

Consolidated

Financial Statements and Supplemental Information June 30, 2020 and 2019

KUB Board of Commissioners

Kathy Hamilton - Chair

Adrienne Simpson-Brown - Vice Chair

Dr. Jerry W. Askew

Celeste Herbert

Sara Hedstrom Pinnell

Tyvi Small

John Worden

Management

Gabriel Bolas II

President and Chief Executive Officer

Mark Walker

Senior Vice President and Chief Financial Officer

Susan Edwards

Senior Vice President and Chief Administrative Officer

Derwin Hagood

Senior Vice President and Chief Operating Officer

Eddie Black

Senior Vice President and Chief Technology Officer

John Williams

Vice President of Construction

Mike Bolin

Vice President of Utility Advancement

Julie Childers

Vice President and Century II Administrator

John Gresham

Vice President of Operations

Knoxville Utilities Board Index

June 30, 2020 and 2019

Page(s)
Independent Auditor's Report1-	2
Management's Discussion and Analysis	7
Financial Statements	
Consolidated Statements of Net Position	9
Consolidated Statements of Revenues, Expenses and Changes in Net Position	0
Consolidated Statements of Cash Flows	1
Notes to Consolidated Financial Statements	3
Required Supplementary Information	
Schedule of Changes in Net Pension Liability and Related Ratios	4
Schedule of Employer Pension Contributions	5
Schedule of Changes in Net OPEB Liability and Related Ratios70	6
Schedule of Employer OPEB Contributions	7
Qualified Governmental Excess Benefit Arrangement	8
Supplemental Information	
Schedule of Expenditures of Federal Awards and State Financial Assistance79	9
Statistical Information	
Schedule of Insurance in Force	0
Independent Auditor's Report on Internal Control Over Financial Reporting and on Compliance and Other Matters Based on an Audit of Financial Statements Performed in Accordance with Government Auditing Standards	2
Schedule of Findings and Questioned Costs	3



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

Independent Auditor's Report

Board of Commissioners Knoxville Utilities Board Knoxville, Tennessee

We have audited the accompanying financial statements of the Knoxville Utilities Board (KUB), a component unit of the City of Knoxville, Tennessee, as of and for the years ended June 30, 2020 and 2019, and the related notes to the financial statements, which collectively comprise KUB's basic financial statements as listed in the index.

Management's Responsibility for the Financial Statements

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

Auditor's Responsibility

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the 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 KUB'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 KUB's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of KUB as of June 30, 2020 and 2019, and the changes in financial position and cash flows for the years then ended in accordance with accounting principles generally accepted in the United States of America.



Board of Commissioners Knoxville Utilities Board Knoxville, Tennessee

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 3 through 27 and the required supplementary information on pages 74 through 78 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise KUB's basic financial statements. The Schedule of Expenditures of Federal Awards and State Financial Assistance, as required by Title 2 U.S. Code of Federal Regulations, Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* and the State of Tennessee is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The Schedule of Expenditures of Federal Awards and State Financial Assistance is the responsibility of management and was derived from and relates 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. In our opinion, the Schedule of Expenditures of Federal Awards and State Financial Assistance is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The statistical information has 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 it.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated October 29, 2020, on our consideration of KUB'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 KUB's internal control over financial reporting and compliance.

Coulter & Justus, P.C.

Knoxville Utilities Board (KUB), comprised of the Electric Division, Gas Division, Water Division, and Wastewater Division (Divisions), is reported as a component unit enterprise fund in the financial statements of the City of Knoxville. KUB's responsibility is to oversee the purchase, production, distribution, and processing of electricity, natural gas, water, and wastewater services. A seven-member Board of Commissioners (Board) governs KUB. The Board has all powers to construct, acquire, expand, and operate the Divisions. It has full control and complete jurisdiction over the management and operation of the Divisions, including setting rates. KUB's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC), the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC), and the Governmental Accounting Standards Board (GASB), as applicable.

This discussion and analysis is designed to (a) assist the reader in focusing on significant financial issues, (b) provide an overview of KUB's financial activity, (c) identify major changes in KUB's financial position, and (d) identify any financial concerns.

The Management Discussion and Analysis (MD&A) focuses on the fiscal year ended June 30, 2020 activities, resulting changes and current known facts, and should be read in conjunction with KUB's consolidated financial statements.

Consolidated Highlights

System Highlights

As of June 30, 2020, KUB served 468,033 customers. KUB added 3,396 new customers in fiscal year 2020, representing growth of less than one percent.

For the second year in a row, KUB's system was impacted by excessive rainfall. After record setting levels in 2019, KUB experienced sustained rainfall amounts exceeding Knoxville's ten-year average for eight months of fiscal year 2020. Electric system reliability was affected, resulting in 2.44 hours of service interruption for the average customer. Despite the record rainfall levels, KUB's water and wastewater systems functioned well. The excess rainfall levels resulted in higher costs at KUB's treatment plant, as intake water required additional treatment. The excess wastewater flows were diverted to system storage allowing KUB to level out the impact of events over longer durations of time.

KUB's energy sales in fiscal year 2020 were impacted by a milder winter in Knoxville. Natural gas sales decreased 3.2 percent from the prior year, while electric sales decreased 2.3 percent.

During March 2020, a global pandemic was declared related to the rapidly growing outbreak of a novel strain of coronavirus (COVID-19). The pandemic has significantly impacted the economic conditions across the nation.

As a result of the pandemic, KUB quickly responded with changes to lessen the economic burden on customers by deferring proposed rate increases and suspending disconnections for nonpayment. To offset the reduced revenues, KUB delayed projects to create more financial liquidity. KUB plans to enroll customers with past due balances in repayment plans and resume disconnects for nonpayment.

KUB's electric system's record peak in demand remains 1,328 megawatt hours, set in February 2015. The natural gas system's record peak demand remains 140,204 dekatherms, set in January 2018.

The third of three annual rate increases for each Division previously adopted by the KUB Board went into effect in fiscal year 2020. These rate increases provide additional revenue to help fund each system's respective Century II infrastructure program.

KUB sold \$68.9 million in revenue refunding bonds in April 2020 for the purpose of refinancing existing revenue bonds at lower interest rates. KUB will realize a total debt service savings of \$27 million over the life of the bonds.

KUB's electric system maintains a Diamond level designation by the American Public Power Association's (APPA) Reliable Public Power Provider (RP3) program, the highest level of recognition of the program.

KUB's natural gas system was named to the American Public Gas Association's (APGA) System Operational Achievement Recognition (SOAR) Program in 2018, reflecting KUB's focus on system integrity, continuous improvement, safety, and employee development. KUB is a Silver level winner and remains a member of the program through 2020. KUB was designated a Safety Contest Winner for calendar year 2019 by APGA, indicating the lowest number of recordable injuries per labor-hours worked.

KUB's treatment plants continue to meet high standards of operation. KUB was awarded the National Association of Clean Water Agencies (NACWA) Water Resources Utility of the Future Today recognition under the category of Beneficial Biosolids Use for 2019. The treatment plants additionally won awards based on performance under NACWA's peak performance recognition. Eastbridge and Fourth Creek wastewater treatment plants won silver awards for calendar year 2019.

KUB continued to maintain Platinum certification with the National Biosolids Partnership following a rigorous review process and independent audit that was conducted in December 2019. Biosolids are nutrient-rich organic matter produced by wastewater treatment and is a registered fertilizer with the Tennessee Department of Agriculture.

Century II Infrastructure Program

Century II is KUB's proactive long-range program to improve and maintain the electric, natural gas, water and wastewater systems for its customers. It includes maintenance and asset replacement strategies for each system and establishes sustainable replacement cycles. Century II moves KUB into its second century of service by improving each system through sound planning, resource allocation, and continued, but accelerated, investment.

In fiscal year 2015, KUB concluded the smart grid pilot project, of which a portion of the project was funded by a United States Department of Energy Smart Grid Investment Grant (SGIG). This grant was received by KUB in 2009 as part of the American Reinvestment and Recovery Act (ARRA). Based upon the success of that pilot, KUB formed a plan to move forward with a Century II Grid Modernization initiative, which includes advanced metering for all KUB customers, a telecommunication system linking critical KUB infrastructure, and an increased investment in automation technology to help operate KUB's energy and water distribution systems. Over the course of ten years, KUB plans to spend \$124.4 million in this effort. The deployment is funded in large part by debt issues and system revenues. In fiscal year 2020, KUB completed the final year of the four-year advanced meter deployment, spending approximately \$82.4 million. The project was completed on time and under budget.

In June 2017, the Board adopted three annual rate increases for all KUB Divisions. The three approved electric rate increases went into effect in October 2017, October 2018, and October 2019 generating \$10.9 million, \$11.2 million, and \$5.7 million in additional annual Electric Division revenue, respectively. The three approved gas rate increases went into effect in October 2017, October 2018, and October 2019, generating \$2.2 million, \$2.3 million, and \$2.3 million in additional annual Gas Division revenue, respectively. The three water rate increases went into effect July 2017, July 2018, and July 2019 generating \$3.1 million, \$3.1 million, and \$3.3 million of additional annual Water Division revenue, respectively. The three approved wastewater rate increases went into effect in July 2017, July 2018, and July 2019 generating \$4.3 million, \$4.2 million, and \$4.5 million in additional annual Wastewater Division revenue, respectively.

In fiscal year 2017, KUB completed the transition to a new disinfection system at the Mark B. Whitaker (MBW) Water Treatment plant.

KUB is currently in the process of implementing a Water Plant Redundancy initiative to ensure that high quality, reliable water service will be provided to customers over the long term. KUB maintains a single water treatment plant for its system. In lieu of building a second treatment facility to ensure capacity will be available to meet the needs of current and future water customers, KUB will invest approximately \$149 million in various redundant facilities at the site of its existing Mark B. Whitaker Water Treatment Plant over a 15-year period that began in fiscal year 2017. Construction of a new generator building with three 2,500 kW diesel generators and associated switchgear is nearing completion at the Mark B. Whitaker Water Treatment Plant. Startup is scheduled for October 2020.

For the fiscal year, KUB stayed on track with its overall Century II capital budget and production goals. The electric system replaced 1,962 poles and 15.1 miles of transmission lines. In the natural gas system, 8.3 miles of gas steel main were replaced. In the water system, 8.1 miles of galvanized water main and 5.7 miles of cast iron water main were replaced. In the wastewater system, 24.2 miles of main were rehabilitated or replaced.

Consent Decree

In February 2005, a Consent Decree was entered into federal court regarding the operation of KUB's wastewater system. Under the terms of the Consent Decree, the remediation of identified sanitary sewer overflows (SSOs) on KUB's wastewater system had to be completed by June 30, 2016. KUB completed all the requirements of the Consent Decree for the collection system two years in advance of the deadline.

The Consent Decree also required KUB to perform an evaluation of the wet weather performance and capacity of its wastewater treatment plants. In July 2007, KUB submitted a Composite Correction Plan (CCP) for its wastewater treatment plants to EPA for review. The development and filing of the CCP was a requirement of the federal order of February 2005. The CCP includes recommended improvements to KUB's Kuwahee and Fourth Creek treatment plants to address wet weather capacity issues noted in prior assessments. The EPA approved the CCP in January 2009 including a recommended schedule of plant improvements that extends beyond the expiration date of the original Consent Decree. An amendment to the Consent Decree incorporating and establishing this schedule was agreed to by all parties and was entered on June 23, 2009. The purpose of the Amendment is to allow KUB to complete a portion of work outlined in the CCP after the Consent Decree deadline of June 30, 2016. The CCP provides for a biologically enhanced high-rate clarification (the BEHRC) secondary treatment system to be installed at the Fourth Creek treatment plant by June 30, 2018 and at the Kuwahee treatment plant by June 30, 2021, KUB successfully completed the installation of the BEHRC system at the Fourth Creek treatment plant ahead of schedule in April 2018. Work is currently ongoing at the Kuwahee treatment plant and remains on schedule for completion before the deadline of June 30, 2021. The total cost of such improvements at the Kuwahee treatment plant is estimated to be approximately \$50 million.

KUB's funding plan for the Consent Decree includes long-term bonds and a series of rate increases phased in over the term of the order. Bond proceeds fund all types of wastewater capital projects, the majority of which are related to the Consent Decree. As of June 30, 2020, the Wastewater Division had issued \$556.2 million in bonds to fund wastewater system capital improvements since the inception of the Consent Decree. The Board approved two 50 percent rate increases, which went into effect in April 2005 and January 2007. The Board also approved an 8 percent rate increase, which was effective in September 2008, two 12 percent rate increases, which were effective in April 2011 and October 2012, three 6 percent rate increases, which were effective October 2014, October 2015, and October 2016, and three 5 percent rate increases, which were effective July 2017, July 2018, and July 2019. KUB anticipates additional bond issues and rate increases over the next decade to help fund wastewater capital improvements.

KUB successfully completed the first cycle of Maintenance Operation Management (MOM) requirements one year before the deadline by inspecting manholes and gravity mains, smoke testing gravity mains, performing required inspections of pump stations and the related force mains, and completing all Corrective Action Plan/Engineering Report (CAP/ER) projects. KUB initiated the second MOM cycle that continues to focus on the prevention of SSOs. As part of the Century II initiative, formally known as the PACE10 program, KUB has installed storage tanks providing 34 million gallons of wastewater storage to control wet weather overflows and rehabilitated or replaced 408 miles of collection system pipe. KUB also continues to maintain a proactive operations and maintenance plan for the wastewater collection system including inspection, grease control, and private lateral enforcement. The result of the PACE10/Century II initiative has been an 80 percent reduction in SSOs.

As of June 30, 2020, the Wastewater Division had completed its 16th full year under the Consent Decree, spending \$559.8 million on capital investments to meet Consent Decree requirements.

Financial Highlights

Fiscal Year 2020 Compared to Fiscal Year 2019

KUB's consolidated Change in Net Position increased \$78 million in fiscal year 2020. Comparatively, net position increased by \$65.3 million in fiscal year 2019.

Operating revenue decreased \$11.6 million, the net result of additional revenues from system rate increases and a decline in billed sales volumes. Purchased energy expense (power and natural gas) decreased \$26.3 million or 5.7 percent, the combined effect of a \$19.8 million decrease in purchased power cost and a decrease of \$6.6 million in purchased gas cost, reflecting lower customer demand. Margin from sales (operating revenue less purchased energy expense) increased \$14.7 million or 4.2 percent compared with the prior fiscal year.

Operating expenses (excluding purchased power and purchased gas expense) decreased \$0.8 million. Operating and maintenance (O&M) expenses were \$1.5 million higher than the previous year. Depreciation expense decreased \$1.9 million or 2.5 percent. Taxes and tax equivalents decreased \$0.4 million or 1.2 percent.

Interest income was \$1.9 million less than the prior fiscal year. Interest expense decreased \$0.5 million or 1.1 percent, reflecting the net impact of interest expense from new revenue bonds sold during fiscal year 2020 and savings on refunding of outstanding bonds.

Capital contributions decreased \$0.7 million, the result of a lower level of assets contributed by developers.

Total plant assets (net) increased \$115.6 million or 5.7 percent over the last fiscal year.

Long-term debt represented 48.3 percent of KUB's consolidated capital structure, compared to 50.2 percent last fiscal year. Capital structure equals long-term debt (including the current and long-term portion of revenue bonds), plus net position.

Fiscal Year 2019 Compared to Fiscal Year 2018

KUB's consolidated Change in Net Position increased \$65.3 million in fiscal year 2019. Comparatively, net position increased by \$63.6 million in fiscal year 2018. A restatement to the fiscal year 2018 beginning net position, based on a change in method of accounting for Other Post-Employment Benefits (OPEB), increased the total net position by an additional \$4.5 million. The change resulted in a total increase of \$68.1 million in KUB's net position.

Operating revenue decreased \$0.2 million, the net result of additional revenues from system rate increases and a decline in billed sales volumes. Purchased energy expense (power and natural gas) decreased \$14.5 million or 3 percent, the combined effect of an \$8.1 million decrease in purchased power cost and a decrease of \$6.4 million in purchased gas cost, reflecting lower customer demand. Margin from sales (operating revenue less purchased energy expense) increased \$14.3 million or 4.2 percent compared with the prior fiscal year.

Operating expenses (excluding purchased power and purchased gas expense) increased \$16.1 million. Operating and maintenance (O&M) expenses were \$17.2 million or 13.9 percent higher than the previous year. Depreciation expense decreased \$2.9 million or 3.8 percent. Taxes and tax equivalents increased \$1.8 million or 5.2 percent, reflecting higher plant in service levels.

Interest income was \$2.6 million more than the prior fiscal year. Interest expense increased \$1.6 million or 3.9 percent, reflecting the interest costs on new revenue bonds issued during fiscal year 2019 to fund system capital improvements.

Capital contributions increased \$0.6 million, the result of a higher level of assets contributed by developers.

Total plant assets (net) increased \$122.2 million or 6.4 percent over the last fiscal year.

Long-term debt represented 50.2 percent of KUB's consolidated capital structure, compared to 50.8 percent last fiscal year. Capital structure equals long-term debt (including the current and long-term portion of revenue bonds), plus net position.

(Space left intentionally blank)

Knoxville Utilities Board Consolidated Financial Statements

KUB's financial performance is reported under three basic consolidated financial statements: the Statement of Net Position; the Statement of Revenues, Expenses and Changes in Net Position; and the Statement of Cash Flows.

Statement of Net Position

KUB reports its assets, deferred outflows of resources, liabilities, deferred inflows of resources and net position in the Statement of Net Position. Assets are classified as current, restricted, plant in service, or other assets.

Liabilities are classified as current, other, or long-term debt. Net position is classified as net investment in capital assets, restricted, or unrestricted. Net position tells the user what KUB has done with its accumulated earnings, not just the balance.

Net investment in capital assets reflects the book value of all capital assets less the outstanding balances of debt used to acquire, construct, or improve those assets.

Restricted net position includes assets that have been limited to specific uses by KUB's bond covenants or through resolutions passed by the KUB Board.

Unrestricted net position is a residual classification; the amount remaining after reporting net position as either invested in capital or restricted is reported there.

Statement of Revenues, Expenses and Changes in Net Position

KUB reports its revenues and expenses (both operating and non-operating) on the Statement of Revenues, Expenses and Changes in Net Position. In addition, any capital contributions or assets donated by developers are reported on this statement.

Total revenue less total expense equals the change in net position for the reporting period. Net position at the beginning of the period is increased or decreased, as applicable, by the change in net position for the reporting period.

The change in net position for the reporting period is added to the net position segment of the Statement of Net Position.

Statement of Cash Flows

KUB reports cash flows from operating activities, capital and related financing activities, and investing activities on the Statement of Cash Flows. This statement tells the user the sources and uses of cash during the reporting period.

The statement indicates the beginning cash balance and ending cash balance and how it was either increased or decreased during the reporting period.

The statement also reconciles cash flow to operating income as it appears on the Statement of Revenues, Expenses and Changes in Net Position.

Condensed Financial Statements

Statement of Net Position

The following table reflects the condensed consolidated Statement of Net Position for KUB compared to the prior two fiscal years.

Statements of Net Position As of June 30

(in thousands of dollars)		2020		2019		2018
Current, restricted and other assets	\$	395,224	\$	389,851	\$	424,562
Capital assets, net		2,135,780		2,020,169		1,897,995
Deferred outflows of resources	_	33,237	_	41,209		25,544
Total assets and deferred outflows of resources	_	2,564,241	-	2,451,229		2,348,101
Current and other liabilities		207,464		180,241		169,966
Long-term debt outstanding		1,126,089		1,135,027		1,097,096
Deferred inflows of resources	_	20,569	_	3,843	_	14,259
Total liabilities and deferred inflows of resources	_	1,354,122	-	1,319,111		1,281,321
Net position						
Net investment in capital assets		990,228		871,180		794,383
Restricted		22,186		21,294		19,436
Unrestricted	_	197,705	_	239,644	_	252,961
Total net position	\$	1,210,119	\$	1,132,118	\$	1,066,780

Normal Impacts on Statement of Net Position

The following is a description of activities which will normally impact the comparability of the Statement of Net Position presentation:

- Change in net position (from Statement of Revenues, Expenses and Changes in Net Position): impacts (increase/decrease) current and other assets and/or capital assets and unrestricted net position.
- Issuing debt for capital: increases deferred outflows of resources and long-term debt.
- Spending debt proceeds on new capital: reduces current assets and increases capital assets.
- Spending of non-debt related current assets on new capital: (a) reduces current assets and increases capital assets and (b) reduces unrestricted net position and increases net investment in capital assets.
- Principal payment on debt: (a) reduces current and other assets and reduces long-term debt and (b) reduces unrestricted net position and increases net investment in capital assets.
- Reduction of capital assets through depreciation: reduces capital assets and net investment in capital
 assets.

Impacts and Analysis

Current, Restricted and Other Assets

Fiscal Year 2020 Compared to Fiscal Year 2019

Current, restricted and other assets increased \$5.4 million or 1.4 percent. This increase reflects an increase in the actuarially determined net pension asset of \$19.1 million offset by a \$7.1 million decrease in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments), and a \$6.8 million decrease in inventories. KUB under recovered \$1.5 million in wholesale gas costs from its customers in fiscal year 2020. This under recovery of costs will be charged to KUB's gas customers during the next fiscal year through adjustments to rates via the Purchased Gas Adjustment.

Fiscal Year 2019 Compared to Fiscal Year 2018

Current, restricted and other assets decreased \$34.7 million or 8.2 percent. This decrease reflects a decrease in the actuarially determined net pension asset of \$19.8 million, an \$11.6 million decrease in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments), and a decrease in accounts receivable of \$5.4 million. KUB under recovered \$1.3 million in wholesale gas costs from its customers in fiscal year 2019. This under recovery of costs will be charged to KUB's gas customers during the next fiscal year through adjustments to rates via the Purchased Gas Adjustment.

Capital Assets

Fiscal Year 2020 Compared to Fiscal Year 2019

Capital assets (net) increased \$115.6 million or 5.7 percent. Major capital expenditures (reflected in both plant additions and work in progress) in fiscal year 2020 included \$46 million related to wastewater Century II projects, \$24.1 million for various electric distribution system improvements, \$11.4 million for building improvements, \$10.5 million for Grid Modernization and advanced metering including Supervisory Control and Data Acquisition (SCADA) system upgrades, \$9.6 million for water main replacements, \$9.3 million for the construction of gas mains, and \$7.3 million for pole replacements for the electric system.

Fiscal Year 2019 Compared to Fiscal Year 2018

Capital assets (net) increased \$122.2 million or 6.4 percent. Major capital expenditures (reflected in both plant additions and work in progress) in fiscal year 2019 included \$42.9 million related to wastewater Century II projects, \$29.5 million for various electric distribution system improvements, \$16.8 million for building improvements, \$14.1 million for Grid Modernization and advanced metering including Supervisory Control and Data Acquisition (SCADA) system upgrades, \$11.3 million for water plant and system improvements, \$10.3 million for pole replacements for the electric system, and \$8.3 million for utility asset replacements and relocations for the gas and water system to accommodate Tennessee Department of Transportation (TDOT) highway improvement projects.

