reductions in total interest payments required under the variable-rate bond, creating lower synthetic rates. Because the rates on the government's variable-rate bonds adjust to changing interest rates, the bonds do not have a corresponding fair value increase. The fair value model calculates future cash flows by projecting forward rates, and then discounts those cash flows at their present value.

Credit Risk: As of June 30, 2018, the City was not exposed to credit risk because the swap had a negative fair value. However, should interest rates change and the fair value of the swap become positive, the City would be exposed to credit risk in the amount of the swap's fair value. The swap counterparty, Raymond James Financial Products (RJFB) was rated "Baa1/BBB+" by Moody's and Standard & Poor's as of June 30, 2018, with its Credit Support Provider, Deutsche Bank, rated "A3/BBB+/A-" by Moody's, Standard & Poor's and Fitch, respectively.

Basis Risk: As noted above, the swap exposes the City to basis risk should the rate on the bonds increase to above 63.5% of LIBOR, thus increasing the synthetic rate on the bonds. If a change occurs that results in the rate on the bonds to be below 63.5% of LIBOR, then the synthetic rate on the bonds will decrease.

Termination Risk: The swap contract uses the International Swap Dealers Association Master Agreement, which includes standard termination events, such as failure to pay and bankruptcy. The Schedule to the Master Agreement includes an "additional termination provision." The Authority or the counterparty may terminate the swap if the other party fails to perform under the terms of the contract. If the swap is terminated, the variable-rate bond would no longer carry a synthetic interest rate. Also, if at the time of termination the swap has a negative fair value, the Authority would be liable to the counterparty for a payment equal to the swap's fair value. Likewise, if the swap has a positive fair value at termination, the counterparty would be liable to the Authority for a payment equal to the swap's fair value.

Interest Rate Risk: The City is exposed to interest rate risk on this instrument. As rates vary, the City's net payment on the swap will change.

15. INTEREST RATE SWAPS (continued)

Swap - Local Government Improvement Bonds, Series VII-E-1 Bonds (continued)

Swap Payments and Associated Debt: As of June 30, 2018, debt service requirements of the variable-rate debt and net swap payments, assuming current interest rates remain the same, for their term are as follows. As rates vary, variable-rate bond interest payments and net swap payments will vary.

	Variable Rate Bonds			
Fiscal Year Ending June 30,	Principal	Interest	Net Interest Rate Swap	Total
2019	$ -	$ 226,447	$ 188,979	$ 415,426
2020	-	226,447	188,979	415,426
2021	-	226,447	188,979	415,426
2022	-	226,447	188,979	415,426
2023	-	226,447	188,979	415,426
2024-2028	-	1,132,236	944,893	2,077,129
2029-2033	10,000,000	980,517	818,276	11,798,793
Total	$10,000,000	$3,244,988	$2,708,064	$15,953,052

Swap - Local Government Improvement Bonds, Series VII-E-1 Bonds and Series VI-M-1 Bonds

On November 22, 2006, the City entered into a $15,675,000 loan agreement with the Authority as part of the TN-LOANs program to fund a portion of the costs for renovation and new construction of the Oak Ridge High School Project. Principal payments are to occur on the loan from 2025 to 2036. Under its loan agreement, the Authority, at the request of the City, has entered into an interest rate swap agreement for all of the outstanding Local Government Improvement Bonds, Series VI-H-1.

The swap Series VI-H-1 did not meet the criteria to be classified as a hedging derivative instrument, and therefore is classified as an investment derivative. Changes in fair value are recorded in the statement of activities as investment earnings.

