

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Years Ended April 30, 2017 and 2016



A Department of the City of Kansas City, Missouri

# COMPREHENSIVE ANNUAL FINANCIAL REPORT

For the Years Ended April 30, 2017 and 2016

For  
**KC Water**

A Department of the City of Kansas City, Missouri



Prepared by  
Sean Hennessy, CFO  
Phillip Cridlebaugh, Finance & Accounting Manager  
Finance & Accounting Staff

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Comprehensive Annual Financial Report**  
**Years Ended April 30, 2017 and 2016**

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## KC WATER

### OFFICE OF THE DIRECTOR

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October 31, 2017

The Honorable Mayor, Members of the City Council, City Manager, and Citizens of Kansas City:

City of Kansas City, Missouri Water Services Department (KC Water) is a department of Kansas City, Missouri's Municipal Government. It operates the Water, Wastewater and Stormwater Enterprise Funds, meaning it is financed by the fees collected from its customers. Kansas City municipal government has 19 departments and all of them, with the exception of KC Water and Aviation, are financed by taxes collected by the City. So, that makes KC Water a unique organization in many ways.

From a management perspective, KC Water is led by a Director who reports to the City Manager, just like the Directors of all other City departments. The two major utilities, Water and Wastewater, are each led by a utility engineering officer. In addition, KC Water's utilities are regulated by Environmental Protection Agency (EPA) and Missouri Department of Natural Resources (MDNR) and the utilities follow standards as prescribed by the American Water Works Association (AWWA) and the Water Environment Federation (WEF).

As an entity that operates and manages three utilities (Water, Wastewater, and Stormwater), KC Water must fully recover the cost of managing each utility through its fee structure each fiscal year, essentially operating as a utility business. Each year, KC Water conducts a cost of service study with an outside third party engineering firm to determine the necessary revenue requirements and cost allocation methodology to cover the costs of operation. This cost of service study is the basis for the department's annual budget and follows guidelines as prescribed by the AWWA and the WEF. In addition, the Department manages a long term financial plan to forecast future revenue needs associated with major items such as debt service related to planned bond issues to cover capital mandates. This financial plan is a critical component into the annual cost of service study.

In terms of the annual budget approval process, the department initially submits its budget to the City Manager and Mayor six months prior to the start of the next fiscal year. After review by the City Manager and Mayor, public hearings on the budget are held around the city over the next few months. Two months before the next fiscal year starts, the budget and associated rate ordinances are presented to the four member Finance Committee of the City Council. Once the budget is passed out of the Finance Committee, it is presented by the Department to the full City Council, who in turn, is required to approve or not approve the proposed budget. So, from a governance structure, while the Department Director can recommend a budget and supporting

rate structure to the City Manager, rates are ultimately required to receive final approval from the 13-member City Council, one month before the start of the next fiscal year.

KC Water is challenged by the fact that we have a low population density relative to other metropolitan utilities around the country. With 478,000 residents and 320 square miles of service territory, that includes 2,800 miles of water mains and 2,800 miles of sewer mains, our city must manage a network that is larger than the cities of San Francisco, Philadelphia, Boston and Miami (combined population of 3.4 million). With a smaller base and larger territory, average bills are higher than in many other cities.

As management of KC Water, we offer readers of the Department's financial statements this narrative overview and analysis of the financial activities of the Department, for the year ended April 30, 2017. Comparative information from the previously issued financial statements for the year ended April 30, 2016 has also been included.

The KCWater is responsible for the operation and maintenance of the City's revenue-producing waterworks system ("System"), which includes facilities for obtaining, purifying and delivering potable water for domestic, commercial and industrial consumption and fire protection within the City and surrounding areas. The System is comprised of three separate and distinct units: The Water, Sewer and Stormwater utilities. Each is treated as a separate and distinct enterprise fund.

## **LOCAL ECONOMY**

Kansas City, Missouri is situated at the junction of the Missouri and Kansas rivers and sits opposite Kansas City, Kansas. It is the largest city in the Kansas City Metropolitan Area; the most populous city in Missouri, the sixth largest city in the Midwest, and the 37th most populous city in the United States. Kansas City's location makes it a national transportation hub. The most geo-central market in the nation, metro Kansas City is served by three interstate highways. Kansas City has a diversified economy including transportation, telecommunications, manufacturing, health care, legal services, trade, financial services, and governmental services. The region provides access to over one million jobs in over seven hundred occupations. The top three employers by industry within Kansas City are Services at 35%, which includes professional and business services, as well as education and health services; Trade, Transportation, and Utilities at 20%; and Government at 14%.