Deferred Outflows of Resources

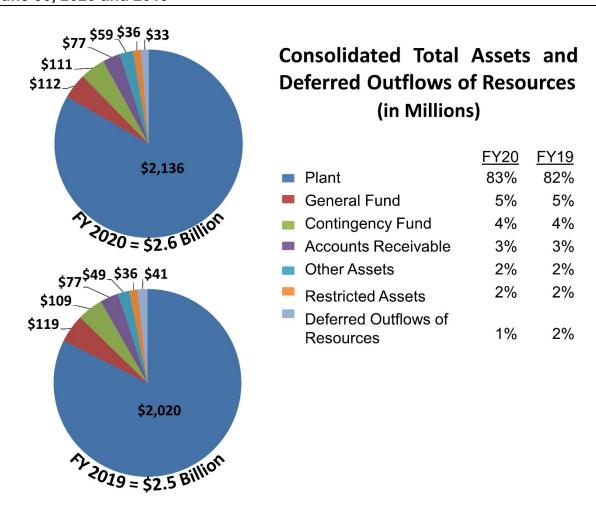
Fiscal Year 2020 Compared to Fiscal Year 2019

Deferred outflows of resources decreased \$8 million compared to the prior year, reflecting a decrease in pension outflow of \$9.1 million and a \$0.5 million decrease in unamortized bonds refunding costs offset by a \$1.7 million increase in OPEB outflow when compared to the prior fiscal year.

Fiscal Year 2019 Compared to Fiscal Year 2018

Deferred outflows of resources increased \$15.7 million compared to the prior year, reflecting an increase in pension outflow of \$15.3 million and a \$1.8 million increase in OPEB outflow offset by a \$1.5 million decrease in unamortized bonds refunding costs when compared to the prior fiscal year.

(Space left intentionally blank)



Current and Other Liabilities

Fiscal Year 2020 Compared to Fiscal Year 2019

Current and other liabilities increased \$27.2 million or 15.1 percent compared to the prior fiscal year. This reflects an increase of \$22.9 million in accounts payable, an increase of \$6.1 million in net OPEB liability, an increase in the current portion of revenue bonds of \$3.2 million, and an increase of \$1.5 million in customer advances for construction offset by a decrease of \$6.9 million in net pension liability. KUB over recovered \$1.8 million in wholesale power costs from its customers in fiscal year 2020, as compared to a \$2.7 million over recovery in fiscal year 2019. This over recovery of costs will be flowed back to KUB's electric customers during the next fiscal year through adjustments to rates via the Purchased Power Adjustment.

The outstanding balance on TVA conservation loans declined by \$1.1 million, as KUB ceased issuance of any new loans in fiscal year 2016.

Fiscal Year 2019 Compared to Fiscal Year 2018

Current and other liabilities increased \$10.3 million or 6 percent compared to the prior fiscal year. This reflects an increase of \$6.6 million in net pension liability, an increase of \$3.2 million in customer advances for construction, and an increase in the current portion of revenue bonds of \$3.1 million. KUB over recovered \$2.7 million in wholesale power costs from its customers in fiscal year 2019, as compared to a \$4.7 million over recovery in fiscal year 2018. This over recovery of costs will be flowed back to KUB's electric customers during the next fiscal year through adjustments to rates via the Purchased Power Adjustment.

The outstanding balance on TVA conservation loans declined by \$1.3 million, as KUB ceased issuance of any new loans in fiscal year 2016.

Long-term Debt

Fiscal Year 2020 Compared to Fiscal Year 2019

Long-term debt decreased \$8.9 million or 0.8 percent. Revenue bonds totaling \$36 million were sold for the water and wastewater system in July 2019 and \$68.9 million of revenue refunding bonds were sold in April 2020, which were offset by the refunded bonds and the scheduled repayment of debt. During the fiscal year, \$42.6 million of bond debt was repaid, which included a \$2 million gas system cash contribution to help retire existing debt, and principal payments from the July 2019 revenue bond issuance.

Fiscal Year 2019 Compared to Fiscal Year 2018

Long-term debt increased \$37.9 million or 3.5 percent. Revenue bonds totaling \$80 million were sold in August 2018 and were offset by the scheduled repayment of debt. During the fiscal year, \$37.9 million of bond debt was repaid, which included principal payments from the August 2018 revenue bond issuance.

Deferred Inflows of Resources

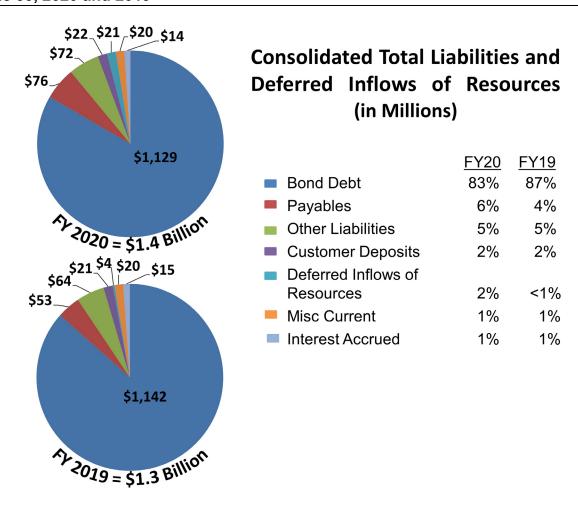
Fiscal Year 2020 Compared to Fiscal Year 2019

Deferred inflows increased \$16.7 million compared to the prior fiscal year due to differences in pension inflows.

Fiscal Year 2019 Compared to Fiscal Year 2018

Deferred inflows decreased \$10.4 million compared to the prior fiscal year due to differences in pension inflows.

(Space left intentionally blank)



Net Position

Fiscal Year 2020 Compared to Fiscal Year 2019

Unrestricted net position decreased \$41.9 million or 17.5 percent compared to the previous fiscal year, partially due to a \$7.1 million decrease in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments), a \$6.8 million decrease in inventories, along with an increase of \$22.9 million in accounts payable, and an increase of \$6.1 million in net OPEB liability. Net investment in capital assets increased \$119 million or 13.7 percent, the result of net capital assets increasing \$115.6 million and a \$5.8 million decrease in current portion of revenue bonds and total long-term debt. Restricted net position increased \$0.9 million compared to the prior year.

Fiscal Year 2019 Compared to Fiscal Year 2018

Unrestricted net position decreased \$13.3 million or 5.3 percent compared to the previous fiscal year, partially due to an \$11.6 million decrease in general fund cash (including cash and cash equivalents, short-term investments, and long-term investments). Net investment in capital assets increased \$76.8 million or 9.7 percent, the result of net capital assets increasing \$122.2 million and a \$41.1 million increase in current portion of revenue bonds and total long-term debt. Restricted net position increased \$1.9 million compared to the prior year.

Statement of Revenues, Expenses and Changes in Net Position

The following table reflects the condensed consolidated Statement of Revenues, Expenses and Changes in Net Position for KUB compared to the prior two fiscal years.

Statements of Revenues, Expenses and Changes in Net Position For the Years Ended June 30

(in thousands of dollars)	2020	2019	2018
Operating revenues	\$ 803,751	\$ 815,390	\$ 815,544
Less: Purchased energy expense	 436,236	462,564	477,038
Margin from sales	367,515	352,826	338,506
Operating expenses			
Treatment	16,306	16,355	15,951
Distribution and collection	70,822	66,590	63,868
Customer service	14,007	15,710	13,327
Administrative and general	41,668	42,601	30,891
Depreciation	72,826	74,730	77,666
Taxes and tax equivalents	 35,863	36,310	34,504
Total operating expenses	 251,492	252,296	236,207
Operating income	116,023	100,530	102,299
Interest income	4,740	6,626	4,063
Interest expense	(43, 127)	(43,590)	(41,962)
Other income/(expense)	 (52)	668	(1,296)
Change in net position before capital contributions	77,584	64,234	63,104
Capital contributions	417	1,104	467
Change in net position	\$ 78,001	\$ 65,338	\$ 63,571

Normal Impacts on Statement of Revenues, Expenses and Changes in Net Position

The following is a description of activities which will normally impact the comparability of the Statement of Revenues, Expenses and Changes in Net Position presentation:

- Operating revenue is largely determined by volume of sales for the fiscal year. Any change (increase/decrease) in retail rates would also be a cause of change in operating revenue.
- Purchased energy expense is determined by volume of power purchases from TVA and volume of natural gas purchases for the fiscal year. Also, any change (increase/decrease) in wholesale power and/or gas rates would result in a change in purchased energy expense.
- Operating expenses (distribution, customer service, administrative and general) are normally impacted by changes in areas including, but not limited to, labor cost (staffing, wage rates), active employee and retiree medical expenses, and system maintenance.
- Depreciation expense is impacted by plant additions and retirements during the fiscal year.
- Taxes and equivalents are impacted by plant additions/retirements, changes in property tax rates, and gross margin levels.

- Interest income is impacted by level of interest rates and investments.
- Interest expense on debt is impacted by level of outstanding debt and the interest rate(s) on the outstanding debt.
- Other income/(expense) is impacted by miscellaneous non-operating revenues and expenses.
- Capital contributions are impacted by a donation of facilities/infrastructure to KUB by developers and
 governmental agencies. The contributions are recognized as revenue and recorded as plant in service
 based on the fair market value of the asset(s).

Impacts and Analysis

Change in Net Position

Fiscal Year 2020 Compared to Fiscal Year 2019

KUB's consolidated Change in Net Position increased \$78 million in fiscal year 2020. Comparatively, net position increased \$65.3 million in fiscal year 2019.

Fiscal Year 2019 Compared to Fiscal Year 2018

KUB's consolidated Change in Net Position increased \$65.3 million in fiscal year 2019. Comparatively, net position increased \$63.6 million in fiscal year 2018. A restatement to the fiscal year 2018 beginning net position, based on a change in method of accounting for OPEB, increased the total net position by an additional \$4.5 million. The change resulted in a total increase of \$68.1 million in KUB's net position.

(Space left intentionally blank)

Margin from Sales

Fiscal Year 2020 Compared to Fiscal Year 2019

Operating revenue was \$11.6 million lower than the previous fiscal year. Both electric and natural gas sales were impacted by a milder winter than the previous fiscal year. Electric Division operating revenue decreased \$12.7 million due to the net result of additional revenue from KUB's 1 percent electric rate increase effective October 2019, a 2.3 percent decrease in sales volumes, and the flow through of prior year over recovered purchased power costs to electric customers. Gas Division revenue decreased \$6 million for the fiscal year, the net result of a 3.2 percent decrease in billed sales and additional revenue generated from the 2 percent gas rate increase effective October 2019. Water Division revenue increased \$4.3 million, the net result of additional revenue from the 6.5 percent water rate increase effective July 2019 and a 1.2 percent decline in billed water sales volumes. Wastewater Division revenue was \$2.7 million higher than the previous year due to additional revenue from the 5 percent wastewater rate increase effective July 2019 offset by a 3.3 percent decrease in billable wastewater volumes.

Wholesale energy expense decreased \$26.3 million or 5.7 percent. Purchased power expense decreased \$19.8 million compared to last year, reflecting lower customer demand and flow through of lower wholesale power costs. Purchased gas expense was \$6.6 million lower, reflecting lower customer demand for the fiscal year and lower natural gas prices.

Margin from sales (operating revenue less purchased energy expense) increased \$14.7 million compared to the previous year. The increase reflects additional revenue from the electric, natural gas, water, and wastewater rate increases.

Fiscal Year 2019 Compared to Fiscal Year 2018

Operating revenue was \$0.2 million lower than the previous fiscal year. Both electric and natural gas sales were impacted by a milder winter than the previous fiscal year. Electric Division operating revenue decreased \$1.7 million due to the net result of additional revenue from KUB's electric rate increase, lower sales volumes, and the flow through of prior year over recovered purchased power costs to electric customers. Gas Division revenue decreased \$6 million for the fiscal year, the net result of a 5.6 percent decrease in billed sales and additional revenue generated from the October 2018 gas rate increase. Water Division revenue increased \$3.7 million, the net result of additional revenue from the July 2018 water rate increase and a 1.1 percent decline in billed water sales volumes. Wastewater Division revenue was \$3.8 million higher than the previous year due to additional revenue from the July 2018 wastewater rate increase offset by a one percent decrease in billable wastewater volumes.

Wholesale energy expense decreased \$14.5 million or 3 percent. Purchased power expense decreased \$8.1 million compared to last year, reflecting lower customer demand. Purchased gas expense was \$6.4 million lower, reflecting lower customer demand for the fiscal year.

Margin from sales (operating revenue less purchased energy expense) increased \$14.3 million compared to the previous year. The increase reflects additional revenue from the electric, natural gas, water, and wastewater rate increases.

Operating Expenses

Fiscal Year 2020 Compared to Fiscal Year 2019

Operating expenses (excluding wholesale purchased energy expense) decreased \$0.8 million compared to fiscal year 2019. Operating expenses include operations and maintenance (O&M) expense, depreciation, and taxes/tax equivalents. O&M expenses can be further classified as treatment, distribution and collection, customer service, and administrative and general.

- Treatment expenses were consistent with the prior year.
- Distribution and collection expenses increased \$4.2 million or 6.4 percent, primarily due to vegetation management costs.
- Customer service expenses decreased \$1.7 million, primary due to lower expenses associated with meter reading contractors and technology consultants.
- Administrative and general expenses decreased \$0.9 million, primarily due to a decrease in insurance costs.

Materials & **Utilities** \$7.3 Million Chemicals \$6.4 Million 5% 4% Vegetation Mgmt \$12.2 Million 9% Other \$12.9 Million_ **Labor Related** 9% \$80.4 Million **Contractors &** 56% **Consultants** \$23.6 Million 17%

FY 2020 Consolidated O&M Expense = \$142.8 Million

- Depreciation expense decreased \$1.9 million or 2.5 percent. KUB added \$135.4 million in assets during fiscal year 2019. A full year of depreciation expense was recorded on these capital investments and a partial year of depreciation expense was incurred on \$161.1 million in assets placed in service during fiscal year 2020. In addition, \$46.8 million of assets were retired during fiscal year 2020.
- Taxes and tax equivalents decreased \$0.4 million or 1.2 percent. Tax equivalent payments to taxing jurisdictions in which KUB's utility systems are located are based on a combination of net plant values and margin from energy sales.

Fiscal Year 2019 Compared to Fiscal Year 2018

Operating expenses (excluding wholesale purchased energy expense) increased \$16.1 million compared to fiscal year 2018. Operating expenses include operations and maintenance (O&M) expense, depreciation, and taxes/tax equivalents. O&M expenses can be further classified as treatment, distribution and collection, customer service, and administrative and general.

- Treatment expenses were \$0.4 million higher than the prior year, reflecting higher outside contractor and consultant expenses for the wastewater system offset by lower outside contractor costs and labor related expenses for the water system.
- Distribution and collection expenses increased \$2.7 million or 4.3 percent, primarily due to higher utility system contractors, electric line contractors, and higher labor related expenses.
- Customer service expenses increased \$2.4 million, primary due to higher expenses associated with meter reading contractors and technology consultants.
- Administrative and general expenses increased \$11.7 million, primarily due to an increase in labor related expenses including higher pension expenses, reflecting impact of investment losses on Pension Trust assets in 2018.

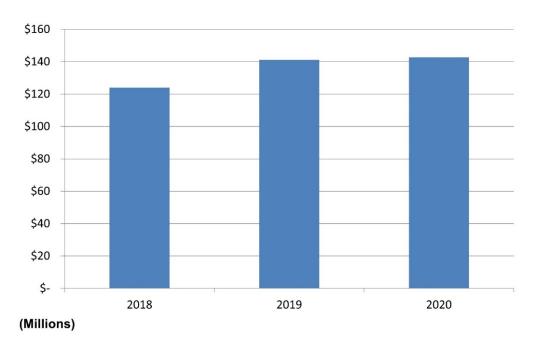
Utilities Materials & Chemicals \$7.4 Million \$5.9 Million 5% Vegetation 4% Mgmt \$7.9 Million 6% Other \$17 Million **Labor Related** 12% \$76 Million 54% **Contractors & Consultants** \$27 Million 19%

FY 2019 Consolidated O&M Expense = \$141.2 Million

Depreciation expense decreased \$2.9 million or 3.8 percent, primarily due to the sale of streetlight assets to the City of Knoxville in 2018 and full depreciation of key information technology systems. KUB added \$145.3 million in assets during fiscal year 2018. A full year of depreciation expense was recorded on these capital investments and a partial year of depreciation expense was incurred on \$135.4 million in assets placed in service during fiscal year 2019.

Taxes and tax equivalents increased \$1.8 million or 5.2 percent due to increased plant in service levels. Tax equivalent payments to taxing jurisdictions in which KUB's utility systems are located are based on a combination of net plant values and margin from energy sales.

Consolidated Operation & Maintenance Expense



Other Income and Expense

Fiscal Year 2020 Compared to Fiscal Year 2019

Interest income decreased \$1.9 million compared to the prior fiscal year, reflecting lower short-term interest rates over the prior fiscal year.

Interest expense decreased \$0.5 million or 1.1 percent, reflecting the net impact of interest expense from new revenue bonds sold during the fiscal year and savings on refunding of outstanding bonds.

Other income (net) decreased \$0.7 million, primarily due to mark-to-market adjustments on investments.

Capital contributions by developers were \$0.7 million lower due to a decrease in donated utility assets compared to the prior fiscal year.

Fiscal Year 2019 Compared to Fiscal Year 2018

Interest income increased \$2.6 million compared to the prior fiscal year, reflecting increases in short-term interest rates over the prior fiscal year.

Interest expense increased \$1.6 million or 3.9 percent, reflecting the impact of interest expense from new revenue bonds sold during the fiscal year.

Other income (net) increased \$2 million, primarily due to mark-to-market adjustments on investments.

Capital contributions by developers were \$0.6 million higher due to increased donated utility assets compared to the prior fiscal year.

Capital Assets

Capital Assets As of June 30 (Net of Depreciation)

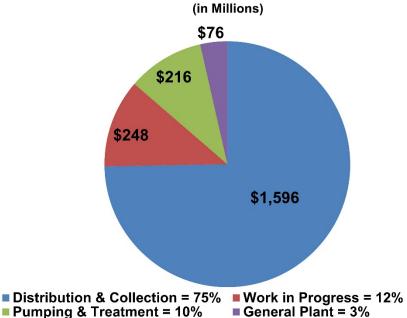
(in thousands of dollars)	2020		20 2019			2018
Production Plant (Intakes)	\$	7	\$	7	\$	57
Pumping and Treatment Plant		216,136		209,281		204,756
Distribution and Collection Plant						
Mains and metering	\$	865,744	\$	837,277	\$	825,318
Services and meters		168,800		152,554		129,275
Electric station equipment		57,564		52,974		54,695
Poles, towers and fixtures		140,424		137,804		127,343
Overhead conductors		110,865		108,965		99,761
Line transformers		61,725		61,784		61,446
Other accounts		191,009	_	187,759	_	185,945
Total Distribution & Collection Plant	\$	1,596,131	\$	1,539,117	\$	1,483,783
General Plant		75,934		54,690		55,713
Total Plant Assets	\$	1,888,208	\$	1,803,095	\$	1,744,309
Work In Progress		247,572	_	217,074	_	153,686
Total Net Plant	\$	2,135,780	_\$	2,020,169	\$	1,897,995

(Space left intentionally blank)

Fiscal Year 2020 Compared to Fiscal Year 2019

As of June 30, 2020, KUB had \$2.1 billion invested in capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$115.6 million or 5.7 percent over the end of the last fiscal year.

FY 2020 Consolidated Capital Assets = \$2.1 Billion



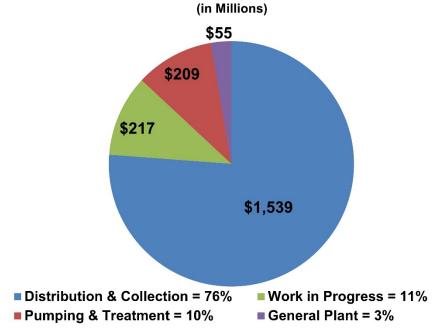
Major capital asset additions during the year were as follows:

- \$46 million related to wastewater Century II projects
- \$20.2 million for wastewater treatment plant upgrades
- \$9.1 million for sewer mini-basin rehabilitation and replacement
- \$5.2 million for rehabilitation projects
- \$3.9 million for pump station construction and improvements
- \$3.9 million for short line projects
- \$3.7 million for sewer trunk line rehabilitation and replacement
- \$24.1 million for various electric distribution system improvements
- \$11.4 million for building improvements including a new Engineering Building
- \$10.5 million for Grid Modernization and advanced metering, including SCADA system upgrades, for the electric, gas and water systems
- \$9.6 million for water main replacements
- \$9.3 million for the construction of gas mains
- \$7.3 million for pole replacements for the electric system

Fiscal Year 2019 Compared to Fiscal Year 2018

As of June 30, 2019, KUB had \$2 billion invested in capital assets, as reflected in the schedule of capital assets, which represents a net increase (including additions, retirements, and depreciation) of \$122.2 million or 6.4 percent over the end of the last fiscal year.

FY 2019 Consolidated Capital Assets = \$2 Billion



Major capital asset additions during the year were as follows:

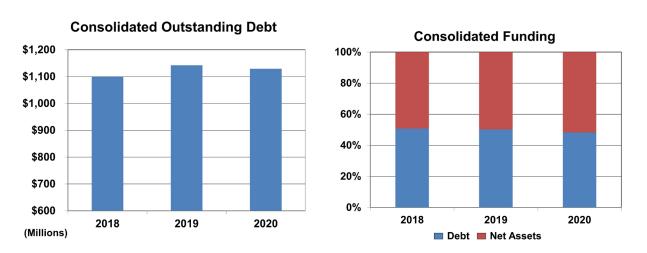
- \$42.9 million related to wastewater Century II projects
- \$19.1 million for wastewater treatment plant upgrades
- \$8.6 million for sewer mini-basin rehabilitation and replacement
- \$5.2 million for pump station construction and improvements
- \$4.1 million for sewer trunk line rehabilitation and replacement
- \$3.1 million for rehabilitation projects
- \$2.8 million for short line projects
- \$29.5 million for various electric distribution system improvements
- \$16.8 million for building improvements
- \$14.1 million for Grid Modernization and advanced metering, including SCADA system upgrades, for the electric, gas and water systems
- \$11.3 million for water plant and system improvements
- \$10.3 million for pole replacements for the electric system
- \$8.3 million for replacement and relocation of utility assets for the gas and water system to accommodate TDOT highway improvement projects

Debt Administration

KUB's outstanding debt was \$1.13 billion at June 30, 2020. Debt as a percentage of capital structure was 48.3 percent in 2020, 50.2 percent in 2019, and 50.8 percent at the end of fiscal year 2018.