Objective of the Interest Rate Swap: In order to protect against the potential of rising interest rates and to balance its mixture of variable and fixed rate debt, the City requested the Authority, on its behalf, to enter into an interest rate swap in connection with its $15,675,000 Series VI-H-1 variable-rate bonds. The intention of the swap was to effectively change the City's variable interest rate on the bonds to a synthetic fixed rate. $11,000,000 of the Series VI-H-1 bonds have since been refunded with a portion of the proceeds of the Series VII-E-1 bonds and the related portion of the interest rate swap is now associated with the Series VII-E-1 bonds. The remaining $4,675,000 of the Series VI-H-1 bonds have since been refunded with a portion of the Series VI-M-1 bonds and the related portion of the interest rate swap is now associated with the Series VI-M-1 bonds.

15. INTEREST RATE SWAPS (continued)

Swap - Local Government Improvement Bonds, Series VII-E-1 Bonds and Series VI-M-1 Bonds (continued)

Terms: Under the swap, the Authority pays the counterparty a fixed payment of 3.536% and receives a variable payment computed as 63% of the five-year LIBOR. The swap has a notional amount of $15,675,000 and the associated variable-rate bond has a $15,675,000 principal amount. At no time will the notional amount on the interest rate swap agreement exceed the outstanding principal of the Series VII-E-1 bonds and/or the Series VI-M-1 bonds. The bonds' variable rates have historically approximated the SIFMA. The bonds and the related swap agreement mature on June 1, 2036.

As of June 30, 2018, rates were as follows:

	Terms	Rates
Fixed Payment to Counterparty	Fixed	3.536 %
Variable Payment to Counterparty	% LIBOR	(1.821)%
Net Interest Rate Swap Payments		1.715 %
Variable-Rate Bond Coupon Payments		2.265 %
On-going Variable-Rate Bond Payments		0.200 %
Effective Synthetic Interest Rate on Bonds		4.180 %

Fair Value: As of June 30, 2018, the swap had a negative fair value of $2,778,234. The negative fair value of the swap may be countered by reductions in total interest payments required under the variable-rate bond, creating lower synthetic rates. Because the rates on the government's variable-rate bonds adjust to changing interest rates, the bonds do not have a corresponding fair value increase. The fair value model calculates future cash flows by projecting forward rates, and then discounts those cash flows to their present value.

Credit Risk: As of June 30, 2018, the City was not exposed to credit risk because the swap had a negative fair value. However, should interest rates change and the fair value of the swap become positive, the City would be exposed to credit risk in the amount of the swap's fair value. In order to mitigate the potential for credit risk, the Authority, on behalf of the City, entered into the interest rate swap agreement with DEPFA Bank, who was rated "A+" by Standard & Poor's, "AA-" by Fitch Ratings and "Aa3" by Moody's Investor Service at the time the interest rate swap agreement was entered into. If DEPFA's credit rating is downgraded, the counterparty is required to post collateral with a third-party custodian. As of June 30, 2018, DEPFA's credit rating had been downgraded and was rated "A2/A-" by Moody's and Standard & Poor's, respectively. The counterparty has posted all collateral requirements with a third-party custodian.

Basis Risk: As noted above, the swap exposes the City to basis risk should the rate on the bonds increase to above 63% of LIBOR, thus increasing the synthetic rate on the bonds. If a change occurs that results in the rate on the bonds to be below 63% of LIBOR, then the synthetic rate on the bonds will decrease.

Interest Rate Risk: The City is exposed to interest rate risk on this instrument. As rates vary, the City's net payment on the swap will change.

15. INTEREST RATE SWAPS (continued)

Swap - Local Government Improvement Bonds, Series VII-E-1 Bonds and Series VI-M-1 Bonds (continued)

Termination Risk: The swap contract uses the International Swap Dealers Association Master Agreement, which includes standard termination events, such as failure to pay and bankruptcy. The Schedule to the Master Agreement includes an "additional termination provision." The Authority or the counterparty may terminate the swap if the other party fails to perform under the terms of the contract. If the swap is terminated, the variable-rate bond would no longer carry a synthetic interest rate. Also, if at the time of termination the swap has a negative fair value, the Authority would be liable to the counterparty for a payment equal to the swap's fair value. Likewise, if the swap has a positive fair value at termination, the counterparty would be liable to the Authority for a payment equal to the swap's fair value.