Housing in the City of Kansas City is comparatively affordable among major metropolitan cities, with values holding steady. The median price for existing homes is \$133,400, while the median home value in Missouri is \$138,400. Forbes named Kansas City third on its list of the "10 Best Cities to Buy a Home," which followed up a prior survey naming the City as the thirteenth most affordable city in the United States for its low cost of living and housing affordability. U.S. News and World Report listed Kansas City as 49th on its "Best Places to Live" 2016 ranking and 19th on their "20 Best Affordable places to Live in the U.S." ranking, showcasing the value of residing in Kansas City.

Kansas City is officially nicknamed the "City of Fountains - Heart of the Nation" with over 200 fountains, the second most in the world just behind Rome. Kansas City's Parks and Recreation Department oversees 134 miles of trails and bike ways, 220 urban parks, 29 lakes, 103 playgrounds, 152 ball diamonds, 10 community centers, 105 tennis courts, five public golf

courses, six museums and attractions, and 30 pools. Swope Park is one of the nation's largest city parks, comprising 1,805 acres, and annually attracts more than 2 million visitors.

Kansas City is recognized for a growing number of hot spot attractions such as the Kauffman Center for the Performing Arts, the National World War I Museum, the Nelson-Atkins Museum of Art, the American Jazz Museum, the Negro Leagues Baseball Museum, and the College Basketball Experience.

In September, 2017 Thrillist put Kansas City on its new list of 9 Surprisingly Great US Food Cities You Have to Visit. Kansas City made the list for barbeque, fine dining experiences and craft cuisines.

Kansas City was ranked 48th in U.S. News "Top 100 Best Places to Live" survey. To make the top of the list, a place had to have good value, be a desirable place to live, have a strong job market and a high quality of life. Kansas City, Missouri – the larger of two cities that bear the same name – is a major metropolitan area with a diverse population of more than 2 million people. Straddling two states and two rivers, Kansas City surprises newcomers who expect to find a homey metro area. Instead, they find a place that continues to celebrate its history while continuously innovating. Locals can sit down to a game of cards in a riverboat casino before enjoying a show at the Kansas City Symphony. Locals can honor resident legend Charlie Parker with a stop at the American Jazz Museum before sinking their teeth into some famous barbecue. As more millennials flock to Kansas City for its desirable cost of living and optimal job market, the area has fostered the growth of a creative community. Throughout the area, independent boutiques and coffee shops have sprung up, and building walls are decorated by colorful murals.

Per the Bureau of Labor Statistics, the average unemployment rate (not seasonally adjusted) for Kansas City from January through July 2017 is 4.6%, which is 0.4 percentage points lower than the same average rate in July 2016. This compares to the national average unemployment rate of 4.6% through July 2017.

### **The Water Utility**

The primary system includes a 240 million gallon per day treatment plant, 4 major pump stations, 14 re-pump stations, numerous water storage facilities, and approximately 2,800 miles of water mains. Treated water service is provided to approximately 170,000 customers inside and outside the City and 32 active wholesale customers. There are also connections with the transmission systems of 6 other regional water suppliers that can be activated in case of an emergency.

The City obtains its raw water for the primary System from a combination of surface and ground water sources. Surface water comes from the Missouri River and accounts for approximately 80% of the raw water. Ground water comes from a well field in the Missouri River aquifer and accounts for the remaining 20% of raw water. Water treatment is a four-step process that consists of sedimentation, softening, stabilization and filtration. The treated water produced by the Water Services Department meets current federal and state requirements for drinking water.

Water is pumped into the transmission system from storage reservoirs located at the water treatment plant, which is located on the north side of the Missouri River. The water transmission system is comprised of two essentially separate systems, one serving customers located north of the Missouri River and the other serving customers located south of the Missouri River. Water is delivered to the southern system through 2 tunnels under the Missouri River. The distribution systems include booster pumping stations and elevated, underground, and ground level water storage reservoirs. The existing treated water storage capacity is 141 million gallons. The average daily flow during Fiscal Year 2017 was about 93.5 million gallons per day with a peak day demand of 159.4 million gallons, which is about 66% of the primary treatment plant's design capacity.