Outstanding Debt As of June 30

(in thousands of dollars)	2020	2019	2018
Revenue bonds	\$ 1,128,795	\$ 1,141,925	\$ 1,099,795
Total outstanding debt	1,128,795	\$ 1,141,925	\$ 1,099,795



KUB will pay \$471.7 million in principal payments over the next ten years, representing 42 percent of outstanding bonds.

Fiscal Year 2020 Compared to Fiscal Year 2019

As of June 30, 2020, KUB had \$1.13 billion in outstanding debt (including the current portion of revenue bonds) compared to \$1.14 billion last year, a decrease of \$13.1 million. The decrease is attributable to new revenue and refunding bonds issued during the fiscal year offset by the scheduled repayment of debt. As of June 30, 2020, KUB's weighted average cost of debt was 3.65 percent (3.55 percent including the impact of Build America Bonds rebates).

KUB sold \$14.4 million in electric system revenue refunding bonds in April 2020 for the purpose of refinancing existing electric system revenue bonds at lower interest rates. KUB will realize a total debt service savings of \$2.4 million over the life of the bonds (\$2.2 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 1.50 percent. The bonds mature over a period of 10 years with a final maturity in fiscal year 2031.

KUB sold \$6.8 million in gas system revenue refunding bonds in April 2020 for the purpose of refinancing existing gas system revenue bonds at lower interest rates. KUB will realize a total debt service savings of \$1.8 million over the life of the bonds (\$1.3 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 1.60 percent. The bonds mature over a period of 10 years with a final maturity in fiscal year 2030.

KUB sold \$20 million in water system revenue bonds in July 2019 for the purpose of funding water system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.79 percent. The bonds mature over a period of 30 years with a final maturity in fiscal year 2049.

KUB sold \$19.5 million in water system revenue refunding bonds in April 2020 for the purpose of refinancing existing water system revenue bonds at lower interest rates. KUB will realize a total debt service savings of \$3.9 million over the life of the bonds (\$3.1 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.55 percent. The bonds mature over a period of 20 years with a final maturity in fiscal year 2040.

KUB sold \$16 million in wastewater system revenue bonds in July 2019 for the purpose of funding wastewater system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.79 percent. The bonds mature over a period of 30 years with a final maturity in fiscal year 2049.

KUB sold \$28.2 million in wastewater system revenue refunding bonds in April 2020 for the purpose of refinancing existing wastewater system revenue bonds at lower interest rates. KUB will realize a total debt service savings of \$18.9 million over the life of the bonds (\$8.8 million on a net present value basis). The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.66 percent. The bonds mature over a period of 25 years with a final maturity in fiscal year 2045.

KUB's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. As of June 30, 2020, Standard & Poor's rated the revenue bonds of the Water Division AAA, the Wastewater Division AA+, and the revenue bonds of the Electric Division and the Gas Division AA. Moody's Investors Service rated the bonds of the Water Division Aa1 and the Electric, Gas, and Wastewater Divisions Aa2.

Fiscal Year 2019 Compared to Fiscal Year 2018

As of June 30, 2019, KUB had \$1.14 billion in outstanding debt (including the current portion of revenue bonds) compared to \$1.1 billion last year, an increase of \$42.1 million. The increase is attributable to new revenue bonds issued during the fiscal year offset by the scheduled repayment of debt. As of June 30, 2019, KUB's weighted average cost of debt was 3.79 percent (3.59 percent including the impact of Build America Bonds rebates).

KUB sold \$40 million in electric system revenue bonds in August 2018 for the purpose of funding electric system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.42 percent.

KUB sold \$8 million in gas system revenue bonds in August 2018 for the purpose of funding gas system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.49 percent.

KUB sold \$20 million in water system revenue bonds in August 2018 for the purpose of funding water system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.46 percent.

KUB sold \$12 million in wastewater system revenue bonds in August 2018 for the purpose of funding wastewater system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 3.49 percent.

KUB's outstanding debt is rated by Standard & Poor's and Moody's Investors Service. In May 2019, KUB received a change in its long-term rating from Standard & Poor's on the electric system. The reduction from

'AA+' to 'AA' reflects a change in methodology in how Standard & Poor's calculates fixed-charge coverage by including the utility's demand component of its purchased power bill to cover its portion of the Tennessee Valley Authority's (TVA) fixed costs, including debt service associated with generating plants. KUB's reduction is consistent with that of other TVA distributors due to the same change in methodology. As of June 30, 2019, Standard & Poor's rated the revenue bonds of the Water Division AAA, the Wastewater Division AA+, and the revenue bonds of the Electric Division and the Gas Division AA. Moody's Investors Service rated the bonds of the Water Division Aa1 and the Electric, Gas, and Wastewater Divisions Aa2.

Impacts on Future Financial Position

KUB anticipates a net increase of 3,730 customers during fiscal year 2021.

During March 2020, a global pandemic was declared related to the rapidly growing outbreak of a novel strain of coronavirus (COVID-19). While the disruption is currently expected to be temporary, there is uncertainty around its duration and the ultimate future impact, if any, on results of operations, financial position, liquidity or capital resources. In response to the COVID-19 pandemic, the Water Division chose to forego a proposed 5% rate increase and the Wastewater Division chose to forego a proposed 2.25% rate increase for fiscal year 2021 to reduce financial impact on its customers.

In March 2020, KUB executed a new Long-Term Partnership Agreement with TVA, extending the term of its five-year evergreen power supply contract with TVA to a 20-year evergreen contract. In return for signing the longer-term agreement with TVA, KUB will receive an annual partnership credit of 3.1% on TVA's wholesale base rates, estimated to be around \$9.5 million per year. Among other things, the new partnership agreement also provides KUB with the flexibility to self-generate up to five percent of its annual power supply through renewable sources.

KUB will be using a portion of the annual partnership credit, around \$800,000 annually, to purchase 212MW of solar power to meet the needs of its electric system customers through TVA's Green Invest Program. This first of its kind agreement in the TVA region will provide 465 million kilowatt-hours of solar output and represent about eight percent of KUB's electric system load. The solar developments providing the 212MW of solar energy are due to be completed in fiscal year 2022.

KUB expects to receive reimbursements in fiscal year 2021 from the Federal Emergency Management Agency (FEMA) to partially offset the cost of the 2019 storm and flood event.

KUB sold \$9 million in water system revenue bonds on October 7, 2020, with a scheduled closing on October 30, 2020, for the purpose of funding water system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.36 percent. The bonds mature over a period of 30 years with a final maturity in fiscal year 2050.

KUB sold \$27.5 million in wastewater system revenue bonds on October 7, 2020, with a scheduled closing on October 30, 2020, for the purpose of funding wastewater system capital improvements. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.41 percent. The bonds mature over a period of 30 years with a final maturity in fiscal year 2050.

Ratings by Standard & Poor's and Moody's Investors Service were reaffirmed for the water and wastewater systems as part of the issuance process for the aforementioned bonds.

KUB long-term debt includes \$59.9 million of Build America Bond (BABs). The BABs were sold on a taxable basis with the United States Treasury providing a rebate to KUB for a percentage of the interest cost. The interest rebates were subject to federal sequestration during the fiscal year and were reduced by 5.9 percent. Any future actions by Congress may also affect the anticipated rebates for future fiscal years.

The Pension Plan actuarial valuation for the Plan year beginning January 1, 2019 resulted in an actuarially determined contribution of \$3,167,680 for the fiscal year ending June 30, 2021, based on the Plan's current funding policy. Subsequent to June 30, 2020, the actuarial valuation for the Plan year beginning January 1, 2020 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$3,665,168 for the fiscal year ending June 30, 2022, based on the Plan's current funding policy. For the Plan year beginning January 1, 2020, the Plan's actuarial funded ratio is 101.61 percent.

The OPEB Plan actuarial valuation as of January 1, 2019 resulted in an actuarially determined contribution of \$757,226 for the fiscal year ending June 30, 2021, based on the Plan's current funding policy. Subsequent to June 30, 2020, the actuarial valuation as of January 1, 2020 was completed. The actuarial valuation resulted in an actuarially determined contribution of \$489,066 for the fiscal year ending June 30, 2022, based on the Plan's current funding policy. The Plan's actuarial funded ratio is 97.68 percent.

GASB Statement No. 84, Fiduciary Activities, is effective for fiscal years beginning after December 15, 2019. GASB Statement No. 87, Leases, is effective for fiscal years beginning after June 15, 2021. GASB Statement No. 89, Accounting for Interest Cost Incurred Before the End of a Construction Period, is effective for fiscal years beginning after December 15, 2020. GASB Statement No. 90, Major Equity Interests - an amendment of GASB Statements No. 14 and No. 61, is effective for fiscal years beginning after December 15, 2019. GASB Statement No. 91, Conduit Debt Obligations, is effective for fiscal years beginning after December 15, 2021. GASB Statement No. 92, Omnibus 2020, is effective for fiscal years beginning after June 15, 2021. GASB Statement No. 93, Replacement of Interbank Offered Rates, is effective for fiscal years beginning after June 15, 2021. GASB Statement No. 94, Public-Private and Public-Public Partnerships and Availability Payment Arrangements, is effective for fiscal years beginning after June 15, 2022. GASB Statement No. 96, Subscription-Based Information Technology Arrangements, is effective for fiscal years beginning after June 15, 2022. GASB Statement No. 97, Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans, is effective for fiscal years beginning after June 15, 2021. KUB has not elected early implementation of these standards and has not completed the process of evaluating the impact of these statements on its financial statements.

No other facts, decisions, or conditions are currently known which would have a significant impact on KUB's financial position or results of operations during fiscal year 2020.

Financial Contact

KUB's financial statements are designed to present users (citizens, customers, investors, and creditors) with a general overview of KUB's financial position and results of operations for the fiscal years ended June 30, 2020 and 2019. If you have questions about the statements or need additional financial information, contact KUB's Chief Financial Officer at 445 South Gay Street, Knoxville, Tennessee 37902.

Knoxville Utilities Board Consolidated Statements of Net Position June 30, 2020 and 2019

		2020		2019
Assets and Deferred Outflows of Resources				
Current assets:				
Cash and cash equivalents	\$	99,445,520	\$	91,639,940
Short-term investments		12,578,300		27,471,225
Short-term contingency fund investments		94,270,579		79,038,925
Other current assets		1,801,954		1,405,053
Accrued interest receivable		49,263		159,019
Accounts receivable, less allowance of uncollectible account	ts			
of \$594,422 in 2020 and \$589,889 in 2019		76,694,933		76,689,091
Inventories		15,349,955		22,127,455
Prepaid expenses		867,359		874,206
Gas storage		6,296,386		7,251,486
Total current assets	_	307,354,249	-	306,656,400
Restricted assets:				
Bond funds		35,991,556		35,948,463
Other funds		1,514		21,482
Total restricted assets	_	35,993,070	-	35,969,945
Plant in service		2,834,424,004		2,720,121,544
Less accumulated depreciation		(946,215,640)		(917,026,275)
	-	1,888,208,364	-	1,803,095,269
Retirement in progress		4,733,893		3,688,844
Construction in progress		242,837,988		213,384,960
Net plant in service	_	2,135,780,245	-	2,020,169,073
Other assets:				
Net pension asset		19,121,375		_
Long-term contingency fund investments		16,935,949		29,934,235
TVA conservation program receivable		1,933,798		2,961,311
Under recovered purchased gas cost		1,513,434		1,339,422
Other		12,371,684		12,989,818
Total other assets	_	51,876,240	-	47,224,786
Total assets	-	2,531,003,804	-	2,410,020,204
Deferred outflows of resources:				
Pension outflow		8,123,085		17,252,635
OPEB outflow		4,178,710		2,493,180
Unamortized bond refunding costs		20,934,777		21,462,880
Total deferred outflows of resources	-	33,236,572	-	41,208,695
Total assets and deferred outflows of resources	\$	2,564,240,376	\$	2,451,228,899

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

Knoxville Utilities BoardConsolidated Statements of Net Position June 30, 2020 and 2019

	2020	2019
Liabilities, Deferred Inflows, and Net Position		
Current liabilities:		
Current portion of revenue bonds	\$ 43,125,000	\$ 39,970,000
Sales tax collections payable	1,375,324	1,422,867
Accounts payable	74,337,079	51,433,305
Accrued expenses	21,443,876	20,412,212
Customer deposits plus accrued interest	21,690,456	20,674,169
Accrued interest on revenue bonds	13,807,353	14,675,955
Total current liabilities	175,779,088	148,588,508
Other liabilities:		
TVA conservation program	2,023,948	3,082,829
Accrued compensated absences	10,280,214	9,184,481
Customer advances for construction	9,658,968	8,144,729
Net pension liability	20,236	6,881,639
Net OPEB liability	7,589,447	1,447,742
Over recovered purchased power cost	1,848,630	2,674,466
Other	263,388	236,604
Total other liabilities	31,684,831	31,652,490
Long-term debt:		
Revenue bonds	1,085,670,000	1,101,955,000
Unamortized premiums/discounts	40,419,199	33,071,871
Total long-term debt	1,126,089,199	1,135,026,871
Total liabilities	1,333,553,118	1,315,267,869
Deferred inflows of resources:		
Pension inflow	20,568,586	3,843,381
Total deferred inflows of resources	20,568,586	3,843,381
Total liabilities and deferred inflows of resources	1,354,121,704	1,319,111,250
Net position		
Net investment in capital assets	990,228,184	871,180,151
Restricted for:		
Debt service	22,184,203	21,272,508
Other	1,514	21,482
Unrestricted	197,704,771	239,643,508
Total net position	1,210,118,672	1,132,117,649
Total liabilities, deferred inflows, and net position	\$ 2,564,240,376	\$ 2,451,228,899

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

Knoxville Utilities Board Consolidated Statements of Revenues, Expenses and Changes in Net Position June 30, 2020 and 2019

	2020		2019
Operating revenues			
Electric \$	538,808,337	\$	551,464,042
Gas	102,265,243		108,316,063
Water	61,882,169		57,555,214
Wastewater	100,795,468		98,054,399
Total operating revenues	803,751,217	_	815,389,718
Operating expenses		-	
Purchased power	393,246,624		413,008,588
Purchased gas	42,989,092		49,554,956
Treatment	16,305,741		16,355,397
Distribution and collection	70,822,228		66,589,972
Customer service	14,007,340		15,710,333
Administrative and general	41,668,181		42,600,716
Provision for depreciation	72,825,673		74,729,662
Taxes and tax equivalents	35,862,712	_	36,310,281
Total operating expenses	687,727,591	_	714,859,905
Operating income	116,023,626	_	100,529,813
Non-operating revenues (expenses)		_	
Contributions in aid of construction	4,826,784		4,915,266
Interest income	4,739,605		6,625,915
Interest expense	(43,127,332)		(43,590,141)
Amortization of debt costs	195,502		102,529
Write-down of plant for costs recovered through contributions	(4,826,784)		(4,915,266)
Other	(247,449)	_	566,668
Total non-operating revenues (expenses)	(38,439,674)		(36,295,029)
Change in net position before capital contributions	77,583,952	_	64,234,784
Capital contributions	417,071	_	1,103,607
Change in net position	78,001,023		65,338,391
Net position, beginning of year	1,132,117,649	_	1,066,779,258
Net position, end of year \$	1,210,118,672	\$	1,132,117,649

Knoxville Utilities Board Consolidated Statements of Cash Flows June 30, 2020 and 2019

		2020		2019
Cash flows from operating activities:	_		_	
Cash receipts from customers	\$	800,678,418	\$	817,447,076
Cash receipts from other operations		15,674,228		15,864,600
Cash payments to suppliers of goods or services		(499,147,360)		(559,980,615)
Cash payments to employees for services		(57,577,942)		(56,925,927)
Payment in lieu of taxes Cash receipts from collections of TVA conservation loan program participants		(30,924,835) 1,171,803		(31,550,780) 1,539,808
Cash payments for TVA Conservation loan program		(1,203,172)		(1,548,508)
Net cash provided by operating activities		228,671,140		184,845,654
Not odon provided by operating detivities		220,071,140	•	104,040,004
Cash flows from capital and related financing activities:				
Net proceeds from bond issuance		37,863,502		80,122,836
Principal paid on revenue bonds		(42,619,999)		(37,860,000)
Interest paid on revenue bonds		(43,995,934)		(43,006,465)
Acquisition and construction of plant		(196,870,532)		(203,842,819)
Changes in bond funds, restricted		(43,093)		(2,442,009)
Customer advances for construction		1,558,719		3,347,423
Proceeds received on disposal of plant		283,021		342,017
Cash received from developers and individuals for capital purposes		4,826,784		4,915,266
Net cash used in capital and related financing activities		(238,997,532)		(198,423,751)
Cash flows from investing activities:				
Purchase of investment securities		(93,646,469)		(71,745,842)
Maturities of investment securities		106,545,000		42,935,000
Interest received		5,071,875		6,479,650
Other property and investments		161,566		(668,695)
Net cash provided by (used in) investing activities		18,131,972		(22,999,887)
Net increase (decrease) in cash and cash equivalents		7,805,580		(36,577,984)
Cash and cash equivalents, beginning of year		91,639,940		128,217,924
Cash and cash equivalents, end of year	\$	99,445,520	\$	91,639,940
Reconciliation of operating income to net cash provided by operating activities				
Operating income	\$	116,023,626	\$	100,529,813
Adjustments to reconcile operating income to net cash				
provided by operating activities:				
Depreciation expense		75,652,541		77,384,125
Changes in operating assets and liabilities:				
Accounts receivable		(5,842)		5,408,188
Inventories		6,777,500		1,064,356
Prepaid expenses		961,947		(221,767)
TVA conservation program receivable		1,027,513		1,339,690
Other assets		(62,267)		1,352,685
Sales tax collections payable		(47,543)		49,434
Accounts payable and accrued expenses		29,359,322		2,610,084
TVA conservation program payable		(1,058,881)		(1,348,390)
Unrecovered purchased power cost		(825,836)		(2,032,249)
Underrecovered gas costs		(174,012)		(2,806,145)
Customer deposits plus accrued interest		1,016,287		1,434,638
Other liabilities	<u> </u>	26,785	φ.	81,192
Net cash provided by operating activities	\$ <u> </u>	228,671,140	\$.	184,845,654
Noncash capital activities:				
Acquisition of plant assets through developer contributions	\$	417,071	\$	1,103,607

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

1. Description of Business

Knoxville Utilities Board (KUB), comprised of the Electric Division, Gas Division, Water Division, and Wastewater Division (Divisions), is reported as a component unit enterprise fund in the financial statements of the City of Knoxville. KUB's responsibility is to oversee the purchase, production, distribution, and processing of electricity, natural gas, water, and wastewater services. A seven-member Board of Commissioners (Board) governs KUB. The Board has all powers to construct, acquire, expand, and operate the Divisions. It has full control and complete jurisdiction over the management and operation of the Divisions, including setting rates. KUB's accounts are maintained in conformity with the Uniform System of Accounts of the Federal Energy Regulatory Commission (FERC), the Uniform System of Accounts of the National Association of Regulatory Utility Commissioners (NARUC), and the Governmental Accounting Standards Board (GASB), as applicable.

2. Significant Accounting Policies

Basis of Accounting

In conformity with Generally Accepted Accounting Principles (GAAP), KUB follows the provisions of GASB Statement No. 34 (Statement No. 34), *Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, as amended by GASB Statement No. 63 (Statement No. 63), *Financial Reporting of Deferred Outflows of Resources, Deferred Inflows of Resources and Net Position*. Statement No. 34 established standards for external financial reporting for all state and local governmental entities. Under Statement No. 63, financial statements include deferred outflows of resources and deferred inflows of resources, in addition to assets and liabilities, and report *net position* instead of net assets. In addition, KUB follows GASB Statement No. 62 (Statement No. 62), *Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements*, as it relates to certain items for regulatory accounting. Regulatory accounting allows a regulated utility to defer a cost (a regulatory asset) or recognize an obligation (a regulatory liability) if it is probable that through the rate making process, there will be a corresponding increase or decrease in future revenues. Accordingly, KUB has recognized certain regulatory assets and regulatory liabilities in the accompanying Statements of Net Position.

The consolidated financial statements are prepared on the accrual basis of accounting, whereby revenues are recognized when earned and expenses are recognized when incurred. The accounting and financial reporting treatment applied is determined by measurement focus. The transactions are accounted for on a flow of economic resources measurement focus. With this measurement focus, all assets and all liabilities associated with the operations are included on the Statement of Net Position. Net position (i.e., total assets and deferred outflows of resources net of total liabilities and deferred inflows of resources) is segregated into net investment in capital assets, restricted for capital activity and debt service, and unrestricted components.

Recently Adopted New Accounting Pronouncements

In May 2020, the GASB issued GASB Statement No. 95 (Statement No. 95), *Postponement of the Effective Dates of Certain Authoritative Guidance*. The objective of this Statement is to provide temporary relief to governments and other stakeholders in light of the COVID-19 pandemic. That objective is accomplished by postponing the effective dates of certain provisions in Statements and Implementation Guides that first became effective or are scheduled to become effective for fiscal years beginning after June 15, 2018. The requirements of this Statement are effective immediately.

Principles of Consolidation

The consolidated financial statements include the accounts of the Electric, Gas, Water and Wastewater Divisions. All significant intercompany balances and transactions have been eliminated in consolidation.

KUB issues separate financial reports, which include financial statements and required supplementary information, for the Electric, Gas, Water, and Wastewater Divisions. These reports may be obtained by writing Knoxville Utilities Board, P.O. Box 59017, Knoxville, TN 37950-9017.

Plant

Plant and other property are stated on the basis of original cost. The costs of current repairs and minor replacements are charged to operating expense. The costs of renewals and improvements are capitalized. The original cost of utility plant assets retired or otherwise disposed of and the cost of removal less salvage value is charged to accumulated depreciation. When other property is retired, the related asset and accumulated depreciation are removed from the accounts, and the gain or loss is included in the results of operations.

The provision for depreciation of plants in service is based on the estimated useful lives of the assets, which range from three to sixty-seven years, and is computed using the straight-line method. Pursuant to FERC/NARUC, the caption "Provision for depreciation" in the consolidated Statements of Revenues, Expenses and Changes in Net Position does not include depreciation for transportation equipment of \$2,826,868 in fiscal year 2020 and \$2,654,463 in fiscal year 2019. Under regulatory accounting, interest costs are expensed as incurred with construction of plant assets.

Operating Revenue

Operating revenue consists primarily of charges for services provided by the principal operations of KUB. Operating revenue is recorded when the service is rendered, on a cycle basis, and includes an estimate of unbilled revenue. Revenues are reported net of bad debt expense of \$1,917,715 in fiscal year 2020 and \$1,926,366 in fiscal year 2019.