Swap Payments and Associated Debt: As of June 30, 2018, debt service requirements of the variable-rate debt and net swap payments, assuming current interest rates remain the same, for their term were as follows. As rates vary, variable-rate bond interest payments and net swap payments will vary.

	Variable Rate Bonds			
Fiscal Year Ending June 30,	Principal	Interest	Net Interest Rate Swap	Total
2019	$ -	$ 354,956	$ 268,863	$ 623,819
2020	-	354,956	268,863	623,819
2021	-	354,956	268,863	623,819
2022	-	354,956	268,863	623,819
2023	-	354,956	268,863	623,819
2024-2028	4,575,000	1,674,577	1,268,418	7,517,995
2029-2033	3,975,000	962,967	729,405	5,667,372
2034-2036	7,125,000	327,216	247,853	7,700,069
Total	$15,675,000	$4,739,540	$3,589,991	$24,004,531

16. FAIR VALUE

The City categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the assets in one of the following categories:

- Level 1: Quoted prices in active markets for identical assets or liabilities
- Level 2: Observable market based inputs
- Level 3: Unobservable inputs not corroborated by market data

The input levels are not applicable to the City's investments in the LGIP as investments are reported at amortized cost.

The City has the following recurring fair value measurements as of June 30, 2018:

- Investments are measured at fair value based on quoted market prices in active markets (Level 1).
- Interest rate swaps are measured at fair value based on the present value of discounted future cash flows (Level 2).

17. COMMITMENTS

At June 30, 2018, the City has remaining contractual commitments for professional services, construction contracts and equipment purchases totaling $11,052,888 for the following projects:

Projects	Spent-to-Date	Commitment Remaining	Committed Fund
Pedestrian Safety Improvements	$ 61,715	$ 562,640	Capital Projects
S Illinois Multimodel Access Project	76,101	222,699	Capital Projects
Rails to Trails	-	358,317	Capital Projects
Peace Bell Pavilion	280,412	219,334	Capital Projects
Senior Center	127,810	68,820	Capital Projects
Oak Ridge Preschool	373,555	201,145	Capital Projects
Energy Savings Project	5,369,171	3,714,343	Capital Projects
ADA Compliance and Transition Plan	32,922	132,278	Capital Projects
Tree Pruning, Removal and Brush Control	2,774,319	494,590	Electric
Line Construction	6,665,084	93,460	Electric
Melton Lake Drive Lighting Project	24,615	23,885	Electric
Substation 900 Equipment	-	58,452	Electric
Electrical Engineering Services	158,076	98,794	Electric
Turtle Park Rehabilitation	3,232,000	1,396,230	Waterworks
TN Ave Waterline and Roadway Improvements	320,113	868,057	Waterworks
Water Distribution System Phase I & II	127,659	42,341	Waterworks
Pavement Patch and Repair	-	200,000	Waterworks
Street Resurfacing	196,213	415,038	State Street Aid
Renovation of Station 4	33,996	8,004	West End
TVRCS Radio System	2,517,000	1,678,000	Emergency Communications District
Cayenta Software	97,325	102,676	General
Integrated Software Suite	393,023	93,785	City Equipment Rental
Total	$22,861,109	$11,052,888	

For the Capital Project Fund, pedestrian safety improvements, multimodel access, and the rails to trails project are being funded primarily through grants along with existing cash reserves. The Peace Bell Pavilion is being funded by community donations. The construction of a new Senior Center and Preschool, as well as the energy savings project, are being funded through debt proceeds. The ADA compliance and transition plan is being funded through existing cash reserves.

Projects in the Electric, Waterworks, State Street Aid, West End, General and City Equipment Rental Funds are being funded through a combination of existing cash reserves and fund revenues, with the exception of the Turtle Park Rehabilitation project in the Waterworks Fund which is being funded by loans through the State Revolving Loan Fund.