The number of employees within the Water Utility totaled 470 at year end, April 30, 2017, which was the same number as the prior year. 61% labor class, 39% management class.

The table below provides a summary of System customers for the past 5 years.

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Retail Customers	150,790	150,958	151,073	152,251	153,232
Commercial / Industrial	16,818	16,954	17,865	17,843	17,862
Wholesale Customers	33	32	32	32	32
Total	167,641	167,944	168,970	170,126	171,126

The table below sets forth the 10 largest users of the Water System and the percentage of total consumption applicable to each for the Fiscal Year ended April 30, 2017:

User	Type of Business	Annual Consumption (100 cubic feet)	Percentage of Total Consumption
City of Lee's Summit	Wholesale Water	1,299,392	4.1%
Jackson County PWSD No. 1	Wholesale Water	1,090,964	3.4%
City of Raymore	Wholesale Water	707,192	2.2%
Raytown Water Company	Wholesale Water	562,867	1.8%
City of Belton	Wholesale Water	551,936	1.7%
City of Blue Springs	Wholesale Water	528,055	1.7%
Dogwood Power Management	Utility	518,856	1.6%
Ford Motor Company	Commercial	466,016	1.5%
Veolia – Kansas City	Utility	457,108	1.4%
KCP&L	Utility	410,842	1.3%

## **The Sewer Utility**

The Sewer System serves an area of about 320 square miles. Wastewater collection and treatment services are provided to approximately 165,000 customers inside and outside the City on a retail basis and agreements with 28 surrounding communities and sewage districts on a contractual basis. The Water Services Department currently maintains about 2,200 miles of sanitary sewers and about 600 miles of combined sewers, 40 wastewater pumping stations, 15 flood pumping stations, 3 effluent pumping stations and 6 wastewater treatment plants. The combined sewers transport both sanitary flows and, during rainfall events, stormwater flows. The combined sewers serve an area south of the Missouri River of about 56 square miles. All wastewater transported to the City's treatment plants receives secondary treatment in compliance with federal and state environmental regulations.

The table below provides a summary of Sewer System customers for the past 5 years.

	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
Residential Customers	145,985	146,855	147,475	148,033	148,501
Commercial/Industrial Customers	16,500	16,606	16,585	16,576	16,662
Inter-Jurisdictional Customers	28	28	28	28	28
Total	164,526	165,503	166,103	166,653	167,208

The table below sets forth the 10 largest users of the Sewer System and the percentage of total revenue applicable to each for the Fiscal Year ended April 30, 2017.

User	Type of Business	Percentage of Total Revenue
Johnson County, KS	Inter-Jurisdictional	8.61%
Liberty, MO	Inter-Jurisdictional	3.36%
Gladstone, MO	Inter-Jurisdictional	2.32%
North Kansas City, MO	Inter-Jurisdictional	1.37%
Ford Motor Company	Commercial	1.20%
Veolia - Kansas City	Commercial	1.04%
Raytown, MO	Inter-Jurisdictional	0.74%
Cook Family Foods	Commercial	0.67%
Independence, MO	Inter-Jurisdictional	0.43%
Honeywell	Commercial	0.39%

A summary of the City's wastewater treatment plants are presented in the table below.

## Existing Wastewater Treatment Facilities

Treatment Facility	Approximate First Year of Operation	Current Design Capacity (mgd)	Average Flow (mgd)
Blue River	1964/1985	105.00	60.39
Westside	1977	22.50	18.49
Birmingham	1977	20.00	13.04
Todd Creek	1999	3.40	2.04
Fishing River	2000	1.00	.93
Rocky Branch	2005	2.80	1.37
TOTAL		154.70	96.26

The System's wastewater collection and treatment services includes the processing of biosolids. Biosolids, the stabilized product generated from treatment of wastewater, is used in land application at a City- owned facility in the cultivation of non-food agriculture. The crops harvested, soy-beans and corn, are most generally used as sources of alternative energy, namely bio-diesel and ethanol. These activities meet the United States Environmental Protection Agency ("EPA") treatment and pollutant content criteria Part 503.13. Biosolids can be safely recycled and applied as fertilizer to improve the quality of land for agriculture, while increasing crop yields.

The number of employees within the Sewer Utility totaled 314 at year end, April 30, 2017. This is 6% more than the prior year. 67% labor class, 33% management class.