Non-operating Revenue

Non-operating revenue consists of revenues that are related to financing and investing types of activities and result from non-exchange transactions or ancillary activities.

Expense

When an expense is incurred for purposes for which there are both restricted and unrestricted assets available, it is KUB's policy to apply those expenses to restricted assets to the extent such are available and then to unrestricted assets.

Net Position

GASB Statement No. 63 requires the classification of net position into three components – net investment in capital assets, net position-restricted, and net position-unrestricted.

These classifications are defined as follows:

• Net investment in capital assets – This component of net position consists of capital assets, including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets. Deferred outflows of resources and deferred inflows of resources that are attributable to the acquisition, construction, or improvement of those assets or related debt also should be included in this component of net position. If there are significant unspent related debt proceeds at year end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Net position-restricted – This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets. Generally, a liability relates to restricted assets if the asset results from a resource flow that also results in the recognition of a liability or if the liability will be liquidated with the restricted assets reported.

Net position-unrestricted – This component of net position consists of assets, deferred
outflows of resources, liabilities, and deferred inflows of resources that are not included in the
determination of net investment in capital assets or the restricted component of net position.

Contributions in Aid of Construction and Capital Contributions

Contributions in aid of construction are cash collections from customers or others for a particular purpose, generally the construction of new facilities to serve new customers in excess of the investment KUB is willing to make for a particular incremental revenue source. KUB reduces the plant account balances to which contributions relate by the actual amount of the contribution and recognizes the contributions as non-operating revenue in accordance with Statement No. 62.

Capital contributions represent contributions of utility plant infrastructure constructed by developers and others in industrial parks and other developments and transferred to KUB upon completion of construction and the initiation of utility service. In accordance with GASB Statement No. 33, Accounting and Financial Reporting for Nonexchange Transactions, such contributions are recognized as revenues and capital assets upon receipt.

Inventories

Inventories, consisting of plant materials and operating supplies, are valued at the lower of average cost or replacement value.

OPEB Plan

KUB's employees hired prior to July 1, 1999, who are retired and who (prior to retirement) qualified for retiree medical insurance by meeting the Rule of 80 (age plus years of service) with a minimum of 20 years of service and were enrolled in medical coverage on their last day, are eligible for post-employment health care. KUB's OPEB Trust was established by KUB's Board of Commissioners through Resolution No. 1168, as amended, dated October 18, 2007. KUB's policy is to fully fund the annual actuarially determined contributions, which are determined by actuarial valuation. As required by GASB Statement No. 75, KUB measures net OPEB liability as total OPEB liability less the amount of the Plan's fiduciary net position. The amounts reported as of June 30, 2020 and 2019 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2020 and 2019 are based on a June 30, 2020 and 2019 measurement date, respectively. The net OPEB liability is \$7,589,447 as of June 30, 2020, and \$1,447,742 as of June 30, 2019.

Pension Plan and Qualified Excess Benefit Arrangement

KUB's employees are participants in the Knoxville Utilities Board Pension Plan as authorized by the Charter of the City of Knoxville §1107(J) (Note 10). KUB's policy is to fully fund the annual actuarially determined contributions. As required by GASB Statement No. 68, KUB measures net pension liability as total pension liability less the amount of the Plan's fiduciary net position. The amounts reported as of June 30, 2020 and 2019 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2020 and 2019 are based on a December 31, 2019 and 2018 measurement date, respectively. The net pension asset is \$19,121,375 as of June 30, 2020, and the net pension liability was \$6,649,756 as of June 30, 2019.

KUB implemented a qualified governmental excess benefit arrangement (QEBA) under IRC section 415(m), which was created by Congress to allow the payment of pension benefits that exceed the IRC section 415(b) limits (and therefore cannot be paid from a qualified retirement plan). The QEBA is a single-employer defined benefit pension plan, administered by KUB (Note 11). As required by GASB Statement No. 73, KUB measures the total pension liability of the QEBA. The amounts reported as of June 30, 2020 and 2019 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2020 and 2019 are based on a December 31, 2019 and 2018 measurement date, respectively. The total pension liability of the QEBA is \$20,236 as of June 30, 2020, and \$231,883 as of June 30, 2019.

Investments

Investments are carried at fair value as determined by quoted market prices at the reporting date.

Self-Insurance

KUB has established self-insurance programs covering portions of workers' compensation, employee health, environmental liability, general liability, property and casualty liability, and automobile liability claims. A liability is accrued for claims as they are incurred. When applicable, claims in excess of the self-insured risk are covered by KUB's insurance carrier. Additionally, KUB provides certain lifetime health benefits to eligible retired employees under a self-insurance plan administered by a third party.

Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. These estimates are based on historical experience and various other assumptions that KUB believes are reasonable under the circumstances. However, future events are subject to change and the best estimates and judgments routinely require adjustment. Estimates are used for, but not limited to, inventory valuation, allowance for uncollectible accounts, depreciable lives of plant assets, unbilled revenue volumes, pension trust valuations, OPEB trust valuations, insurance liability reserves, and potential losses from contingencies and litigation. Actual results could differ from those estimates.

Restricted and Designated Assets

Certain assets are restricted by bond resolutions for the construction of utility plant and debt repayment. Certain additional assets are designated by management for contingency purposes and economic development.

Cash Equivalents

For purposes of the Statements of Cash Flows, KUB considers all unrestricted and undesignated highly liquid investments with an original maturity of three months or less when purchased to be cash equivalents.

Deferred Outflows and Inflows of Resources

Deferred outflows of resources are items related to the acquisition of assets or related debt which are amortized over the life of the asset or debt. Deferred inflows of resources are items related to the acquisition of assets or related debt which are amortized over the life of the asset or debt. KUB records costs associated with the gain or loss on refunding of debt as either a deferred outflow or inflow based on the parameters of Statement No. 65. Deferred outflows of resources also include employer pension contributions made subsequent to the measurement date of the net pension liability and before the end of the employer's reporting period in accordance with Statement No. 71. Deferred inflows and deferred outflows also include the net difference between projected and actual earnings on pension plan investments and OPEB plan investments, differences between expected and actual experience, and changes in assumptions in accordance with Statements No. 68, 73, and 75.

Debt Premium/Discount

KUB records unamortized premium and discount on debt as a separate line item in the Long Term Debt section of the Financial Statements. Amortization of these amounts is recorded over the life of the applicable debt as amortization expense.

Debt Issuance Costs

In accordance with regulatory accounting, KUB records debt issuance costs as an Other Asset. Amortization of these amounts is recorded over the life of the applicable debt as amortization expense.

Deferred Gain/Loss on Refunding of Debt

KUB records costs associated with the gain or loss on refunding of debt as either a deferred outflow or inflow based on the parameters of Statement No. 65. In accordance with FERC presentation, amortization of these amounts is recorded over the life of the applicable debt as amortization expense.

Compensated Absences

KUB accrues a liability for earned but unpaid paid time off (PTO) days.

TVA Conservation Program

KUB previously served as a fiscal intermediary for the Tennessee Valley Authority (TVA) whereby loans were made to KUB customers by TVA to be used in connection with TVA's Energy Right Residential Program. While KUB still holds existing loans on behalf of TVA, no loans were made through this program after October 31, 2015.

Subsequent Events

KUB has evaluated events and transactions through October 29, 2020, the date these financial statements were issued, for items that should potentially be recognized or disclosed. KUB sold \$9,045,000 in water system revenue bonds on October 7, 2020, with a scheduled closing on October 30, 2020, for the purpose of funding water system capital improvements in fiscal year 2021. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.36 percent. Annual debt service payments including principal and interest range from \$313,539 to \$470,050 with final maturity in fiscal year 2050. KUB sold \$27,460,000 in wastewater system revenue bonds on October 7, 2020, with a scheduled closing on October 30, 2020, for the purpose of funding wastewater system capital improvements in fiscal year 2021. The true interest cost of the bonds, which were sold through a competitive bidding process, was 2.41 percent. Annual debt service payments including principal and interest range from \$919,320 to \$1,416,300 with final maturity in fiscal year 2050.

Purchased Power Adjustment

In October 2002, the Board adopted a Purchased Power Adjustment (PPA) to address changes in wholesale power costs. The PPA was established in response to an amendment to KUB's power supply contract under which, among other things, TVA relinquished its regulatory authority over KUB retail electric rates. The PPA allows KUB to promptly adjust retail electric rates in response to wholesale rate changes or adjustments, thus ensuring that KUB will recover the costs incurred for purchased power. These changes in electric costs are reflected as adjustments to the base electric rates established by the Board. The rate-setting authority vested in the Board by the City Charter meets the "self-regulated" provisions of Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, and KUB meets the remaining criteria of Statement No. 62.

TVA implemented a fuel cost adjustment in October 2006 applied on a quarterly basis to wholesale power rates. TVA's quarterly fuel cost adjustment became a monthly fuel cost adjustment effective October 2009. KUB flows changes to wholesale power rates from TVA's fuel cost adjustment mechanism directly through to its retail electric rates via the PPA.

In April 2011, TVA modified its wholesale rate structure to demand and energy billing for its distributors. In response, KUB revised its PPA to include a deferred accounting component to ensure appropriate matching of revenue and expense and cost recovery. KUB will adjust its retail rates on an annual basis to flow any over or under recovery of wholesale power costs through to its customers via the PPA.

Under the PPA mechanism, KUB tracks the actual over/(under) recovered amount in the Over/(Under) Recovered Purchased Power Cost accounts. These accounts are rolled into the PPA rate adjustments thereby assuring that any over/(under) recovered amounts are promptly passed on to the KUB's electric customers. The amount of over/(under) recovered cost was \$1,848,630 at June 30, 2020, and \$2,674,466 at June 30, 2019.

Purchased Gas Adjustment

In November 1990, the Board implemented a deferred Purchased Gas (Cost) Adjustment (PGA) mechanism, which allows KUB to flow changes in purchased gas costs through to its customers. These changes in gas costs are reflected as adjustments to the base gas rates established by the Board. The rate-setting authority vested in the Board by the City Charter meets the "self-regulated" provisions of GASB Statement No. 62 (Statement No. 62), Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements.

The PGA is intended to ensure that KUB recovers the total cost of natural gas purchased, transported and/or reserved for delivery to its sales and transportation customers on an equitable basis. The PGA is also intended to ensure that no excess or deficient cost recovery from KUB's customers occurs.

Under the PGA mechanism, KUB tracks the actual over/(under) recovered amount in the Over/(Under) Recovered Purchased Gas Cost accounts. These accounts are rolled into the PGA rate adjustment on June 30 of each year thereby ensuring that any over/(under) recovered amounts are passed on to KUB's gas system customers. The amount of over/(under) recovered cost was (\$1,513,434) at June 30, 2020, and (\$1,339,422) at June 30, 2019.

Recently Issued Accounting Pronouncements

In January 2017, the GASB issued GASB Statement No. 84 (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, 2019.

In June 2017, the GASB issued GASB Statement No. 87 (Statement No. 87), *Leases*. This Statement requires recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. Under this Statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset. Statement No. 87 is effective for fiscal years beginning after June 15, 2021.

In June 2018, the GASB issued GASB Statement No. 89 (Statement No. 89), Accounting for Interest Cost Incurred Before the End of a Construction Period. The objectives of this Statement are to enhance the relevance and comparability of information about capital assets and the cost of borrowing for a reporting period, and to simplify accounting for interest cost incurred before the end of a construction period. Statement No. 89 is effective for fiscal years beginning after December 15, 2020.

In August 2018, the GASB issued GASB Statement No. 90 (Statement No. 90), *Major Equity Interests* – *an amendment of GASB Statements No. 14 and No. 61.* The objectives of this Statement are to improve the consistency and comparability of reporting a government's majority equity interest in a legally separate organization and to improve the relevance of financial statement information for certain component units. Statement No. 90 is effective for fiscal years beginning after December 15, 2019.

In May 2019, the GASB issued GASB Statement No. 91 (Statement No. 91), *Conduit Debt Obligations*. The objectives of this Statement are to provide a single method of reporting conduit debt obligations by issuers and eliminate diversity in practice associated with (1) commitments extended by issuers, (2) arrangements associated with conduit debt obligations, and (3) related note disclosures. Statement No. 91 is effective for fiscal years beginning after December 15, 2021.

In January 2020, the GASB issued GASB Statement No. 92 (Statement No. 92), *Omnibus 2020*. The objectives of this Statement are to enhance comparability in accounting and financial reporting and to improve the consistency of authoritative literature by addressing practice issues that have been identified during implementation and application of certain GASB Statements. Certain provisions of

Statement No. 92 were effective immediately. Paragraphs 6, 7, 8, 9, and 12 are effective for fiscal years beginning after June 15, 2021.

In March 2020, the GASB issued GASB Statement No. 93 (Statement No. 93), *Replacement of Interbank Offered Rates*. This Statement establishes accounting and financial reporting requirements related to the replacement of IBORs in hedging derivative instruments and leases. It also identifies appropriate benchmark interest rates for hedging derivative instruments. Statement No. 93 is effective for fiscal years beginning after June 15, 2021.

In March 2020, the GASB issued GASB Statement No. 94 (Statement No. 94), *Public-Private and Public-Public Partnerships and Availability Payment Arrangements*. The objective of this Statement is to better meet the information needs of financial statement users by improving the comparability of financial statements among governments that enter in PPPs and APAs. Statement No. 94 is effective for fiscal years beginning after June 15, 2022.

In May 2020, the GASB issued GASB Statement No. 96 (Statement No. 96), *Subscription-Based Information Technology Arrangements*. The objective of this Statement is to better meet the information needs of financial statement users by (a) establishing uniform accounting and financial reporting requirements for SBITAs; (b) improving the comparability of financial statements among governments that have entered into SBITAs; and (c) enhancing the understandability, reliability, relevance, and consistency of information about SBITAs. Statement No. 96 is effective for fiscal years beginning after June 15, 2022.

In June 2020, the GASB issued GASB Statement No. 97 (Statement No. 97), Certain Component Unit Criteria, and Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans. The objectives of this Statement are to (a) increase consistency and comparability related to the reporting of fiduciary component units in circumstances in which a potential component unit does not have a governing board and the primary government performs the duties that a governing board typically would perform; (b) mitigate costs associated with the reporting of certain defined contribution pension plans, defined contribution other postemployment benefit (OPEB) plans, and employee benefit plans other than pension plans or OPEB plans (other employee benefit plans) as fiduciary component units in fiduciary fund financial statements; and (c) enhance the relevance, consistency, and comparability of the accounting and financial reporting for Internal Revenue Code (IRC) Section 457 deferred compensation plans (Section 457 plans) that meet the definition of a pension plan and for benefits provided through those plans. Statement No. 97 is effective for fiscal years beginning after June 15, 2021.

KUB has not elected early implementation of these standards and has not completed the process of evaluating the impact of these statements on its financial statements.

3. Deposits and Investments

KUB follows the provisions of Statement No. 40 of the Governmental Accounting Standards Board, Deposit and Investment Risk Disclosures—an amendment of GASB Statement No. 3. This Statement establishes and modifies disclosure requirements for state and local governments related to deposit and investment risks. KUB classifies its fair value measurements within the fair value hierarchy established by Statement No. 72 of the Governmental Accounting Standards Board, Fair Value Measurement and Application.

KUB's investment policy provides the framework for the administration and investment of cash deposits. The investment policy follows Tennessee State law and defines the parameters under which KUB funds should be invested. State law authorizes KUB to invest in obligations of the United States Treasury, its agencies and instrumentalities; certificates of deposit; repurchase agreements; money market funds; and the State Treasurer's Investment Pool.

Interest Rate Risk. KUB's primary investment objectives are to place investments in a manner to ensure the preservation of capital, remain sufficiently liquid to meet all operating requirements, and maximize yield of return. KUB minimizes its exposure to interest rate risk by adhering to Tennessee State law requirements for the investment of public funds. This includes limiting investments to those types described above and limiting maturity horizons. The maximum maturity is four years from the date of investment. KUB also limits its exposure by holding investments to maturity unless cash flow requirements dictate otherwise.

Credit Risk. KUB's investment policy, as required by state law, is to apply the prudent-person rule: Investments are made with judgment and care, under circumstances then prevailing, which persons of prudence, discretion, and intelligence exercise in the management of their own affairs, not for speculation, but for investment, considering the probable income to be derived, as well as the probable safety of their capital.

Custodial Credit Risk. KUB's investment policy limits exposure to custodial credit risk by restricting investments to a standard set forth by state law. All deposits in excess of federal depository insurance limits are collateralized with government securities held in KUB's name by a third-party custodian bank(s) acting as KUB's agent(s), or through the State of Tennessee's collateral pool. Financial institutions that participate in the collateral pool are subject to special assessment; therefore, the deposits are considered insured. A portion of KUB's investments are generally held in the State of Tennessee Local Government Investment Pool (LGIP). The LGIP is a part of the State Pooled Investment Fund and is sponsored by the State of Tennessee Treasury Department. Tennessee Code Annotated ¶9-4-701 et seq. authorizes local governments to invest in the LGIP. None of KUB's investments are exposed to custodial credit risk.

Classification of deposits and investments per Statement of Net Position:

		2020		2019
Current assets				
Cash and cash equivalents	\$	99,445,520	\$	91,639,940
Short-term investments		12,578,300		27,471,225
Short-term contingency fund investments		94,257,567		79,038,925
Other assets				
Long-term contingency fund investments		16,590,303		29,366,076
Restricted assets				
Bond fund		35,991,556		35,948,463
Other funds	_	1,514	_	21,482
	\$_	258,864,760	\$_	263,486,111

The above amounts do not include accrued interest of \$358,658 in fiscal year 2020 and \$568,159 in fiscal year 2019. Interest income is recorded on an accrual basis.

Investments and maturities of KUB's deposits and investments as held by financial institutions as of June 30, 2020:

	Deposit and Investment Maturities (in Years)								
		Fair		Less					
		Value	_	Than 1		1-5			
Supersweep NOW and Other Deposits	\$	124,850,348	\$	124,850,348	\$	-			
State Treasurer's Investment Pool		67,936,014		67,936,014		-			
Agency Bonds		71,686,171		55,095,868		16,590,304			
	\$	264,472,533	\$	247,882,230	\$_	16,590,304			

KUB categorizes its fair value measurements within the fair value hierarchy established by Statement No. 72 of the Governmental Accounting Standards Board, *Fair Value Measurement and Application*. The hierarchy is based on the valuation inputs used to measure the fair value of an asset with a maturity at purchase of greater than one year. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

KUB has the following recurring fair value measurements as of June 30, 2020:

• U.S. Agency bonds of \$16,590,304, which have a maturity at purchase of greater than one year, are valued using quoted market prices (Level 1 inputs)

KUB measures investments with a maturity at purchase of one year or less at amortized cost, which is considered a fair value equivalent due to their nature. Investments in the State Treasurer's Investment Pool are measured at net asset value (NAV) per share.

(Space left intentionally blank)

4. Accounts Receivable

Accounts receivable consists of the following:

	2020	2019
Wholesale and retail customers		
Billed services	\$ 46,716,972	\$ 48,109,474
Unbilled services	28,284,426	26,627,126
Other	2,287,957	2,542,380
Allowance for uncollectible accounts	(594,422)	(589,889)
	\$ 76,694,933	\$ 76,689,091

5. Accounts Payable and Accruals

Accounts payable and accruals consist of the following:

	2020	2019
Trade accounts	\$ 74,337,079	\$ 51,433,305
Salaries and wages	3,721,785	3,196,798
Advances on pole rental	1,262,510	1,224,209
Self-insurance liabilities	1,720,620	1,911,512
Other current liabilities	 14,738,961	 14,079,693
	\$ 95,780,955	\$ 71,845,517

(Space left intentionally blank)