The Emergency Communications District Fund project for the TVRCS Radio System is being funded through a combination of debt proceeds, grants and existing cash reserves.

18. TRANSFERS

Transfers were primarily to support capital projects, debt service and operations of the funds. Interfund transfers for the current fiscal year were as follows:

	Transfer In					
Transfer Out	General Fund	General Purpose School Fund	Capital Projects Fund	Debt Service Fund	Nonmajor Funds	Total
General Fund	$ -	$15,493,963	$1,200,000	$4,650,000	$1,605,731	$22,949,694
General Purpose School Fund	-	-	-	-	69,208	69,208
Electric Fund	1,645,492	-	-	-	-	1,645,492
Waterworks Fund	1,684,435	-	-	-	-	1,684,435
Nonmajor Funds	-	136,524	-	-	-	136,524
Total	$3,329,927	$15,630,487	$1,200,000	$4,650,000	$1,674,939	$26,485,353

19. FUND BALANCE

Nonspendable fund balances are not in spendable form and include $488,942 in inventory, comprised of $250,000 in the General Fund, $179,503 in the State Street Aid Fund, $16,244 in the Golf Course Fund and $43,195 in the Central Cafeteria Fund and $161,562 in miscellaneous prepaids. The General Fund has an outstanding advance to the Waterworks Fund for capital improvements in the amount of $476,190.

Restrictions and commitments in Education Programs of $627,825 and $871,708, respectively, were primarily for the Career Ladder Program, Extended School Fund and for the Central Cafeteria Fund. The $5,265,123 restricted fund balance in the Debt Service Fund is from a portion of local sales tax collections that resulted from a .50% increase that are restricted to paying the debt issued for the renovation and construction at the ORHS until all the debt is extinguished. Restrictions in the Drug and State Street Aid Funds are due to state law restrictions on the revenues accounted for in those funds. The Capital Projects Fund includes $5,831,199 in funds restricted for capital projects from unused bond proceeds.

City Council assigned $13,384,916 for various endeavors, including education, debt service, capital projects, recreation, and fire and emergency services. Assigned fund balances includes $585,197 in encumbrances for general government and public works expenditures.

19. FUND BALANCE (continued)

At June 30, 2018, fund balance is classified as follows:

	General Fund	General Purpose School Fund	Capital Projects Fund	Debt Service Fund	Nonmajor Governmental Funds	Total
Nonspendable:						
Inventory	$ 250,000	$ -	$ -	$ -	$ 238,942	$ 488,942
Prepaids	44,975	112,824	-	-	3,763	161,562
Advances to Other Funds	476,190	-	-	-	-	476,190
Restricted to:						
Capital Projects	-	-	5,831,199			5,831,199
Education Programs	-	3,004	-	-	624,821	627,825
Debt Service	-	-	-	5,265,123	-	5,265,123
Drug Enforcement	-	-	-	-	401,348	401,348
Street Improvements	-	-	-	-	1,548,839	1,548,839
Public Transportation	61,392	-	-	-	-	61,392
Committed to:						
Education Programs	-	770,491	-	-	101,217	871,708
Assigned to:						
2019 Budgeted Fund Balance Draw	365,383	-	-	-	-	365,383
Education Programs	-	7,270,394	-	-	-	7,270,394
Debt Service	-	-	-	2,675,881	-	2,675,881
Capital Projects	-	-	1,527,333	-	-	1,527,333
General Government	269,637	-	-	-	-	269,637
Public Works	315,560	-	-	-	-	315,560
Recreation	-	-	-	-	232,748	232,748
Fire and Emergency Services	-	-	-	-	903,012	903,012
Solid Waste	-	-	-	-	410,165	410,165
Unassigned	9,794,937	-	-	-	-	9,794,937
Total	$11,578,074	$8,156,713	$7,358,532	$7,941,004	$4,464,855	$39,499,178

20. LITIGATION

The City generally follows the practice of recording liabilities from claims and legal actions only when it is probable that both an asset has been impaired or a liability has been incurred, and the amount of loss can be reasonably estimated.