## **The Stormwater Utility**

Six hundred thirty miles of storm sewer carry stormwater from more than 53,000 stormwater inlets serving Kansas City. In addition, KC Water maintains a flood risk management system that includes 13.5 miles of levee and floodwall, operates 15 flood pump stations, and maintains six detention basins. On an annual basis, the Stormwater utility cleans 18,000 storm inlets, repairs and replaces 300 catch basins, and sweeps over 14,000 miles of stormwater gutters.

## **What is Stormwater?**

Stormwater is simply the water created by rainfall or melting snow. Stormwater is a necessary and important resource, but it can also cause water quality and water quantity issues in urban and suburban areas. When it does not soak into the ground, it runs off, traveling down street gutters and across paved surfaces, bare soil, or sloped lawns. As stormwater travels across paved surfaces, it collects pollutants such as sediment, fertilizers, pesticides, pet waste, oil, de-icing products, yard waste, and litter. It eventually makes its way to a ditch or storm drain in the street. From there, the storm drain system carries the water directly to local streams and rivers without treatment to remove pollutants.

Polluted stormwater can cause many problems, including threats to human and animal health, flooding, and erosion. Many pollutants are toxic, such as organic compounds, bacteria, and viruses. In addition, when too much stormwater runs off paved surfaces, roofs, and lawns, flooding may occur, which can cause damage to property. High volumes of stormwater flowing into a stream also can cause severe stream bank erosion.

### **Issues related to Stormwater**

Because stormwater runoff is the number one vehicle for pollutants entering our local waterways, it is critical that we be aware of what ends up on the ground and ultimately, in our storm drains.

When rain soaks into the soil it is called infiltration. Infiltration helps clean and filter the water and recharge groundwater supplies. Paved, solid surfaces (also known as “impervious surfaces”) such as parking lots, roads, and driveways keep rain from soaking into the soil. In addition to preventing rain from soaking into the soil, impervious surfaces increase the speed and amount of water that rushes into streams, which in turn can cause erosion, damage properties, harm wildlife habitats, and fill streams with sediment.

In Kansas City, the average size home has a 1,000 square-foot roof. A rainfall of just one inch can cause over 600 gallons of water to run off that roof. Much of this water runs from gutters through downspouts onto impervious surfaces such as streets or driveways, carrying pollutants into storm drains and eventually into our rivers and streams.

In the past, cities installed pipes and storm drains to move stormwater away from homes and buildings as quickly as possible and drain it in the nearest creek or stream. This approach, still practiced in many places today, can result in polluted stormwater, stream bank erosion, and flooding in communities downstream. The new and preferred way to manage stormwater is to keep it onsite, slow it down, spread it out, and let it soak in. This allows the soil to filter out pollutants and enables water to enter streams gradually. Developers and municipalities are now using green infrastructure methods such as rain gardens, bio-retention, native plantings, and porous pavements to help manage stormwater where it falls.

### **Sewer Overflows**

Combined sewers are older systems that carry both stormwater and sewage (also called “wastewater”) to treatment plants. Kansas City has 58 square miles of combined sewers. When stormwater runoff from rain storms completely fills combined sewer pipes, the result is a “Combined Sewer Overflow,” a discharge of untreated wastewater and stormwater into local streams. In areas where sanitary sewers and storm sewers are separate, sewer overflows can occur when downspouts, sump pumps, and floor drains from homes and businesses are connected directly to the wastewater sewer.

The Stormwater Utility Division is responsible for stormwater management for the City of Kansas City, Missouri. Its responsibilities can be classified into quantity and quality management duties. Stormwater quantity management involves the management and coordination of improvements to the stormwater system and flood risk management systems including the levees, floodwalls, flood pump stations and the flood warning system. This entails coordinating

the planning, design and construction of the improvements necessary to fulfill these responsibilities. Stormwater quality management involves the coordination, oversight and protection of the city's runoff and surface water quality through the implementation of the MS4 and Land Disturbance Permit requirements. The Stormwater division also sets the policies and standards (as well as implements existing standards) for stormwater infrastructure across the city.

In addition, the Stormwater Line Maintenance group is responsible for maintaining the rain gardens created within the city's right of ways. This responsibility will continue to increase in the future as more rain gardens are created. Other responsibilities now managed by the Stormwater utility include Leaf and Brush Removal and Household Hazardous Waste.