6. Long-Term Obligations

		Balance June 30, 2019	Additions		Payments		Defeased		Balance June 30, 2020		Amounts Due Within One Year
Electric			71441110111				20.00000				0
Z-2010 - 1.45 - 6.35%	\$	19.930.000 \$	_	\$	1,390,000	\$	17.115.000	\$	1,425,000	\$	1,425,000
AA-2012 - 3.0 - 5.0%	•	25,835,000	_	•	2,955,000	-	-	•	22,880,000	•	3,100,000
BB-2012 - 3.0 - 4.0%		31,125,000	_		750,000		_		30,375,000		800,000
CC-2013 - 3.0 - 4.0%		8,085,000	_		500,000		_		7,585,000		515,000
DD-2014 - 2.0 - 4.0%		37,125,000			800,000				36,325,000		825,000
EE-2015 - 2.0 - 5.0%		27,975,000			2,075,000				25,900,000		2,135,000
FF-2015 - 2.0 - 5.0%		32,900,000			750,000				32,150,000		775,000
GG-2016 - 2.0 - 5.0%		38,400,000	-		850,000		-		37,550,000		900,000
HH-2017 - 2.5 - 5.0%		21,500,000	-		1,990,000		-		19,510,000		2,090,000
			-				-				805,000
II-2017 - 3.0 - 5.0%		39,300,000	-		765,000		-		38,535,000		•
JJ-2018 - 3.0 - 5.0%		39,995,000	44.000.00		775,000		-		39,220,000		815,000
KK-2020 - 5.0%	_		14,380,00	_	40.000.000			•	14,380,000	•	44405,000
Total bonds	\$_	322,170,000 \$			13,600,000	\$	17,115,000	\$	305,835,000	\$	14,185,000
Unamortized Premium		11,673,884	2,896,02		901,731			_	13,668,174	_	
Total long term debt	\$_	333,843,884 \$	17,276,02	<u>21</u> \$	14,501,731	\$	17,115,000	\$	319,503,174	\$	14,185,000
Gas											
P-2010 - 3.3 - 6.2%	\$	10,295,000 \$	-	\$	620,000	\$	9,675,000	\$	-	\$	-
Q-2012 - 2.0 - 4.0%		16,265,000	-		2,260,000		-		14,005,000		2,350,000
R-2012 - 2.0 - 4.0%		8,150,000	-		450,000		-		7,700,000		475,000
S-2013 - 2.0 - 4.0%		9,650,000	-		645,000		-		9,005,000		695,000
T-2013 - 2.0 - 4.6%		22,900,000	-		500,000		-		22,400,000		500,000
U-2015 - 2.0 - 5.0%		10,305,000	-		680,000		-		9,625,000		710,000
V-2016 - 2.125 - 5.0%		11,300,000	_		250,000		-		11,050,000		250,000
W-2017 - 5.0%		6,720,000	_		705,000		-		6,015,000		735,000
X-2017 - 2.0 - 5.0%		11,565,000	_		245,000		_		11,320,000		260,000
Y-2018 - 3.0 - 5.0%		7,790,000	_		155,000		_		7,635,000		160,000
Z-2020 - 4.0 - 5.0%		7,700,000	6,755,00	nn	100,000		_		6,755,000		610,000
Total bonds	\$	114,940,000 \$			6,510,000	\$	9,675,000	\$	105,510,000	\$	6,745,000
	Ψ=					Ψ		φ		φ	0,743,000
Unamortized Premium	_	4,193,696	1,164,70	_	397,369		67,459	•	4,893,568	•	
Total long term debt	\$_	119,133,696 \$	7,919,70	00 \$	6,907,369	\$	9,742,459	\$	110,403,568	\$	6,745,000
Water											
W-2011 - 2.0 - 5.0%	\$	21,150,000 \$	-	\$	550,000	\$	20,600,000	\$	-	\$	-
X-2012 - 3.0 - 5.0%		7,050,000	-		590,000		-		6,460,000		625,000
Y-2013 - 3.0 - 4.0%		8,070,000	-		340,000		-		7,730,000		350,000
Z-2013 - 2.0 - 5.0%		22,150,000	-		550,000		-		21,600,000		575,000
AA-2014 - 2.0 - 4.0%		7,275,000	-		175,000		-		7,100,000		175,000
BB-2015 - 2.0 - 5.0%		20,985,000	_		950,000		_		20,035,000		960,000
CC-2015 - 2.0 - 4.0%		18,450,000	_		425,000		_		18,025,000		450,000
DD-2016 - 3.0 - 5.0%		23,750,000	_		525,000		_		23,225,000		550,000
EE-2016 - 2.0 - 5.0%		20,675,000	_		1,090,000		_		19,585,000		1,155,000
FF-2017 - 3.0 - 5.0%		4,375,000			475,000		-		3,900,000		495,000
GG-2017 - 2.125 - 5.0%			-				-				
HH-2018 - 3.0 - 5.0%		19,420,000	-		395,000		-		19,025,000		415,000
		19,470,000	-		380,000		-		19,090,000		395,000
II-2019 - 3.0 - 5.0%		-	19,995,00		400,000		-		19,595,000		365,000
JJ-2020 - 3.0 - 5.0%			19,520,00				-		19,520,000		630,000
Total bonds	\$_	192,820,000 \$			6,845,000	\$	20,600,000	\$	204,890,000	\$	7,140,000
Unamortized Premium	_	5,847,325	2,660,94		402,958		196,016	_	7,909,293	_	
Total long term debt	\$_	198,667,325 \$	42,175,94	2 \$	7,247,958	\$	20,796,016	\$	212,799,293	\$	7,140,000
Wastewater											
2010 - 6.3 - 6.5%	\$	30,000,000 \$	-	\$		\$	30,000,000	\$	-	\$	-
2010C - 1.18 - 6.1%		60,050,000	-		1,600,000		-		58,450,000		1,650,000
2012A - 2.0 - 4.0%		11,800,000	-		950,000		-		10,850,000		1,085,000
2012B - 1.25 - 5.0%		59,325,000	-		1,100,000		-		58,225,000		1,150,000
2013A - 2.0 - 4.0%		109,800,000	-		685,000		-		109,115,000		710,000
2014A - 2.0 - 4.0%		27,800,000	-		500,000		-		27,300,000		525,000
2015A - 3.0 - 5.0%		121,390,000	-		5,305,000		-		116,085,000		5,460,000
2015B - 3.0 - 5.0%		28,000,000	_		525,000		_		27,475,000		525,000
2016 - 2.0 - 5.0%		18,750,000	_		475,000		_		18,275,000		475,000
2017A - 3.0 - 5.0%		9,100,000	_		1,525,000		_		7,575,000		1,605,000
2017B - 2.0 - 5.0%		24,260,000	_		515,000		_		23,745,000		540,000
2018 - 3.0 - 5.0%		11,720,000	-		235,000		-		11,485,000		245,000
		11,120,000	16,000,00	00			-				
2019 - 3.0 - 5.0%		-	16,000,00		250,000		-		15,750,000		300,000
2020 - 3.0 - 5.0%	_	- -	28,230,00		40.005.000			æ	28,230,000	æ	785,000
Total bonds	\$_	511,995,000 \$	44,230,00		13,665,000	Ф	30,000,000	\$	512,560,000	\$	15,055,000
Unamortized Premium	. –	11,356,966	3,388,69		640,486		157,013	_	13,948,164	_	
Total long term debt	\$	523,351,966 \$	47,618,69	97 \$	14,305,486	\$	30,157,013	\$	526,508,164	\$	15,055,000
Consolidated											
Total bonds	\$	1,141,925,000 \$	104,880,00	00 \$	40,620,000	\$	77,390,000	\$	1,128,795,000	\$	43,125,000
Total unamortized premium	_	33,071,871	10,110,36		2,342,545		420,488		40,419,199		
Total long term debt	\$	1,174,996,871 \$	114,990,36	\$0_\$	42,962,545	\$	77,810,488	\$	1,169,214,199	\$	43,125,000
	_			_							

		Balance June 30, 2018		Additions		Payments		Defeased		Balance June 30, 2019		Amounts Due Within One Year
Electric		2010		Additions		. ayınıcınıs		Dolouscu		2010		One rear
Y-2009 - 2.5 - 5.0%	\$	1,850,000	\$	_	\$	1.850.000	\$	_	\$	_	\$	_
Z-2010 - 1.45 - 6.35%	Ψ.	21,285,000	۳	_	•	1,355,000	•	_	•	19,930,000	Ψ.	1,390,000
AA-2012 - 3.0 - 5.0%		28,640,000		_		2,805,000		_		25,835,000		2,955,000
				-		725,000		-				
BB-2012 - 3.0 - 4.0%		31,850,000		-				-		31,125,000		750,000
CC-2013 - 3.0 - 4.0%		8,560,000		-		475,000		-		8,085,000		500,000
DD-2014 - 2.0 - 4.0%		37,900,000		-		775,000		-		37,125,000		800,000
EE-2015 - 2.0 - 5.0%		28,125,000		-		150,000		-		27,975,000		2,075,000
FF-2015 - 2.0 - 5.0%		33,625,000		-		725,000		-		32,900,000		750,000
GG-2016 - 2.0 - 5.0%		39,225,000		-		825,000		-		38,400,000		850,000
HH-2017 - 2.5 - 5.0%		23,390,000		-		1,890,000		-		21,500,000		1,990,000
II-2017 - 3.0 - 5.0%		40,000,000		-		700,000		-		39,300,000		765,000
JJ-2018 - 3.0 - 5.0%				39,995,000						39,995,000		775,000
Total bonds	\$	294,450,000	\$	39,995,000	\$	12,275,000	\$		\$	322,170,000	\$	13,600,000
Unamortized Premium	_	12,031,042		516,151		873,309	,			11,673,884		-
Total long term debt	\$	306,481,042	\$	40,511,151	\$	13,148,309	\$		\$	333,843,884	\$	13,600,000
Gas	-											
P-2010 - 3.3 - 6.2%	\$	10,890,000	\$	_	\$	595,000	\$	_	\$	10,295,000	\$	620,000
Q-2012 - 2.0 - 4.0%		18,455,000		_		2,190,000		_		16,265,000		2,260,000
R-2012 - 2.0 - 4.0%		8,575,000		_		425,000		_		8,150,000		450,000
S-2013 - 2.0 - 4.0%		10,265,000		_		615,000		_		9,650,000		645,000
				-				-				500.000
T-2013 - 2.0 - 4.6%		23,400,000		-		500,000		-		22,900,000		,
U-2015 - 2.0 - 5.0%		10,965,000		-		660,000		-		10,305,000		680,000
V-2016 - 2.125 - 5.0%		11,550,000		-		250,000		-		11,300,000		250,000
W-2017 - 5.0%		7,390,000		-		670,000		-		6,720,000		705,000
X-2017 - 2.0 - 5.0%		11,800,000		-		235,000		-		11,565,000		245,000
Y-2018 - 3.0 - 5.0%		-		8,000,000		210,000				7,790,000		155,000
Total bonds	\$_	113,290,000	\$	8,000,000	\$	6,350,000	\$		\$	114,940,000	\$	6,510,000
Unamortized Premium		4,510,823		70,169		387,296		-		4,193,696		-
Total long term debt	\$_	117,800,823	\$	8,070,169	\$	6,737,296	\$		\$	119,133,696	\$	6,510,000
Water	_						*			-		
U-2009 - 3.0 - 4.5%	\$	950,000	\$	_	\$	950,000	\$	_	\$	_	\$	_
W-2011 - 2.0 - 5.0%	•	21,700,000	-	_	_	550,000	7	_	•	21,150,000	•	550,000
X-2012 - 3.0 - 5.0%		7,615,000		_		565,000		_		7,050,000		590,000
Y-2013 - 3.0 - 4.0%		8,390,000				320,000				8,070,000		340,000
				-				-				
Z-2013 - 2.0 - 5.0%		22,675,000		-		525,000		-		22,150,000		550,000
AA-2014 - 2.0 - 4.0%		7,425,000		-		150,000		-		7,275,000		175,000
BB-2015 - 2.0 - 5.0%		21,870,000		-		885,000		-		20,985,000		950,000
CC-2015 - 2.0 - 4.0%		18,875,000		-		425,000		-		18,450,000		425,000
DD-2016 - 3.0 - 5.0%		24,250,000		-		500,000		-		23,750,000		525,000
EE-2016 - 2.0 - 5.0%		20,775,000		-		100,000		-		20,675,000		1,090,000
FF-2017 - 3.0 - 5.0%		4,840,000		-		465,000		-		4,375,000		475,000
GG-2017 - 2.125 - 5.0%		19,800,000		-		380,000		-		19,420,000		395,000
HH-2018 - 3.0 - 5.0%		-		19,995,000		525,000		-		19,470,000		380,000
Total bonds	\$	179,165,000	\$	19,995,000	\$	6,340,000	\$	-	\$	192,820,000	\$	6,445,000
Unamortized Premium		5,743,978		467,809		364,462	,	-		5,847,325		-
Total long term debt	\$	184,908,978	\$	20,462,809	\$	6,704,462	\$		\$	198,667,325	\$	6,445,000
Wastewater	-											
2010 - 6.3 - 6.5%	\$	30,000,000	\$	_	\$	_	\$	_	\$	30,000,000	\$	_
2010C - 1.18 - 6.1%	•	61,600,000	-	_	_	1,550,000	7	_	•	60,050,000	•	1,600,000
2012A - 2.0 - 4.0%		12,770,000		_		970,000		_		11,800,000		950,000
				-		1,050,000		-				
2012B - 1.25 - 5.0%		60,375,000		-				-		59,325,000		1,100,000
2013A - 2.0 - 4.0%		110,460,000		-		660,000		-		109,800,000		685,000
2014A - 2.0 - 4.0%		28,275,000		-		475,000		-		27,800,000		500,000
2015A - 3.0 - 5.0%		126,400,000		-		5,010,000		-		121,390,000		5,305,000
2015B - 3.0 - 5.0%		28,500,000		-		500,000		-		28,000,000		525,000
2016 - 2.0 - 5.0%		19,200,000		-		450,000		-		18,750,000		475,000
2017A - 3.0 - 5.0%		10,560,000		-		1,460,000		-		9,100,000		1,525,000
2017B - 2.0 - 5.0%		24,750,000		-		490,000		-		24,260,000		515,000
2018 - 3.0 - 5.0%				12,000,000		280,000				11,720,000		235,000
Total bonds	\$	512,890,000	\$	12,000,000	\$	12,895,000	\$		\$	511,995,000	\$	13,415,000
Unamortized Premium	-	11,860,393		101,285		604,712				11,356,966		-
Total long term debt	\$	524,750,393	\$	12,101,285	\$	13,499,712	\$		\$	523,351,966	\$	13,415,000
Consolidated	Ť=	1,. 00,000	+	,.51,250	+	, ,	. *		Ψ	,50.,000	*	
Total bonds	\$	1,099,795,000	\$	79,990,000	\$	37,860,000	\$		\$	1,141,925,000	\$	39,970,000
Total unamortized premium	Ÿ	34,146,236	¥	1,155,414	Ψ	2,229,779	Ψ	-	Ψ	33,071,870	Ψ	-
Total long term debt	\$	1,133,941,236	2	81,145,414	\$	40,089,779	2.		\$	1,174,996,870	\$	39,970,000
. Star long tolli dobt	Ψ=	., 100,071,200	Ψ	01,170,714	Ψ	-10,000,119	Ψ		Ψ	1,114,000,010	Ψ	55,575,000

Debt service over remaining term of the debt is as follows:

Fiscal					
Year		Principal		Interest	Total
2021	\$	43,125,000	\$	40,754,376	\$ 83,879,376
2022		44,405,000		38,975,118	83,380,118
2023		46,340,000		36,979,427	83,319,427
2024		48,290,000		34,979,691	83,269,691
2025		49,250,000		33,166,366	82,416,366
2026-2030		240,305,000		139,942,269	380,247,269
2031-2035		210,255,000		100,324,466	310,579,466
2036-2040		215,295,000		63,516,376	278,811,376
2041-2045		171,375,000		25,471,882	196,846,882
2046-2050	_	60,155,000	_	3,926,648	64,081,648
Total	\$	1,128,795,000	\$	518,036,619	\$ 1,646,831,619

The Divisions have pledged sufficient revenue, after deduction of all current operating expenses (exclusive of tax equivalents), to meet bond principal and interest payments of revenue bonds when due. Such bond requirements are being met through monthly deposits to the bond funds as required by the bond covenants. As of June 30, 2020, these requirements had been satisfied.

During fiscal year 2011, KUB's Electric Division issued series Z 2010 bonds to fund electric system capital improvements. The bonds were issued as federally taxable Build America Bonds with a 35 percent interest payment rebate to be received from the United States Government for each interest payment. These bonds are subject to a reduction in rebate payment amounts which is subject to change based on Congressional action. As of October 1, 2019, the effective reduction in rebate is 5.9 percent, During fiscal year 2019, KUB's Electric Division issued Series JJ 2018 bonds to fund electric system capital improvements. During fiscal year 2020, KUB's Electric Division issued Series KK 2020 bonds to retire a portion of outstanding Series Z 2010 bonds as follows. On May 22, 2020, \$14.4 million in revenue refunding bonds with an average interest rate of 5 percent were issued to advance refund \$17.1 million of outstanding bonds with an average interest rate of 5.8 percent. The net proceeds of \$17.1 million (after payment of \$0.2 million in issuance costs plus premium of \$2.9 million) were used to purchase U.S. government securities. Those securities were deposited in an irrevocable trust with an escrow agent to provide for future debt service payments on the bonds, with the exception of the July 1, 2020 debt service payment. As a result, the remaining bonds are considered to be refunded and the liability of \$17.1 million for those bonds has been removed from the financial statements. This refunding decreases total debt service payments over the next 11 years by \$2.4 million resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$2.2 million.

During fiscal year 2019, KUB's Gas Division issued Series Y 2018 bonds to fund gas system capital improvements. During fiscal year 2020, KUB's Gas Division issued Series Z 2020 bonds to retire a portion of outstanding Series P 2010 bonds as follows. On May 22, 2020, \$6.8 million in revenue refunding bonds with an average interest rate of 4.7 percent were issued to currently refund \$9.7 million of outstanding bonds with an average interest rate of 6.1 percent. The net proceeds of \$9.8 million (after payment of \$0.1 million in issuance costs plus premium of \$1.1 million and an additional issuer equity contribution of \$2 million) were used to refund the bonds. As a result, the bonds are considered to be refunded and the liability for those bonds has been removed from the financial statements. This refunding decreases total debt service payments over the next 12 years by \$1.8 million resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$1.3 million.

During fiscal year 2019, KUB's Water Division issued HH 2018 bonds to fund water system capital improvements. During fiscal year 2020, KUB's Water Division issued Series II 2019 bonds to fund water system capital improvements. KUB's Water Division also issued Series JJ 2020 bonds to retire a portion of outstanding Series W 2011 bonds as follows. On May 22, 2020, \$19.5 million in revenue refunding bonds with an average interest rate of 3.2 percent were issued to currently refund \$20.6 million of outstanding bonds with an average interest rate of 4 percent. The net proceeds of \$20.8 million (after payment of \$0.2 million in issuance costs plus premium of \$1.5 million) were used to refund the bonds. As a result, the bonds are considered to be refunded and the liability for those bonds has been removed from the financial statements. This refunding decreases total debt service payments over the next 20 years by \$3.9 million resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$3.1 million.

During fiscal year 2011, KUB's Wastewater Division issued Series 2010C bonds to fund capital improvements. These bonds were issued as federally taxable Build America Bonds with a 35 percent interest payment rebate to be received from the United States Government for each interest payment. These bonds are subject to a reduction in rebate payment amounts which is subject to change based on Congressional action. As of October 1, 2019, the effective reduction in rebate is 5.9 percent. During fiscal year 2019, KUB's Wastewater Division issued Series 2018 bonds to fund wastewater system capital improvements. During fiscal year 2020, KUB's Wastewater Division issued Series 2019 bonds to fund wastewater system capital improvements. KUB's Wastewater Division also issued Series 2020 bonds to retire a portion of outstanding Series 2010 bonds as follows. On May 22, 2020, \$28.2 million in revenue refunding bonds with an average interest rate of 3.3 percent were issued to currently refund \$30 million of outstanding bonds with an average interest rate of 6.4 percent. The net proceeds of \$30.3 million (after payment of \$0.3 million in issuance costs plus premium of \$2.4 million) were used to refund the bonds. As a result, the bonds are considered to be refunded and the liability for those bonds has been removed from the financial statements. This refunding decreases total debt service payments over the next 25 years by \$18.9 million resulting in an economic gain (difference between the present values of the debt service payments on the old and new debt) of \$8.8 million.

Other liabilities consist of the following:

		Balance June 30, 2019		Increase	Decrease		Balance June 30, 2020
TVA conservation program Accrued compensated	\$	3,082,829	\$	176,370	\$ (1,235,251)	\$	2,023,948
absences		9,184,481		16,101,901	(15,006,168)		10,280,214
Customer advances							
for construction		8,144,729		3,467,243	(1,953,004)		9,658,968
Other	_	236,604	_	448,069	 (421,285)	_	263,388
	\$	20,648,643	\$	20,193,583	\$ (18,615,708)	\$_	22,226,518

	Balance June 30, 2018	Increase	Decrease		Balance June 30, 2019
TVA conservation program Accrued compensated	\$ 4,431,219	\$ 229,677	\$ (1,578,067)	\$	3,082,829
absences	8,497,960	17,219,913	(16,533,392)		9,184,481
Customer advances for construction	4,927,837	5.388.950	(2,172,058)		8,144,729
Other	155,411	460,348	(379,155)		236,604
	\$ 18,012,427	\$ 23,298,888	\$ (20,662,672)	\$_	20,648,643

7. Lease Commitments

KUB has non-cancelable operating lease commitments for office equipment, property, and vehicles, summarized for the following fiscal years:

2021	\$	313,658
2022		105,405
2023		15,586
2024		13,714
2025	_	13,714
Total operating minimum lease payments	\$	462,077

(Space left intentionally blank)

8. Capital Assets

Capital asset activity was as follows:

Production Plant (Intakes) Pumping and Treatment Plant	\$ Balance June 30, 2019 742,503 \$ 330,416,249	8	Increase - 16,032,444	\$	Decrease - (1,912,647)	\$ Balance June 30, 2020 742,503 344,536,046
Distribution and Collection Plant Mains and metering Services and meters Electric station equipment Poles, towers and fixtures Overhead conductors Line transformers Other accounts Total Distribution & Collection Plant	1,059,317,613 232,626,565 162,076,580 190,331,961 159,466,936 103,617,680 295,372,474 2,202,809,809 \$	_	52,233,740 23,499,929 11,097,794 8,214,374 6,401,128 2,488,983 11,447,667 115,383,615	<u> </u>	(9,858,902) (21,633,098) (1,016,847) (1,483,237) (4,299,228) (1,010,136) (4,059,326) (43,360,774)	\$ 1,101,692,451 234,493,396 172,157,527 197,063,098 161,568,836 105,096,527 302,760,815 2,274,832,650
General Plant Total Plant Assets	\$ 186,152,983 2,720,121,544 \$		29,647,823 161,063,882	\$	(1,488,001) (46,761,422)	214,312,805 2,834,424,004
Less Accumulated Depreciation Net Plant Assets	\$ (917,026,275) 1,803,095,269 \$	_ •	(76,331,498) 84,732,384	\$	<u>47,142,133</u> 380,711	\$ (946,215,640) 1,888,208,364
Work In Progress Total Net Plant	\$ 217,073,804 2,020,169,073 \$	<u> </u>	191,689,791 276,422,175	\$ _	(161,191,714) (160,811,003)	\$ 247,571,881 2,135,780,245
	Balance				D	Balance
Production Plant (Intakes) Pumping and Treatment Plant	\$ June 30, 2018	\$	Increase - 14,159,127	\$	Decrease - (2,317,357)	\$ Balance June 30, 2019 742,503 330,416,249
,	\$ June 30, 2018 742,503		-	\$ \$	-	June 30, 2019 742,503
Pumping and Treatment Plant Distribution and Collection Plant Mains and metering Services and meters Electric station equipment Poles, towers and fixtures Overhead conductors Line transformers Other accounts	June 30, 2018 742,503 318,574,479 1,032,950,195 202,172,532 158,378,701 176,892,740 155,165,532 101,994,883 288,745,129 2,116,299,712 181,111,380		33,661,520 33,921,735 4,513,155 15,553,101 12,895,083 2,854,573 10,031,160	_	(7,294,102) (3,467,702) (815,276) (2,113,880) (8,593,679) (1,231,776) (3,403,815)	\$ 742,503 330,416,249 1,059,317,613 232,626,565 162,076,580 190,331,961 159,466,936 103,617,680 295,372,474
Pumping and Treatment Plant Distribution and Collection Plant Mains and metering Services and meters Electric station equipment Poles, towers and fixtures Overhead conductors Line transformers Other accounts Total Distribution & Collection Plant General Plant	\$ June 30, 2018 742,503 318,574,479 1,032,950,195 202,172,532 158,378,701 176,892,740 155,165,532 101,994,883 288,745,129 2,116,299,712 181,111,380 2,616,728,074 (872,419,331)	\$ -	33,661,520 33,921,735 4,513,155 15,553,101 12,895,083 2,854,573 10,031,160 113,430,327 7,796,309	\$ -	(2,317,357) (7,294,102) (3,467,702) (815,276) (2,113,880) (8,593,679) (1,231,776) (3,403,815) (26,920,230) (2,754,706) (31,992,293) 32,909,458	\$ June 30, 2019 742,503 330,416,249 1,059,317,613 232,626,565 162,076,580 190,331,961 159,466,936 103,617,680 295,372,474 2,202,809,809 186,152,983

9. Risk Management

KUB is exposed to various risks of loss related to active and retiree medical claims; injuries to workers; theft of, damage to, and destruction of assets; environmental damages; and natural disasters. Claims expenditures and liabilities are reported when it is probable that a loss has occurred and the amount of that loss can be reasonably estimated. These losses include an estimate of claims that have been incurred but not reported.