In fiscal year 2018, the City terminated a management agreement with Billy Casper Golf, LLC (BCG) in connection with the Centennial Golf Course, which is part of the Golf Course Fund. BCG has claimed that the City owes approximately $488,000 in unpaid fees, cancellation fee, interest and costs incurred on behalf of the City. The City has not recorded a liability for disputed fees of $382,000 included in the amount claimed by BCG. The City cannot reasonably estimate, at this time, the possible loss, if any, that may arise from this claim.

Settlement of all remaining potential claims from various lawsuits in which the City is involved would not, in management's estimation, materially affect the financial statements of the City.

21. RISK MANAGEMENT

The Insurance Fund, an internal service fund, is used to account for risks of loss related to torts; theft of, damage to, and destruction of assets; natural disasters; errors and omissions; injuries to employees; and employee medical insurance plans. The Insurance Fund does not account for risks related to the City School system assets or employees. Funding for the Insurance Fund is provided by the General, Electric and Waterworks Funds through an allocation for insurance coverage based on each Fund’s pro rata share of services provided. The General Purpose School Fund, a Special Revenue Fund, is used to account for School system risks of loss related to torts; theft of, damage to, and destruction of assets; natural disasters; errors and omissions; injuries to employees; and employee medical insurance plans.

City employee group medical insurance is fully provided through an independent insurance carrier with the City and employees contributing to payment of the premiums. Dental and vision benefits provided to employees by the City are self-insured and funded from the revenues of the Insurance Fund. School employee medical insurance is fully provided through an independent insurance carrier with the General Purpose School Fund and the employees contributing to payment of the premiums.

Insurance coverage for assets related to general liability, auto liability, auto physical damage, errors and omissions and workers compensation for city and school system employees is through public entity risk pools operated as a risk sharing programs by the Tennessee Municipal League (TML) for the City coverage and the Tennessee Risk Management Trust (TNRMT) for School coverage. These pools are sustained by member premiums and the City and Schools pay an annual premium for its coverage. Coverage through the Pool is for payment of damage claims and to defend the City in any damage suit that is included in the coverage, up to the policy’s applicable limits, at the Pool’s expense. This includes any other necessary costs relating to the defense. The City has the responsibility of following any reporting requirements, including timely reporting of any incidents that might result in a damage claim. The City is to do everything necessary to protect the rights of recovery of the Pool and enforcement of these rights by complying with all terms of the policy. The Pool has the right to apply premium rate changes as necessary.

Other risks of loss are covered by commercial insurance with the City being responsible for the per occurrence deductible. In fiscal 2018, the city paid $233,961 in net deductibles to the TML for workers compensation and property liability claims.

The per occurrence deductible for each insurance policy covered by the Insurance Fund for fiscal 2018 is as outlined below:

Insurance Plan	Annual Per Occurrence Deductible
General Liability	$ 1,000
Auto Liability	1,000
Auto Physical Damage	5,000
Errors and Omissions	5,000
Buildings and Personal Property	10,000
Equipment Breakdown	10,000
Electronic Data Processing Equipment	2,500
Worker’s Compensation	50,000

21. RISK MANAGEMENT (continued)

Liabilities are reported when it is probable that a loss has occurred and the amount of the loss can be reasonably estimated. Changes in the claims liability amount for the Insurance Fund for the fiscal year ended June 30, 2018 were as follows:

Beginning Balance	Claims and Changes in Estimate	Claims Payments	Ending Balance
$290,915	$330,226	$(494,471)	$126,670

Copies of the complete financial statements of the City for the current Fiscal Year are available at https://www.comptroller.tn.gov/office-functions/la/reports/audit-reports.html.