These liabilities are included in accrued expenses in the Statement of Net Position. The liability is KUB's best estimate based on available information. At June 30, 2020 and June 30, 2019, the amount of these liabilities was \$1,720,620 and \$1,911,512, respectively, resulting from the following changes:

		2020		2019
Balance, beginning of year	\$	1,911,512	\$	1,822,689
Current year claims and changes in estimates		14,943,377		17,179,059
Claims payments	_	(15,134,269)	_	(17,090,236)
Balance, end of year	\$	1,720,620	\$	1,911,512

10. Pension Plan

Description of Plan

The Knoxville Utilities Board Pension Plan (the Plan) is a governmental plan as defined by the Employee Retirement Income Security Act of 1974 (ERISA or the Act), is not subject to any of the provisions of the Act, and was revised January 1, 2020 to include all prior approved amendments. The Plan is a single-employer contributory, defined benefit pension plan established by Knoxville Utilities Board Resolution No. 980 dated February 18, 1999, effective July 1, 1999, as authorized by the Charter of the City of Knoxville §1107(J). The Plan is designed to provide retirement, disability, and death benefits to KUB employees. KUB administers the Plan through an Administrative Committee consisting of seven KUB employees that are appointed by KUB's President and CEO. Any amendments to the Plan involving costs not approved in the operating budget must be adopted by KUB's Board of Commissioners, upon recommendation by KUB's President and CEO. All other amendments to the Plan may be approved by KUB's President and CEO upon 60 days notification to the Board's Audit and Finance Committee. The Plan issues a financial report, which includes financial statements and required supplementary information. The report may be obtained by writing the Knoxville Utilities Board Retirement System, P.O. Box 59017, Knoxville, TN 37950-9017.

Effective January 1, 2011, KUB closed the Plan such that persons employed or re-employed by KUB on or after January 1, 2011, are not eligible to participate, but that eligible employees hired prior to January 1, 2011, who have not separated from service, shall continue as Participants and accrue benefits under the Plan.

Participants in the Plan consisted of the following as of December 31:

	2019	2018
Inactive plan members:		
Terminated vested participants	18	21
Retirees and beneficiaries	592	588
Active plan members	<u>551</u>	<u>592</u>
Total	<u>1,161</u>	<u>1,201</u>

Retirement Benefits

The Plan provides three benefit arrangements for KUB participants, retirees, and beneficiaries.

The Plan provides pension benefits through the Career Equity Program ("CEP") for eligible employees hired on or after January 1, 1999, and for eligible former "City System Plan A" participants who elected CEP coverage as of July 1, 1999. The guaranteed pension benefit payable to a participant who has completed five or more years of service (or reached the normal retirement date, if earlier) upon termination of KUB employment shall be a lump sum equal to the participant's average compensation times their benefit percentage, as defined in the Plan document, or an annuity may be chosen by the participant.

In addition, the Plan provided retirement benefits through "Plan A" for former City System Plan A participants who elected not to participate in the CEP. Plan A is a closed plan and is not available to KUB employees hired after July 1, 1999. Plan A provides for early retirement benefits with 25 years of service and normal retirement benefits at age 62 or later. Benefits provided to Plan A participants include several different forms of monthly annuity payments.

The Plan also provides retirement benefits through "Plan B" for former "City System Plan B" participants. Plan B is a closed plan providing benefits to participants not covered by Social Security. Benefits provided to Plan B participants include several different forms of monthly annuity payments available to participants.

Effective January 1, 2012, KUB began to provide for additional monthly supplements, which are not subject to cost of living adjustments, to certain former employees and surviving dependents of former employees who are eligible for and have elected coverage under the KUB retiree medical plan and are eligible for Medicare. This was done to compensate for the elimination of drug coverage under the KUB retiree medical plan and to assist such individuals in obtaining prescription drug coverage under Medicare Part D.

Contributions

Participation in Plan A requires employee contributions of three percent of the first \$4,800 of annual earnings and five percent of annual earnings in excess of \$4,800. KUB contributions are determined by the enrolled actuary of the Plan and equal the amount necessary to provide the benefits under the Plan determined by the application of accepted actuarial methods and assumptions. The method of funding shall be consistent with Plan objectives.

Plan Funding

KUB maintains a Funding Policy for the Plan in accordance with Tennessee State law. The primary goal of the Policy is to document the method KUB has adopted to provide assurance that future KUB and employee contributions and current Plan assets will be sufficient to fund all benefits expected to be paid to current active, inactive, and retired Plan participants and their beneficiaries. Per the Funding Policy, KUB fully funds its annual Actuarially Determined Contribution.

Investments

The Plan's investments are held by State Street Bank and Trust Company (the "Trustee"). The Plan's policy in regard to the allocation of invested assets is established by the Retirement System Investment Committee and approved by the KUB Board of Commissioners and may only be amended by the KUB Board of Commissioners. It is the policy of the Retirement System Investment Committee to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The following was the Plan's adopted asset allocation policy as of December 31, 2019:

Asset Class	Target Allocation
Domestic equity – large cap	20% - 50%
Domestic equity – mid cap	0% - 15%
Domestic equity – small cap	0% - 15%
Domestic equity – convertible securities	0% - 10%
Non-U.S. equity	0% - 20%
Real estate equity	0% - 10%
Fixed income – aggregate bonds	5% - 25%
Fixed income – long-term bonds	10% - 25%
Cash and deposits	0% - 5%

Contributions of \$2,585,824 and \$3,156,661 for 2018 and 2017, respectively, were made during the Plan sponsor's fiscal years ended June 30, 2020 and 2019, respectively. The fiscal year 2020 contribution was determined as part of the January 1, 2018 valuation using the Individual Entry Age Normal funding method. The objective under this method is to fund each participant's benefits under the Plan as payments which are level as a percentage of salary, starting on the original participation date (employment date) and continuing until the assumed retirement, termination, disability, or death.

Net Pension Liability

The below summarizes the disclosures of GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27 ("GASB 68"), which requires measurement of the net pension liability as total pension liability less the amount of the Plan's fiduciary net position. The amounts reported as of June 30 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2020 and 2019 are based on a December 31, 2019 and 2018 measurement date, respectively.

GASB 68 requires certain disclosures related to the net pension liability of the Plan as disclosed below:

		2019	2018
Total pension liability	\$	226,818,557 \$	212,157,951
Plan fiduciary net position	_	(245,939,932)	(205,508,195)
Plan's net pension liability (asset)	\$	(19,121,375) \$	6,649,756
	_		
Plan fiduciary net position as a percentage of the			
total pension liability		108.43%	96.87%

(Space left intentionally blank)

Changes in Net Pension Liability are as follows:

	Total Pension Liability (a)	Net Pension Liability (Asset) (a) - (b)		
Balances at December 31, 2018	\$ 212,157,951	\$ 205,508,195	\$ 6,649,756	
Changes for the year:	0.440.040		0.440.040	
Service cost	6,142,213	-	6,142,213	
Interest	16,030,626	-	16,030,626	
Changes of Benefits	163,199	-	163,199	
Differences between Expected				
and Actual Experience	(1,054,117)	-	(1,054,117)	
Changes of Assumptions	8,473,160	-	8,473,160	
Contributions - employer	-	2,871,241	(2,871,241)	
Contributions - rollovers	-	3,167,836	(3,167,836)	
Contributions - member	-	2,989	(2,989)	
Net investment income	_	49,951,894	(49,951,894)	
Benefit payments	(15,094,475)	(15,094,475)	-	
Administrative expense	-	(467,748)	467,748	
Net changes	14,660,606	40,431,737	(25,771,131)	
Balances at December 31, 2019	\$ 226,818,557	\$ 245,939,932	\$ (19,121,375)	

Actuarial Assumptions

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

Valuation dates	January 1, 2019, rolled forward to December 31, 2019; January 1, 2018, rolled forward to December 31, 2018
Discount rate	7.25% as of December 31, 2019; 7.50% as of December 31, 2018
Salary increase	From 2.50% to 5.65%, based on years of service as of
·	December 31, 2019; from 2.80% to 5.15%, based on years of service as of December 31, 2018
Mortality	115% and 110% of the PubG-2010 table, for males and females, respectively, using the Public Sector General Employee Table for ages prior to the start of the Healthy Annuitant Table, both projected from the 2010 base rates using scale MP2018, fully generational as of December 31, 2019; Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA as of December 31, 2018
Inflation	2.5% as of December 31, 2019; 2.8% as of December 31, 2018

The actuarial assumptions used in the December 31, 2019 valuation were based on an actuarial experience study covering the period January 1, 2014 through December 31, 2018. The discount rate was subsequently reduced from 7.5 percent to 7.25 percent as of the December 31, 2019 measurement date. The Plan was amended to provide automatic increases to retirees for benefits limited under Code §415(d), effective January 1, 2020.

The actuarial assumptions used in the December 31, 2018 valuation were based on the results of an actuarial experience study for the period January 1, 2009 through December 31, 2013.

Subsequent revisions to lump sum and post-disability assumptions were based upon updated experience through December 31, 2015 and to retirement and termination rates and expense assumptions based upon updated experience through December 31, 2016.

The long-term expected rate of return on Plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return for each major asset class included in the Plan's target asset allocation as of December 31, 2019 and 2018 are summarized in the following table. The real rate of return reported for fixed income is for aggregate fixed income. The Plan has both aggregate and long duration fixed income.

	Long Term Expected			
	Real Rate of Return			
Asset Class	2019	2018		
Domestic equity	5.5%	5.8%		
Non-U.S. equity	6.4%	6.9%		
Real estate equity	5.9%	6.0%		
Debt securities	1.5%	1.7%		
Cash and deposits	0.6%	0.7%		

Discount rate

The discount rate used to measure the total pension liability was 7.25 percent as of December 31, 2019, and 7.5 percent as of December 31, 2018. The projection of cash flows used to determine the discount rate assumed that participant contributions will be made at the current contribution rate and that KUB contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the pension plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Sensitivity of the net pension liability to changes in the discount rate

The following presents the net pension liability of the Plan as of December 31, 2019, calculated using the discount rate of 7.25 percent, as well as what the Plan's net pension liability would be if it were calculated using a discount rate that is one percent lower (6.25 percent) or one percent higher (8.25 percent) than the current rate:

	1%		Current	1%	
	Decrease (6.25%)	Discount Rate (7.25%)		Increase (8.25%)	
Plan's net pension liability (surplus)	\$ 946,692	\$	(19,121,375) \$	(36,452,396)	

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2020, KUB recognized pension expense of \$2,673,376.

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2018, this average was 5.00 years. During the measurement year, there was an experience gain of \$1,054,117, with \$210,822 of that recognized in the current year and in each of the next four years, resulting in a deferred inflow of \$843,295. Unrecognized experience gains from prior periods were \$2,408,388, of which \$1,163,381 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of \$1,245,007.

During the measurement year, there was an assumption change loss of \$8,473,160, with \$1,694,632 of that recognized in the current year and each of the next four years, resulting in a deferred outflow of \$6,778,528. Unrecognized assumption change decreases from prior periods were \$1,387,733, of which \$658,104 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of \$729,629.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment gain of \$34,889,331, of which \$6,977,866 was recognized in the current year and will be recognized in each of the next four years. Net unrecognized investment losses from prior periods were \$15,614,774, of which \$5,418,519 was recognized as an increase in pension expense in the current year. The combination of unrecognized investment gains this year along with the net unrecognized investment losses from prior periods results in a net difference between projected and actual earnings on pension plan investments as of December 31, 2019 of \$17,715,210. The following table summarizes the current balances of deferred outflows and deferred inflows of resources along with the net recognition over future years. In addition, KUB recorded a deferred outflow of resources of \$1,292,915 at June 30, 2020 for employer contributions made between December 31, 2019 and June 30, 2020.

(Space left intentionally blank)

	Deferred Outflows of Resources		 ferred Inflows Resources
Differences between expected and actual			
experience	\$	-	\$ 2,088,302
Changes in assumptions		6,778,528	729,629
Net difference between projected and actual			
earnings on pension plan investments		-	17,715,210
Contributions subsequent to measurement date		1,292,915	
Total	\$	8,071,443	\$ 20,533,141

\$1,292,915 reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2021. Other amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Year ended Ju	ine 30:
2021 3	\$ (4,595,539)
2022	(3,722,647)
2023	57,633
2024	(5,494,060)
Thereafter	-

For the year ended June 30, 2019, KUB recognized pension expense of \$4,128,608.

The impact of experience gains or losses and assumption changes on the Total Pension Liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2017, this average was 5.00 years. During the measurement year, there was an experience gain of \$605,649, with \$121,129 of that recognized in the current year and in each of the next four years, resulting in a deferred inflow of \$484,520. Unrecognized experience gains from prior periods were \$2,966,120, of which \$1,042,251 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of \$1,923,868.

During the measurement year, there were no benefit changes or assumption changes. Unrecognized assumption change decreases from prior periods were \$2,045,837, of which \$658,103 was recognized as a reduction in pension expense in the current year and resulted in a deferred inflow of \$1,387,733.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of \$28,364,098, of which \$5,672,818 was recognized in the current year and an identical amount will be recognized in each of the next four years. Net unrecognized investment gains from prior periods were \$8,925,385, of which \$1,848,878 was recognized as a decrease in pension expense in the current year. The combination of unrecognized investment losses this year along with the net unrecognized investment gains from prior periods results in a net difference between projected and actual earnings on pension plan investments as of December 31, 2018 of \$15,614,774.

The following table summarizes the current balances of deferred outflows and deferred inflows of resources. In addition, KUB recorded a deferred outflow of resources of \$1,578,332 at June 30, 2019 for employer contributions made between December 31, 2018 and June 30, 2019.

	erred Outflows Resources	 erred Inflows Resources
Differences between expected and actual experience Changes in assumptions Net difference between projected and actual	\$ - -	\$ 2,408,388 1,387,733
earnings on pension plan investments Contributions subsequent to measurement date	15,614,774 1,578,332	-
Total	\$ 17,193,106	\$ 3,796,121

11. Qualified Excess Benefit Arrangement

Description

In fiscal year 2017, KUB implemented a qualified governmental excess benefit arrangement (QEBA) under IRC section 415(m), which was created by Congress to allow the payment of pension benefits that exceed the IRC section 415(b) limits (and therefore cannot be paid from a qualified retirement plan). The QEBA is a single-employer defined benefit pension plan, administered by KUB. The number of participants in any given year for the QEBA is determined by the number of KUB Pension Plan participants who exceed the current year's section 415(b) limitations, as calculated by the KUB Pension Plan actuary. The amount of QEBA benefit will be the amount specified by the terms of the KUB Pension Plan without regard to Section 415(b) limitations minus the amount payable from the KUB Pension Plan as limited by Section 415(b). QEBA benefits are subject to cost of living adjustments.

As of June 30, 2020, there are 532 active employees eligible for the KUB Pension Plan who are potentially eligible to receive QEBA benefits. There is currently one member receiving benefits under the QEBA. The KUB Pension Plan was closed effective January 1, 2011, such that persons employed or re-employed by KUB on or after January 1, 2011, are not eligible to participate, but that eligible employees hired prior to January 1, 2011, who have not separated from service, shall continue as Participants and accrue benefits under the KUB Pension Plan. The KUB Pension Plan was amended to include the provision of QEBA benefits; therefore, amendments to the QEBA require the same authority as amendments to the KUB Pension Plan. As required by federal tax law, the QEBA is unfunded within the meaning of the federal tax laws. KUB may not pre-fund the QEBA to cover future liabilities beyond the current year. KUB has established procedures to pay for these benefits on a pay-as-you-go basis, funded by KUB. There are no assets accumulated in a trust that meets the GASB's criteria.

Total Pension Liability of the QEBA

The below summarizes the disclosures of GASB Statement No. 73, Accounting and Financial Reporting for Pensions and Related Assets That Are Not within the Scope of GASB Statement 68, and Amendments to Certain Provisions of GASB Statements 67 and 68 ("GASB 73"). GASB 73 extends a similar approach of financial reporting to plans meeting specific criteria that are not administered through trusts that GASB 68 established for pension plans. GASB 73 requires measurement of the total pension liability of the QEBA. The amounts reported as of June 30 must be based upon a plan measurement date within the prior twelve months. Therefore, KUB's measurements as of June 30, 2020 and 2019 are based on a December 31, 2019 and 2018 measurement date, respectively.

GASB 73 requires certain disclosures related to the total pension liability of the QEBA, as disclosed below:

	2019	2018
Total pension liability	\$20,236	\$231,883
Deferred outflows	(45,559)	(52,287)
Deferred inflows	35,445	47,260
Net impact on Statement of Net Position	\$10,122	\$226,856
Covered payroll	\$40,276,197	\$42,150,040
Total pension liability as a % of covered payroll	0.05%	0.55%

Changes in total pension liability of the QEBA are as follows:

	Increase	e (Decrease)
	Total Pension Liability	
Balances at December 31, 2018	\$	231,883
Changes for the year:		
Service cost		-
Interest		9,181
Changes of Benefits		(218,272)
Differences between Expected and Actual Experience		34
Changes of Assumptions		13,342
Benefit payments		(15,932)
Net changes		(211,647)
Balances at December 31, 2019	\$	20,236

Actuarial Assumptions

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

Valuation dates	December 31, 2019 and December 31, 2018
Actuarial cost method	Individual entry age
Salary increase	From 2.80% to 5.15%, based on years of service
Mortality	115% and 110% of the Public Sector General Healthy Annuitant
•	Mortality Table (PubG-2010), for males and females,
	respectively, using the Public Sector General Employee Table
	for ages prior to the start of the Healthy Annuitant Table, both projected from the 2010 base rates using scale MP2018, fully generational as of December 31, 2019; Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA as of December 31, 2018
Inflation	2.5% as of December 31, 2019, and 2.8% as of December 31, 2018

The actuarial assumptions used in the December 31, 2019 valuation were based on the results of an actuarial experience study for the period January 1, 2014 through December 31, 2018. The

actuarial assumptions used in the December 31, 2018 valuation were based on the results of an actuarial experience study for the period January 1, 2009 through December 31, 2013. Subsequent revisions to lump sum and post-disability assumptions were based upon updated experience through December 31, 2015 and to retirement and termination rates and expense assumptions based upon updated experience through December 31, 2016.

Discount rate

The QEBA is not funded. In accordance with paragraph 31 of GASB 73, the discount rate is based on the Bond Buyer 20-Bond GO index. This rate was 2.74% at December 31, 2019.

Sensitivity of the total pension liability to changes in the discount rate

The following presents the total pension liability of the QEBA as of December 31, 2019, calculated using the discount rate of 2.74 percent, as well as what the QEBA's total pension liability would be if it were calculated using a discount rate that is one percent lower (1.74 percent) or one percent higher (3.74 percent) than the current rate:

	1% Decrease (1.74%) \$ 20.423		Current Discount Rate (2.74%) \$ 20,236		1% Increase (3.74%) \$ 20.053	
QEBA's total pension liability						

Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions

For the year ended June 30, 2020, KUB recognized pension expense of (\$199,098) for the QEBA. This amount is not expected to be the same as KUB's contribution to the QEBA (\$17,636), but instead represents the change in the net impact on KUB's Statement of Net Position plus employer contributions [\$10,122 - \$226,856 + \$17,636].

The impact of experience gains or losses and assumption changes on the total pension liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2018, this average was 5 years. During the measurement year, there was an experience loss of \$34, with \$7 recognized in the current year and each of the next four years, resulting in a deferred outflow of \$27. There was a deferred inflow at the end of the measurement year of \$21,675 from experience gains in prior years and a deferred outflow of \$5,473 from experience losses in prior years.

During the measurement year, the Plan was amended to provide automatic increases to retirees for benefits limited under Code §415(d), resulting in a change in benefits of \$218,272 that was recognized in the current year. There was an increase in the total pension liability due to assumption changes of \$13,342, with \$2,668 recognized in the current year and each of the next four years, resulting in a deferred outflow of \$10,674. There was a deferred inflow at the end of the measurement year of \$13,770 and a deferred outflow of \$29,385 from assumption changes in prior years. In addition, KUB recorded a deferred outflow of resources of \$6,083 at June 30, 2020 for contributions between December 31, 2019 and June 30, 2020.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual experience	\$	5,500	\$	21,675
Changes in assumptions		40,059		13,770
Contributions subsequent to measurement date		6,083		_
Total	\$	51,642	\$	35,445

\$6,083 reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction of the total pension liability in the year ended June 30, 2021. Other amounts reported as deferred outflows and deferred inflows of resources will be recognized in pension expense as follows:

Year ended June 30:	
2021 \$	8,289
2022	8,289
2023	(9,140)
2024	2,676
Thereafter	_

For the year ended June 30, 2019, KUB recognized pension expense of \$29,543 for the QEBA. This amount is not expected to be the same as KUB's contribution to the QEBA (\$13,312), but instead represents the change in the net impact on KUB's Statement of Net Position plus employer contributions [\$226,856 - \$210,625 + \$13,312].

The impact of experience gains or losses and assumption changes on the total pension liability are recognized in the pension expense over the average expected remaining service life of all active and inactive members, determined as of the beginning of the measurement period. As of December 31, 2017, this average was 5 years. During the measurement year, there was an experience gain of \$36,125, with \$7,225 recognized in the current year and each of the next four years, resulting in a deferred inflow of \$28,900. There was a deferred outflow at the end of the measurement year of \$8,210 from experience losses in prior years.

During the measurement year, there were no benefit changes. There was a decrease in the total pension liability due to assumption changes of \$22,950, with \$4,590 recognized in the current year and each of the next four years, resulting in a deferred inflow of \$18,360. There was a deferred outflow at the end of the measurement year of \$44,077 from assumption changes in prior years. In addition, KUB recorded a deferred outflow of resources of \$7,242 at June 30, 2019 for contributions between December 31, 2018 and June 30, 2019.

The table below summarizes the current balances of deferred outflows and deferred inflows of resources:

	Deferred Outflows of Resources		Deferred Inflows of Resources	
Differences between expected and actual experience	\$	8,210	\$	28,900
Changes in assumptions		44,077		18,360
Contributions subsequent to measurement date		7,242		
Total	\$	59,529	\$	47,260

12. Defined Contribution Plan

The KUB Asset Accumulation 401(k) Plan (the "401(k) Plan") is a defined contribution 401(k) employee retirement savings plan covering eligible KUB employees established by the KUB Board of Commissioners in accordance with the Charter of the City of Knoxville, Tennessee. The 401(k) Plan's assets are held in trust under an agreement between KUB and Fidelity Management Trust Company. Employees hired prior to January 1, 2011 may participate and receive a matching contribution of 50 percent of their own contribution up to a maximum match of 3 percent. Employees hired on or after January 1, 2011 have an enhanced 401(k) due to the closure of the Defined Benefit Pension Plan. They may participate and receive a matching contribution of 50 percent of their own contribution up to a maximum match of 3 percent. They also receive a nonelective KUB contribution of 3 percent to 6 percent, depending on years of service, whether they contribute or not.

KUB funded 401(k) matching contributions and nonelective contributions of \$2,469,273 and \$2,410,201, respectively, for the years ended June 30, 2020 and 2019.

(Space left intentionally blank)

13. Other Post-Employment Benefits (OPEB)

Description of Trust

The Knoxville Utilities Board Other Post Employment Benefits Trust (the Trust) is a single-employer Other Post Employment Benefits Plan (OPEB Plan) established by the Knoxville Utilities Board of Commissioners through Resolution No. 1168, as amended, dated October 18, 2007. The applicable documentation was submitted to the State Funding Board and, in December 2007, the State Funding Board approved the Trust. The Trust was also approved by the Internal Revenue Service in June 2008. KUB administers the Trust through a Board of Trustees consisting of seven KUB employees that are appointed by KUB's President and CEO. Any amendments to the Trust involving costs not approved in the operating budget must be approved by KUB's Board of Commissioners, upon recommendation by KUB's President and CEO. All other amendments to the Trust may be approved by KUB's President and CEO upon 60 days notification to the Board's Audit and Finance Committee. The investment of all deposits to the Trust is governed by an Investment Policy, which was adopted by the KUB Board and approved by the State Funding Board. The Trust issues a financial report, which includes financial statements and required supplementary information. The report may be obtained by writing the Knoxville Utilities Board Retirement System, P.O. Box 59017, Knoxville, TN 37950-9017.

Effective July 1, 1999, KUB closed the OPEB Plan such that persons employed or re-employed by KUB on or after July 1, 1999, are not eligible to participate, but that eligible employees hired prior to July 1, 1999, who are retired and who (prior to retirement) qualified for retiree medical insurance by meeting the "Rule of 80", the sum of age and at least 20 years of qualified service equal or exceed 80, accrue benefits under the Plan.

Participants in the OPEB Plan consisted of the following as of June 30:

	2020	2019
Retirees	555	554
Dependents of retirees	576	550
Eligible active employees	181	288
Total	1,312	1,392

Benefits

Other post-employment benefits may include, but shall not be limited to, medical, prescription drugs, dental, vision, hearing, Medicare Part B or Part D premiums, life insurance, long-term care, and long-term disability. Only medical and pharmacy are currently provided to eligible retirees.

Contributions and Plan Funding

The primary goal of the Funding Policy for the Trust is to document the method KUB has adopted to provide assurance that future KUB and retiree contributions and current Trust assets will be sufficient to fund all benefits expected to be paid to Trust beneficiaries. Per the Funding Policy, KUB's current practice is to fully fund its annual Actuarially Determined Contribution, which is determined by actuarial valuation.

Contributions are authorized by the terms of the Trust as established by KUB Resolution No. 1168, as amended, as approved by the Tennessee State Funding Board. KUB shall have the right at any time to amend, in whole or in part, the provisions of this Trust; however, no such amendment shall authorize or permit the assets of the Trust to be used for or diverted to purposes other than those expressed in the Declaration of Trust.

It shall be the sole and exclusive responsibility of KUB to determine the level of contributions KUB will make to the Trust for the purpose of financing other post-employment benefits accrued by its respective participants. Neither the Trust, nor the Trust's Board, shall be responsible for collecting or otherwise determining the level of contributions needed by KUB to finance any other post-employment benefits offered by KUB. The assets of the Trust shall be expended solely to make payments for other post-employment benefits pursuant to, and in accordance with, the terms of the Trust and to pay the cost of administration.

Based on the date of retirement, certain retired plan members are required to contribute specified amounts monthly to maintain health insurance. Those who retired prior to July 1983 have no required monthly premiums for themselves or dependents. The retirees, or their surviving dependents, who retired between August 1983 and January 1998 are required to pay \$262.50 per month for pre-Medicare family health insurance. For individuals who retired after January 1998, the required monthly premium for pre-Medicare health insurance is \$262.50 for single coverage and \$525 for family coverage. There is currently no premium for Medicare eligible retirees or dependents. KUB is responsible for determining the level of retired plan member contributions on an annual basis, as part of its review of healthcare cost sharing.

Investments

The Trust holds investments in a balanced fund, which invests in passively managed common trust index funds, managed and sponsored by State Street Global Advisors (SSgA), with an asset allocation mirroring the asset allocation of the Trust and rebalanced monthly. The Trust's Investment Policy was established and may only be amended by the KUB Board of Commissioners. The Trust's Investment Policy is to invest in a manner that will provide sufficient investment return to meet current and future retiree health benefits, while conforming to all governing State and Federal statutes. It allows investment of Trust assets in any type of security instrument allowed for in T.C.A 8-50-1203. The following was the Trust's adopted investment target allocations as set forth in the Trust's Investment Policy as of June 30, 2020:

Asset Class	Target Allocation
Domestic Equity:	
Large Cap	30%
Small Cap	8%
International Equity:	
Developed	16%
Emerging .	8%
Real Estate Equity	8%
Debt Securities	30%
Total	100%

An actuarially determined contribution of \$311,324 was made to the OPEB Trust in fiscal year ended June 30, 2020. No contribution was made to the OPEB Trust for the fiscal year ended June 30, 2019. These were based on the OPEB Plan's actuarial valuations as of January 1, 2018, and 2017.

Net OPEB Liability

The below summarizes the disclosures of GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions ("GASB 75"), which requires measurement of the net OPEB liability as total OPEB liability less the amount of the Trust's fiduciary net position. The amounts reported as of June 30 are based on the reporting date for the KUB Other Post-Employment Benefits Plan which is June 30. Measurements as of the reporting date are based on the fair value of assets as of June 30, 2020 and 2019 and the Total OPEB Liability

as of the valuation date, January 1, 2019 updated to June 30, 2020, and January 1, 2018 updated to June 30, 2019, respectively. There was one significant event between the valuation date and the measurement date for June 30, 2020 where the discount rate was reduced from 7.5% to 7.25%.

The components of the net OPEB liability of the Trust are as follows as of June 30:

	2020	2019
Total OPEB liability	\$ 54,544,240	\$ 50,197,938
Plan fiduciary net position	46,954,793	48,750,196
Net OPEB liability	\$ 7,589,447	\$ 1,447,742
Plan fiduciary net position as a percentage of the		
total OPEB liability	86.09%	97.12%

Changes in Net OPEB Liability are as follows:

	Total OPEB Liability (a)		Increase (Decrease) Plan Fiduciary Net Position (b)		Net OPEB Liability (Asset) (a) - (b)	
Balances at June 30, 2019	\$	50,197,938	\$	48,750,196	\$	1,447,742
Changes for the year:						
Service cost		256,270		-		256,270
Interest		3,672,291		-		3,672,291
Changes of Benefits		(202,408)		-		(202,408)
Differences between Expected						
and Actual Experience		43,902		-		43,902
Changes of Assumptions		3,604,843		-		3,604,843
Contributions - employer		-		311,324		(311,324)
Contributions - member		-		-		-
Net investment income		-		975,155		(975,155)
Benefit payments		(3,028,596)		(3,028,596)		-
Administrative expense		-		(53,286)		53,286
Net changes		4,346,302		(1,795,403)		6,141,705
Balances at June 30, 2020	\$	54,544,240	\$	46,954,793	\$	7,589,447

Actuarial assumptions

The total OPEB liability was determined by actuarial valuations, using the following actuarial assumptions, applied to all periods included in the measurement:

Valuation dates: January 1, 2019, updated to June 30, 2020; January 1, 2018,

updated to June 30, 2019

Discount rate: 7.25% as of January 1, 2019; 7.5% as of January 1, 2018

Healthcare cost trend rates: Pre-Medicare: 7.83% grading down to 4.50% over 19 years as

of January 1, 2019; 8.00% grading down to 4.50% over 20 years

as of January 1, 2018

Medicare: 6.88% grading down to 4.50% over 19 years as of January 1, 2019; 7.00% grading down to 4.50% over 20 years as

of January 1, 2018

Administrative expenses: 3.0% per year

Salary increases: From 2.50% to 5.65%, based on years of service as of January

1, 2019; From 2.80% to 5.15%, based on years of service as of

January 1, 2018

Mortality: 115% and 110% of the Public Sector Healthy Annuitant Mortality

Table (PubG-2010), for males and females, respectively, using the Public Sector General Employee Table (PubG-2010) for ages prior to the start of the Health Annuitant Mortality Table, both projected using scale MP2018 fully generational as of January 1, 2019; Sex distinct RP-2000 Combined Mortality projected to 2024

using Scale AA as of January 1, 2018

Inflation: 2.5% as of January 1, 2019; 2.8% as of January 1, 2018

The actuarial assumptions used in the January 1, 2019 and January 1, 2018 valuations were based on the results of actuarial experience studies for the periods January 1, 2014 through December 31, 2018 and January 1, 2009 through December 31, 2013, respectively. The discount rate was subsequently reduced to 7.25 percent form 7.50 percent as of January 1, 2020; therefore, the new rate was used to calculate the OPEB liability as of June 30, 2020.

The long-term expected rate of return on Trust investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of Trust investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. The long-term expected rate of return may be lower in periods of current strong performance due to future valuations that mean revert to the long-term average. Best estimates of arithmetic real rates of return for each major asset class included in the Trust's target asset allocation (see the discussion of the Trust's Investment Policy) are summarized in the chart below.

	Long Term Expected Real Rate of Return		
Asset Class	2020	2019	
Domestic equity	5.4%	5.5%	
International equity	6.4%	6.4%	
Real estate equity	5.8%	5.9%	
Debt securities	0.2%	1.5%	
Cash and deposits	(0.2%)	0.6%	

Discount rate

The discount rate used to measure the total OPEB liability was 7.25 percent and 7.5 percent as of June 30, 2020 and 2019, respectively. The projection of cash flows used to determine the discount rate assumed that participant contributions will be made at the current contribution rate and that KUB contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the Trust's fiduciary net position was projected to be available to make all projected future benefit payments. Therefore, the long-term expected rate of return on Trust investments was applied to all periods of projected benefit payments to determine the total OPEB liability.

Sensitivity of the net OPEB liability to changes in the discount rate.

The following presents the net OPEB liability of the Trust as of June 30, 2020, calculated using the discount rate of 7.25 percent, as well as what the Trust's net OPEB liability would be if it were calculated using a discount rate that is 1 percent lower (6.25 percent) or 1 percent higher (8.25 percent) than the current rate:

	1%	Current	1%
	Decrease	Discount	Increase
	(6.25%)	Rate (7.25%)	(8.25%)
Net OPEB liability	\$ 12,643,555	\$ 7,589,447	\$ 3,282,461

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates.

The following presents the net OPEB liability of the Trust as of June 30, 2020, as well as what the Trust's net OPEB liability would be if it were calculated using a healthcare cost trend rate that is 1 percent lower or 1 percent higher than the current rate:

	1%	Baseline	1%
	Decrease	Trends	Increase
Net OPEB liability	\$ 2,482,856	\$ 7,589,447	\$ 13,485,387

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB

For the year ended June 30, 2020, KUB recognized OPEB expense of \$4,767,499.

The impact of liability experience gains or losses and assumption changes on the Total OPEB Liability are recognized in the OPEB expense over the average expected remaining service life of all active and inactive members of the OPEB Plan. As of the beginning of the measurement period, this average was 2.0 years. During the measurement year, there was an experience loss of \$43,902, with \$21,951 of that recognized in the current year and the remaining amount will be recognized in the next year, resulting in a deferred outflow of resources of \$21,951. Unrecognized experience losses from prior periods were \$499,549, of which the entire amount is recognized as an increase in OPEB expense in the current year.

During the measurement year, there were benefit changes that decreased the expense by \$202,408. There was an increase in the Total OPEB Liability due to assumption changes of \$3,604,843, with \$1,802,422 of that recognized in the current year and in the next year, resulting in a deferred outflow of \$1,802,421. Unrecognized assumption changes from prior periods were \$1,615,800, of which the entire amount is recognized as an increase in OPEB expense in the current year.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of \$2,579,092, of which \$515,818 was recognized in the current year and will be recognized in each of the next four years, resulting in a deferred outflow of resources as of June 30, 2020 of \$2,063,274. Net unrecognized investment losses from prior periods were \$377,831, of which \$86,767 was recognized as an increase in OPEB expense in the current year and resulting in a net deferred outflow of \$291,064. The table below summarizes the current balances of deferred outflows and deferred inflows of resources.

	 rred Outflows Resources	Deferred Inflows of Resources		
Differences between expected and actual				
experience	\$ 21,951	\$	-	
Changes in assumptions	1,802,421		-	
Net difference between projected and actual				
earnings on OPEB plan investments	 2,354,338			
Total	\$ 4,178,710	\$	-	

Amounts reported as deferred outflows and deferred inflows of resources will be recognized in OPEB expense as follows:

Year ended June 30:	
2021 \$	2,426,957
2022	602,586
2023	633,347
2024	515,820
2025	-
Thereafter	-

For the year ended June 30, 2019, KUB recognized OPEB expense of \$3,046,377.

The impact of liability experience gains or losses and assumption changes on the Total OPEB Liability are recognized in the OPEB expense over the average expected remaining service life of all active and inactive members of the OPEB Plan. As of the beginning of the measurement period, this average was 2.0 years. During the measurement year, there was an experience loss of \$999,098, with \$499,549 of that recognized in the current year and the remaining amount will be recognized in the next year, resulting in a deferred outflow of resources of \$499,549. Unrecognized experience losses from prior periods were \$662,384, of which the entire amount is recognized as an increase in OPEB expense in the current year.

During the measurement year, there were no benefit changes. There was an increase in the Total OPEB Liability due to assumption changes of \$3,231,601, with \$1,615,801 of that recognized in the current year and in the next year, resulting in a deferred outflow of \$1,615,800. Unrecognized assumption changes from prior periods were (\$198,590), of which the entire amount is recognized as a decrease in OPEB expense in the current year.

The impact of investment gains or losses is recognized over a period of five years. During the measurement year, there was an investment loss of \$587,645, of which \$117,529 was recognized in the current year and will be recognized in each of the next four years. Net unrecognized investment gains from prior periods were \$123,047, of which \$30,762 was recognized as a decrease in OPEB expense in the current year. The combination of unrecognized investment losses this year along with the net unrecognized investment gains from prior periods results in a net difference between projected and actual earnings on OPEB plan investments as of June 30, 2019 of \$377,831. The table below summarizes the current balances of deferred outflows and deferred inflows of resources.

 		ed Inflows sources
\$ 499,549	\$	-
1,615,800		-
 377,831		-
\$ 2,493,180	\$	=
of \$	1,615,800	of Resources of Resources of Resources of Resources of Resources

14. Related Party Transactions

KUB, in the normal course of operations, is involved in transactions with the City of Knoxville. Such transactions for the years ended June 30, 2020 and 2019 are summarized as follows:

	2020	2019
City of Knoxville		
Amounts billed by KUB for utilities and related services	\$ 12,615,466	\$ 13,624,129
Payments by KUB in lieu of property tax	20,036,911	20,238,463
Payments by KUB for services provided	1,721,989	2,773,377

With respect to these transactions, accounts receivable from the City of Knoxville included in the balance sheet at year end were as follows:

	2020	2019		
Accounts receivable	\$ 773,461	\$ 754,587		

(Space left intentionally blank)

15. Natural Gas Supply Contract Commitments

For fiscal year 2020, the Gas Division hedged 36 percent of its total gas purchases via gas supply contracts. As of June 30, 2020, the Gas Division had hedged the price on approximately 4 percent of its anticipated gas purchases for fiscal year 2021.

KUB contracts separately for the purchase, transportation and storage of natural gas. Purchase commitments for the next five years are as follows:

Firm obligations related to purchased gas - demand

		2021 2022		2023	2024		2025		
Transportation									
Tennessee Gas Pipeline	\$	3,343,892	\$	3,381,612	\$ 3,381,612	\$	3,381,612 \$;	3,381,612
East Tennessee Natural Gas		9,664,040		9,664,040	9,664,040		9,664,040		9,664,040
Texas Eastern		328,500		328,500	328,500		328,500		328,500
Storage									
Tennessee Gas Pipeline		1,600,272		1,600,272	1,600,272		1,600,272		1,600,272
East Tennessee Natural Gas		727,385		727,385	727,385		727,385		727,385
Saltville Natural Gas		2,000,160		2,000,160	1,655,130		620,040		465,030
Bobcat	_	156,000		162,000	 54,000				
Demand Total	\$_	17,820,249	\$_	17,863,969	\$ 17,410,939	\$_	16,321,849 \$;	16,166,839

Firm obligations related to purchased gas - commodity

	2021	2022		2023		2024			2025	
Baseload										
ConocoPhillips	\$ 279,000	\$	-	\$	-	\$	-	\$		-
Shell Energy	460,920		-		-		-			-
CNX Gas	2,367,573		-		-		-			-
NJR Energy Services	1,599,632		-		-		-			-
Commodity Total	\$ 4,707,125	\$	_	\$	_	\$	_	\$_		

The total commodity values presented here are based upon firm supply obligations with each individual natural gas supplier. The firm obligations value for ConocoPhillips and Shell Energy are based upon firm supply obligations and locked prices with those suppliers. The firm obligations value for CNX Gas and NJR Energy Services are based upon firm supply obligations and the applicable NYMEX strip prices on June 30, 2020.

16. Other Commitments and Contingencies

In the normal course of business, there are various lawsuits pending against KUB. Management has reviewed these lawsuits with counsel, who is vigorously defending KUB's position and is of the opinion that the ultimate disposition of these matters will not have a material adverse effect on KUB's financial position, results of operations or cash flows.

In February 2005, a Consent Decree was entered into federal court regarding the operation of KUB's wastewater system. Under the terms of the Consent Decree, the remediation of identified sanitary sewer overflows (SSOs) on KUB's wastewater system had to be completed by June 30, 2016. KUB

completed all the requirements of the Consent Decree for the collection system two years in advance of the deadline.

The Consent Decree also required KUB to perform an evaluation of the wet weather performance and capacity of its wastewater treatment plants. In July 2007, KUB submitted a Composite Correction Plan (CCP) for its wastewater treatment plants to EPA for review. The development and filing of the CCP was a requirement of the federal order of February 2005. The CCP includes recommended improvements to KUB's Kuwahee and Fourth Creek treatment plants to address wet weather capacity issues noted in prior assessments. The EPA approved the CCP in January 2009 including a recommended schedule of plant improvements that extends beyond the expiration date of the original Consent Decree. An amendment to the Consent Decree incorporating and establishing this schedule was agreed to by all parties and was entered on June 23, 2009. The purpose of the Amendment is to allow KUB to complete a portion of work outlined in the CCP after the Consent Decree deadline of June 30, 2016. The CCP provides for a biologically enhanced high-rate clarification (the BEHRC) secondary treatment system to be installed at the Fourth Creek treatment plant by June 30, 2018 and at the Kuwahee treatment plant by June 30, 2021. KUB successfully completed the installation of the BEHRC system at the Fourth Creek treatment plant ahead of schedule in April 2018. Work is currently ongoing at the Kuwahee treatment plant and remains on schedule for completion before the deadline of June 30, 2021. The total cost of such improvements at the Kuwahee treatment plant is estimated to be approximately \$50 million.

KUB's funding plan for the Consent Decree includes long-term bonds and a series of rate increases phased in over the term of the order. Bond proceeds fund all types of wastewater capital projects, the majority of which are related to the Consent Decree. As of June 30, 2020, the Wastewater Division had issued \$556.2 million in bonds to fund wastewater system capital improvements since the inception of the Consent Decree. The Board approved two 50 percent rate increases, which went into effect in April 2005 and January 2007. The Board also approved an 8 percent rate increase, which was effective in September 2008, two 12 percent rate increases, which were effective in April 2011 and October 2012, three 6 percent rate increases which were effective October 2014, October 2015, and October 2016 and three 5 percent rate increases which were effective July 2017, July 2018, and July 2019. KUB anticipates additional bond issues and rate increases over the next decade to help fund wastewater capital improvements.

KUB successfully completed the first cycle of Maintenance Operation Management (MOM) requirements one year before the deadline by inspecting manholes and gravity mains, smoke testing gravity mains, performing required inspections of pump stations and the related force mains, and completing all Corrective Action Plan/Engineering Report (CAP/ER) projects. KUB initiated the second MOM cycle that continues to focus on the prevention of SSOs. As part of the Century II initiative, formally known as the PACE10 program, KUB has installed storage tanks providing 34 million gallons of wastewater storage to control wet weather overflows and rehabilitated or replaced 408 miles of collection system pipe. KUB also continues to maintain a proactive operations and maintenance plan for the wastewater collection system including inspection, grease control, and private lateral enforcement. The result of the PACE10/Century II initiative has been an 80 percent reduction in SSOs.

As of June 30, 2020, the Wastewater Division had completed its 16th full year under the Consent Decree, spending \$559.8 million on capital investments to meet Consent Decree requirements.

17. Risks and Uncertainties

During March 2020, a global pandemic was declared related to the rapidly growing outbreak of a novel strain of coronavirus (COVID-19). The pandemic has significantly impacted the economic conditions across the nation as federal, state, and local governments react to the public health crisis, creating significant uncertainties in the economy. This situation is rapidly changing, and additional impacts may arise. While the disruption is currently expected to be temporary, there is uncertainty around its duration. The ultimate future impact, if any, of the pandemic on results of operations, financial position, liquidity or capital resources cannot be reasonably estimated at this time.

18. Segment Information

The following financial information represents identifiable activities for which the revenue bonds and other revenue backed debt are outstanding for the respective Divisions:

Condensed Statement of Net Position

	2020							
		Electric		Gas		Water	1	Wastewater
Assets and Deferred Outflows of Resources								
Current assets	\$	142,596,498	\$	56,645,627	\$	47,015,529	\$	61,096,595
Restricted assets		19,873,861		3,332,858		4,461,765		8,324,586
Net capital assets		677,193,326		308,721,806		363,225,158		786,639,955
Other assets		19,023,379		8,707,713		7,624,866		16,520,282
Total assets	\$	858,687,064	\$	377,408,004	<u>\$</u>	422,327,318	\$	872,581,418
Deferred outflows of resources		8,535,096		3,059,739		4,534,363		17,107,374
Total assets and deferred outflows of								
resources	\$	867,222,160	\$	380,467,743	\$	426,861,681	\$	889,688,792
Liabilities and Deferred Inflows of Resources								
Current liabilities	\$	120,647,893	\$	17,800,407	\$	13,412,671	\$	23,918,117
Other liabilities		19,638,654		5,372,728		2,778,648		3,894,801
Long-term debt		305,318,174		103,658,568		205,659,293		511,453,164
Total liabilities	\$	445,604,721	\$	126,831,703	\$	221,850,612	\$	539,266,082
Deferred inflows of resources		9,872,921		3,496,660		2,673,916		4,525,089
Total liabilities and deferred inflows of								
resources	\$	455,477,642	\$	130,328,363	\$	224,524,528	\$	543,791,171
Net position								
Net investment in capital assets	\$	356,245,321	\$	198,777,130	\$	155,728,467	\$	279,477,265
Restricted		14,185,852		2,113,135		2,240,297		3,646,433
Unrestricted		41,313,345		49,249,115		44,368,389		62,773,923
Total net position	\$	411,744,518	\$	250,139,380	\$	202,337,153	\$	345,897,621

Condensed Statement of Net Position

	2019								
	Electric	Gas	Water	Wastewater					
Assets and Deferred Outflows of Resources									
Current assets	\$ 137,680,310	\$ 62,061,705	\$ 39,581,468	\$ 67,332,917					
Restricted assets	19,507,008	3,638,555	4,418,741	8,405,641					
Net capital assets	634,285,863	292,089,721	340,619,377	753,174,112					
Other assets	17,957,337	7,626,693	5,921,643	15,719,112					
Total assets	\$ 809,430,518	\$ 365,416,674	\$ 390,541,229	\$ 844,631,782					
Deferred outflows of resources	12,340,126	4,243,825	5,537,853	19,086,892					
Total assets and deferred outflows of									
resources	\$ 821,770,644	\$ 369,660,499	\$ 396,079,082	\$ 863,718,674					
Liabilities and Deferred Inflows of Resources									
Current liabilities	\$ 94,528,815	\$ 16,992,984	\$ 12,652,885	\$ 24,413,825					
Other liabilities	20,105,451	5,028,708	2,692,650	3,825,681					
Long-term debt	320,243,884	112,623,696	192,222,325	509,936,966					
Total liabilities	\$ 434,878,150	\$ 134,645,388	\$ 207,567,860	\$ 538,176,472					
Deferred inflows of resources	1,844,823	653,375	499,640	845,544					
Total liabilities and deferred inflows of									
resources	\$ 436,722,973	\$ 135,298,763	\$ 208,067,500	\$ 539,022,016					
Net position									
Net investment in capital assets	\$ 300,562,581	\$ 173,773,732	\$ 147,251,605	\$ 249,592,233					
Restricted	13,610,435	2,174,252	2,151,226	3,358,076					
Unrestricted	70,874,655	58,413,752	38,608,751	71,746,349					
Total net position	\$ 385,047,671	\$ 234,361,736	\$ 188,011,582	\$ 324,696,658					

Condensed Statement of Revenues, Expenses and Changes in Net Position

	2020						
	Electric	Gas	Water	Wastewater			
Operating revenues	\$547,686,983	\$ 102,565,268	\$ 62,473,524	\$ 101,335,524			
Operating expenses	481,441,378	70,871,519	31,203,340	41,695,761			
Provision for depreciation	29,994,212	12,910,308	10,039,955	19,881,198			
Total operating expenses	511,435,590	83,781,827	41,243,295	61,576,959			
Operating income Non-operating expense Change in net position before capital contributions Capital contributions Change in net position	36,251,393 (9,723,555) 26,527,838 169,009 26,696,847	18,783,441 (3,005,797) 15,777,644 15,777,644	21,230,229 (6,961,046) 14,269,183 56,388 14,325,571	39,758,565 (18,749,276) 21,009,289 191,674 21,200,963			
Net position							
Beginning of year	385,047,671	234,361,736	188,011,582	324,696,658			
End of year	\$411,744,518	\$ 250,139,380	\$ 202,337,153	\$ 345,897,621			

Condensed Statement of Revenues, Expenses and Changes in Net Position

	2019						
	Electric	Gas	Water	Wastewater			
Operating revenues	\$558,369,583	\$ 108,551,679	\$ 58,073,479	\$ 98,482,153			
Operating expenses	497,928,942	76,977,721	32,340,065	40,970,691			
Provision for depreciation	31,991,227	12,877,969	10,315,031	19,545,435			
Total operating expenses	529,920,169	89,855,690	42,655,096	60,516,126			
Operating income Non-operating expense Change in net position before capital contributions Capital contributions Change in net position	28,449,414 (8,537,834) 19,911,580 120,717 20,032,297	18,695,989 (3,068,090) 15,627,899 29,791 15,657,690	15,418,383 (5,811,120) 9,607,263 563,998 10,171,261	37,966,027 (18,877,988) 19,088,039 389,102 19,477,141			
Net position Beginning of year	365,015,374	218,704,046	177,840,321	305,219,517			
End of year	\$385,047,671	\$ 234,361,736	\$ 188,011,582	\$ 324,696,658			

Condensed Statement of Cash Flows

	2020									
	Electric	Electric			Water	V	V astewater			
Net cash provided by										
operating activities	\$ 101,059,249	\$	35,346,474	\$	33,606,169	\$	58,659,248			
Net cash used in capital and										
related financing activities	(98,741,103)		(42,362,688)		(27,054,805)		(70,838,936)			
Net cash provided by (used in)										
investing activities	15,551,456		(16,935)		922,460		1,674,991			
Net increase (decrease) in										
cash and cash equivalents	17,869,602		(7,033,149)		7,473,824		(10,504,697)			
Cash and cash equivalents,										
beginning of year	25,457,569		31,187,947		12,761,344		22,233,080			
Cash and cash equivalents,										
end of year	\$ 43,327,171	\$	24,154,798	\$	20,235,168	\$	11,728,383			

Condensed Statement of Cash Flows

	2019								
	Electric	Electric			Water	V	Wastewater		
Net cash provided by									
operating activities	\$ 64,317,384	\$	30,955,487	\$	27,144,260	\$	62,428,523		
Net cash used in capital and									
related financing activities	(68,089,843)		(30,264,126)		(25,849,294)		(74,220,488)		
Net cash used in									
investing activities	(11,104,315)		(939,468)		(2,683,636)		(8,272,468)		
Net decrease in									
cash and cash equivalents	(14,876,774)		(248, 107)		(1,388,670)		(20,064,433)		
Cash and cash equivalents,									
beginning of year	40,334,343		31,436,054		14,150,014		42,297,513		
Cash and cash equivalents,									
end of year	\$ 25,457,569	\$	31,187,947	\$	12,761,344	\$	22,233,080		

Knoxville Utilities Board Required Supplementary Information - Schedule of Changes in Net Pension Liability and Related Ratios June 30, 2020

			*Year ended December 31									
		2019		2018		2017		2016		2015		2014
Total pension liability Service cost Interest	\$	6,142,213 16,030,626	\$	5,095,488 15,344,193	\$	4,607,486 S 15,015,282	\$	4,226,985 14,966,559	\$	4,157,062 14,812,784	\$	4,092,808 14,698,657
Changes of benefit terms Differences between expected and actual experience Changes of assumptions		163,199 (1,054,117) 8,473,160		- (605,649) -		- (1,087,161) (357,633)		- (2,233,762) (2,932,883)		(1,890,334) -		- - -
Benefit payments, including refunds of member contributions		(15,094,475)		(15,274,814)		(14,969,979)		(14,138,511)		(15,350,926)		(15,533,167)
Net change in total pension liability		14,660,606		4,559,218		3,207,995		(111,612)		1,728,586		3,258,298
Total pension liability - beginning		212,157,951		207,598,733		204,390,738		204,502,350		202,773,764		199,515,466
Total pension liability - ending (a)	\$	226,818,557	\$	212,157,951	\$	207,598,733	\$	204,390,738	\$	204,502,350	\$	202,773,764
Plan fiduciary net position												
Contributions - employer	\$	2,871,241	\$	3,456,475	\$	4,286,597	\$	5,243,146	\$	5,991,887	\$	5,908,541
Contributions - participants		3,170,825		2,081,125		1,488,632		555,075		487,546		475,854
Net investment income		49,938,315		(11,748,396)		32,360,219		13,788,263		(95,430)		22,292,369
Other additions		13,579		62,616		82,239		45,848		30,879		29,733
Benefit payments, including refunds of member contributions		(15,030,475)		(15,174,814)		(14,895,979)		(14,044,511)		(15,274,926)		(15,405,167)
Administrative expense		(467,748)		(445,916)		(385,282)		(441,332)		(397,160)		(378,085)
Death benefits		(64,000)		(100,000)		(74,000)		(94,000)		(76,000)		(128,000)
Net change in plan fiduciary net position**		40,431,737		(21,868,910)		22,862,426		5,052,489		(9,333,204)		12,795,245
Plan fiduciary net position - beginning**		205,508,195		227,377,105		204,514,679		199,462,190		208,795,394		196,000,149
Plan fiduciary net position - ending (b)**	\$	245,939,932	\$	205,508,195	\$	227,377,105	\$	204,514,679	\$	199,462,190	\$	208,795,394
Plan's net pension liability - ending (a) - (b)	\$	(19,121,375)	\$	6,649,756	\$	(19,778,372)	\$	(123,941)	\$	5,040,160	\$	(6,021,630)
Plan fiduciary net position as a percentage of the total pension liability		108.43%		96.87%		109.53%		100.06%		97.54%		102.97%
Covered payroll	\$	40,276,197	\$	42,150,040		43,309,374	\$	44,437,747	\$	44,446,743	\$	44,076,351
Plan's net pension liability as a percentage of covered payroll	•	(47.48%)	•	15.78%		(45.67%)		(0.28%)	•	11.34%	•	(13.66%)

Notes to Schedule:

^{*} Information not reflected prior to 2014 due to changes in actuary methodologies required under GASB 67, which was implemented in 2014.

^{**} Excludes amounts related to 401(k) matching contributions.

Knoxville Utilities Board

Required Supplementary Information - Schedule of Employer Pension Contributions June 30, 2020

	*Year ended December 31									
		2019		2018		2017	2016	2015		2014
Actuarially determined contribution Contribution in relation to the actuarially	\$	2,871,241	\$	3,456,475	\$	4,286,597	\$ 5,243,146	\$ 5,991,887	\$	5,908,541
determined contribution		2,871,241		3,456,475		4,286,597	5,243,146	5,991,887		5,908,541
Contribution deficiency	\$	-	\$	-	\$	-	\$ -	\$ -	\$	-
Covered payroll Contributions as a percentage of	\$	40,276,197	\$	42,150,040	\$	43,309,374	\$ 44,437,747	\$ 44,446,743	\$	44,076,351
covered payroll		7.13%		8.20%		9.90%	11.80%	13.48%		13.41%

Notes to Schedule:

Timing: Actuarially determined contributions for a Plan year are based upon 50% of the

amounts determined at the actuarial valuations for each of the two prior Plan years.

Valuation Dates: January 1, 2018 and January 1, 2017

Key methods and assumptions used to determine contribution rates:

Actuarial cost method: Individual entry age
Asset valuation method: 5-year smoothed market

Amortization method: Level dollar, 30-year closed period with 23 years remaining (24 years as of January 1, 2017),

or a level dollar, 30-year open period for a negative unfunded liability; As of January 1, 2018,

the unfunded liability was negative.

Discount rate: 7.5%

Salary increases: 2.80% to 5.15%, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA

Inflation: 2.8%

^{*} Schedule of Employer Contribution information is not reflected prior to 2014 due to changes in actuary methodologies required under GASB 67, which was implemented 2014. Please refer to prior year's audited financial statements for prior methods and assumptions.

Knoxville Utilities Board Required Supplementary Information – Schedule of Changes in Net OPEB Liability and Related Ratios June 30, 2020

	*Year ended June 30					
		2020		2019		2018
Total OPEB liability						_
Service cost	\$	256,270	\$	270,515	\$	202,603
Interest		3,672,291		3,624,737		3,295,240
Change of benefit terms		(202,408)		-		-
Differences between expected and actual experience		43,902		999,098		1,324,769
Changes of assumptions		3,604,843		3,231,601		(397,180)
Benefit payments		(3,028,596)		(3,532,444)		(3,298,739)
Net change in total OPEB liability		4,346,302		4,593,507		1,126,693
Total OPEB liability - beginning		50,197,938		45,604,431		44,477,738
Total OPEB liability - ending (a)	\$	54,544,240	\$	50,197,938	\$	45,604,431
Plan fiduciary net position						
Contributions - employer	\$	311,324	\$	-	\$	-
Net investment income	•	975,155		2,981,928		3,705,473
Benefit payments		(3,028,596)		(3,532,444)		(3,298,739)
Administrative expense		(53,286)		(54,787)		(51,668)
Net change in plan fiduciary net position		(1,795,403)		(605,303)		355,066
Plan fiduciary net position - beginning		48,750,196		49,355,499		49,000,433
Plan fiduciary net position - ending (b)	\$	46,954,793	\$	48,750,196	\$	49,355,499
Net OPEB liability (asset) - ending (a) - (b)	\$	7,589,447	\$	1,447,742	\$	(3,751,068)
Plan fiduciary net position as a percentage of the total						
OPEB liability		86.09%		97.12%		108.23%
Covered employee payroll Net OPEB liability (asset) as a percentage of	\$	23,363,536	\$	24,346,735	\$	23,677,080
covered employee payroll		32.48%		5.95%		(15.84%)

Notes to Schedule:

See accompanying Independent Auditor's Report

^{*} Information not reflected prior to 2018 due to changes in actuary methodologies required under GASB 75, which was implemented in 2018.

Knoxville Utilities Board

Required Supplementary Information – Schedule of Employer OPEB Contributions June 30, 2020

	 2020	*Year	ended June 30 2019	2018
Actuarially determined contribution Contribution in relation to the annual	\$ 311,324	\$	-	\$ -
required contribution Contribution deficiency/(excess)	\$ 311,324 -	\$	<u>-</u>	\$ <u>-</u>
Covered employee payroll Contributions as a percentage of	\$ 23,363,536	\$	24,346,735	\$ 23,677,080
covered employee payroll	1.33%		0.00%	0.00%

Notes to Schedule:

Valuation Date: January 1, 2018 and January 1, 2017

Timing: Actuarially determined contribution rates are calculated based on the actuarial valuation

completed 18 months before the beginning of the fiscal year.

Key methods and assumptions used to determine contribution rates:

Actuarial cost method: Entry age normal

Asset valuation method: 5-year smoothed market

Amortization method: Level dollar, 30-year closed period with 18 years remaining as of January 1, 2018

(19 years as of January 1, 2017), or a level dollar, 30-year open period for a negative

unfunded liability; As of January 1, 2018, the unfunded liability was negative

Discount rate: 7.5%

Healthcare cost trend rate: Pre-Medicare: 8% grading down to 4.5% over 20 years as of January 1, 2018;

7.83% to 4.5% over 19 years as of January 1, 2017

Medicare: 7% grading down to 4.5% over 20 years as of January 1, 2018;

6.88% to 4.5% over 19 years as of January 1, 2017

Administrative expenses: 3.0% per year

Salary increases: From 2.8% to 5.15%, based on years of service

Mortality: Sex distinct RP-2000 Combined Mortality projected to 2024 using Scale AA

Inflation: 2.8% Investment rate of return: 7.5%

Retirement age: 2% at ages 50-57 at January 1, 2018 and January 1, 2017,

respectively, grading up to 100% at age 70

See accompanying Independent Auditor's Report

^{*} Schedule of Employer Contribution information is not reflected prior to 2018 due to changes in actuary methodologies required under GASB 75, which was implemented in 2018.

Please refer to prior year's audited financial statement for prior methods and assumptions.

Knoxville Utilities Board

Required Supplementary Information – Qualified Governmental Excess Benefit Arrangement Schedule of Changes in Total Pension Liability and Related Ratios June 30, 2020

	*Year ended December 31					
	2019	2018	2017	2016		
Total pension liability	•					
Service cost	\$ -	\$ 941	\$ 584	\$ -		
Interest (includes interest on service cost)	9,181	9,676	7,535	-		
Changes of benefit terms	(218,272)	-	-	185,077		
Differences between expected and actual experience	34	(36,125)	13,684	-		
Changes of assumptions	13,342	(22,950)	73,461	-		
Benefit payments, including refunds of member contributions	(15,932)	<u> </u>		<u> </u>		
Net change in total pension liability	(211,647)	(48,458)	95,264	185,077		
Total pension liability - beginning	231,883	280,341	185,077	-		
Total pension liability - ending	\$ 20,236	\$ 231,883	\$ 280,341	\$ 185,077		
Covered payroll Total pension liability as a percentage of	\$ 40,276,197	\$ 42,150,040	\$ 43,309,374	\$ 44,437,747		
covered payroll	0.05%	0.55%	0.65%	0.42%		

Notes to Schedule:

^{*} There are no assets accumulated in a trust that meet the criteria in paragraph 4 of GASB 73 to pay related benefits.

Knoxville Utilities Board Supplemental Information - Schedule of Expenditures of Federal Awards and State Financial Assistance June 30, 2020

Federal Grantor/ Pass-Through Grantor	<u>Program Name</u>	<u>CFDA</u> <u>Number</u>	Pass-Through Entity <u>Identifying Number</u>	<u>Expenditures</u>
U.S. Department of Homeland Security through Tennessee Department of Military	Disaster Grants - Public Assistance	97.036	PA-04-TN-4427-PW- 00434	\$ 105,150
U.S. Department of Homeland Security through Tennessee Department of Military	Disaster Grants - Public Assistance	97.036	PA-04-TN-4427-PW- 00266	\$ 18,000
U.S. Department of Homeland Security through Tennessee Department of Military	Disaster Grants - Public Assistance	97.036	PA-04-TN-4427-PW- 00446	\$ 36,418
U.S. Department of Homeland Security through Tennessee Department of Military	Disaster Grants - Public Assistance	97.036	PA-04-TN-4427-PW- 00468	\$ 21,653
U.S. Department of Homeland Security through Tennessee Department of Military	Disaster Grants - Public Assistance	97.036	PA-04-TN-4427-PW- 00472	<u>\$ 60,398</u>
		Total Program	n 97.036	<u>\$ 241,619</u>
		Total Federa	l Awards	<u>\$ 241,619</u>

NOTE 1 - BASIS OF PRESENTATION

The Schedule of Expenditures of Federal Awards and State Financial Assistance includes the federal award related grant activity of Knoxville Utilities Board and is presented on the accrual basis of accounting. The expenditures reported in the Schedule of Expenditures and State Financial Assistance were incurred in fiscal years 2019 and 2020. In accordance with the requirements of CFDA 97.036, the expenditures have been reported in fiscal year 2020 when the grant was approved by the Federal Emergency Management Association. KUB did not elect to use 10% de minimis indirect cost rate.

Knoxville Utilities Board Statistical Information - Schedule of Insurance in Force June 30, 2020 (Unaudited)

Crime

Covers losses resulting from employee dishonesty, robbery, burglary, and computer fraud. Limits of coverage - \$5,000,000; \$250,000 retention.

Directors' and Officers' Liability Insurance

Covers KUB personnel appropriately authorized to make decisions on behalf of KUB (including but not limited to Commissioners, President and CEO, Senior Vice Presidents, Vice Presidents, and Directors) for wrongful acts. Limits of coverage - \$20,000,000; \$500,000 corporate deductible, \$0 individual deductible.

Employment Practices Liability

Coverage for costs related to actual or alleged employment practices violations for amounts exceeding specified amount (\$500,000). Limits of coverage - \$10,000,000.

Fiduciary

Covers losses resulting from wrongful acts related to KUB's Pension, 401(k), OPEB Trust funds, and Medical Plan. Limits of coverage - \$10,000,000; \$150,000 deductible.

Pollution Legal Liability

New conditions coverage for losses exceeding specified amount per occurrence (\$1,000,000). Limits of coverage - \$20,000,000.

Property Insurance

This coverage provides protection of KUB's property for fire, extended coverage, vandalism and malicious mischief, and coverage on boilers and machinery. Also included are flood and earthquake damage and mechanical failure. Limits of coverage - \$250,000,000 per occurrence (subject to certain sublimits); \$2,500,000 deductible per occurrence.

Travel Accident

Covers losses related to employees' business travel. Limits of coverage - \$1,000,000 aggregate.

Excess Insurance for General Liability

As a government entity, KUB's liability is limited under the Tennessee Governmental Tort Liability Act (TCA §29-20-403). KUB is self-insured for up to the first \$700,000 of any accident and has insurance of \$1,000,000 above this retention.

Excess Insurance for Workers' Compensation

Covers all losses exceeding specified amount per occurrence (\$1,000,000). Limits of coverage - Statutory; stop loss coverage applies for aggregate losses over \$5,000,000.

Employee Health Plan Stop Loss Coverage

KUB's employee health plan is self-funded. KUB has purchased stop loss insurance, which covers KUB's exposure to annual expenses in excess of \$575,000 per individual participant.



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

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

Board of Commissioners Knoxville Utilities Board Knoxville, Tennessee

We have audited, in accordance with the 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, the financial statements of the Knoxville Utilities Board (KUB), a component unit of the City of Knoxville, Tennessee, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise KUB's basic financial statements, and have issued our report thereon dated October 29, 2020.

Internal Control over Financial Reporting

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

A deficiency in internal control exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of KUB's financial statements will not be prevented, or detected and corrected on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.



Board of Commissioners Knoxville Utilities Board Knoxville, Tennessee

Compliance and Other Matters

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

Purpose of this Report

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

Coulter & Justus, P.C.

Knoxville, Tennessee October 29, 2020

Knoxville Utilities Board Schedule of Findings and Questioned Costs June 30, 2020

Section I -- Summary of Auditor's Results

Financial Statements

Type of auditors' report issued: Unmodified

Internal control over financial reporting:

Material weakness(es) identified?

Significant deficiency(s) identified not

considered to be material weaknesses? None reported

Noncompliance material to financial statements: No

Section II -- Financial Statement Findings

None reported.

Section III – Findings Required by the State of Tennessee Audit Manual

None reported.

Section IV -- Summary Schedule of Prior Year Audit Findings

2019-01

In July 2018, an employee in the KUB Underground Construction Department in the Wastewater Division used a KUB-owned backhoe to take a front-loader full of asphalt off KUB property for use at his personal residence. The value of the asphalt was estimated at \$200. The employee resigned in lieu of termination and the stolen materials were written-off.

2019-02

In November 2018, it was discovered that an employee in the KUB Electrical Engineering Department in the Electric Division had falsified timesheets resulting in \$7,907.79 of overpayments for false time reported. The employee resigned in lieu of termination. The employee paid full restitution of \$7,907.79 to KUB.

2019-03

In May 2019, it was discovered that an employee in the KUB Gas Engineering Department in the Gas Division had falsified timesheets resulting in \$2,740.50 of overpayments for false time reported. The employee resigned in lieu of termination. The employee paid full restitution of \$2,740.50 to KUB.