### **Stormwater Fees**

Most homeowners pay a stormwater fee that helps the community maintain its stormwater system. This fee is often collected monthly in a water or other city utility bill, or paid annually with property taxes. Stormwater fees vary across the Kansas City metropolitan region but are generally either a flat or tiered rate, which is based on the amount of impervious surface (such as roofs and driveways) on each property. If you are a resident of Kansas City, Missouri, your stormwater fee is included in your monthly water bill.

Currently, the average Kansas City, Missouri resident pays a stormwater monthly charge of approximately \$2.50 based on a fee of 50 cents per 500 square feet of impervious surface. This rate has remained unchanged since 2003. This fee supports several Stormwater utility activities such as leaf and brush removal, street sweeping, household hazardous waste disposal, catch-basin cleaning, floodwall and levee inspections, and pipe and inlet maintenance. With such a minimal fee, there is only enough funding to minimally maintain the current stormwater system but not enough to replace or expand existing stormwater infrastructure.

Stormwater fees raise about \$13 million annually, vs. stormwater utility expenses of roughly \$17 million annually. The deficit is funded through reductions in cash reserves, which is not a sustainable long-term solution to funding the operating deficit.

### **Stormwater Credits**

In order to reduce stress on the stormwater system and encourage more green infrastructure to help reduce stormwater runoff, many communities give stormwater-fee credits to customers. Kansas City Water Services is no exception. KC Water offers two types of stormwater fee credits for property owners that use best-management practices on their property.

The first type of credit is a ratio credit for properties that have a large pervious area to help absorb stormwater and prevent it from entering storm drains. Property owners can receive a credit if the ratio of the total property area to the runoff surface area is at least 30:1. For example, if a property totals 30,000 square feet and paved or roofed areas make up only 1,000 square feet of the property, it qualifies for the credit. Properties that qualify are granted a 50 percent stormwater fee credit.

The second type of stormwater fee credit is a detention credit for the installation of stormwater detention structures on your property. These types of structures are installed and maintained to hold stormwater on the property during the heaviest parts of a storm, thereby reducing flooding and erosion downstream. Typically, detention basins are professionally designed stormwater management systems that are carefully built to ensure that they catch the required amount of water per rain storm for a given area.

The number of employees within the Stormwater Utility totaled 93 at year end, April 30, 2017. This is 2% less than the prior year. 60% labor class, 40% management class.

### **Capital Improvement Projects**

The Water Fund will have invested approximately \$424 million over five years in water capital improvement projects. The projects are dedicated to water distribution; replacement of water transmission mains; rehabilitation of water treatment plants, pump stations, and storage facilities. The largest allocation, or 74.0% of the total capital investment is committed to the water distribution system. The projects are designed to improve system performance and reliability, reduce water main breaks, enhance fire protection, and deliver safe drinking water to customers.

The Water Main Replacement (WMR) Program uses a strategic, data-driven approach to prioritize the replacement of the water distribution system. It is based on replacing approximately 1% of the system annually, approximately 28 miles/year. The capital investment is structured to reduce O&M costs through systematic replacement of aging infrastructure in order to increase system reliability and improve customer service through reduced service interruptions. The prioritization process is based on a business risk exposure assessment of each pipe segment in the system. The 2,800-mile distribution system was divided into more than 70,000 individual segments. Each segment was analyzed for a consequence-of-failure score and a likelihood-of-failure score to create a business risk exposure (BRE) score for each segment. Those segments with the highest BRE score are scheduled for replacement the following year. The model is a dynamic model updated with the latest information and run each year to establish the prioritization for the following year.

### **Overflow Control Program**

The Overflow Control Program (OCP) was developed to meet regulatory requirements set forth by the Environmental Protection Agency and the Missouri Department of Natural Resources. The regulations require minimizing overflows from the combined sewer system and preventing overflows from the separate sanitary sewer system. The parties have agreed to allow a 25-year period to meet those objectives by completing a planned list of improvements within five years. The implementation schedule is targeted to treat 88% of combined sewer flows and eliminate sanitary sewer overflows during a twenty-four hour rainfall event.

The Sewer Fund will have invested approximately \$600 million over five years in capital improvement projects. Of this amount, \$362 million is committed to the 25-year federally mandated OCP. The estimated total cost of OCP over the next 25 years is approximately \$4.5 billion, adjusted for inflation. In addition, annual expenditures for operations and

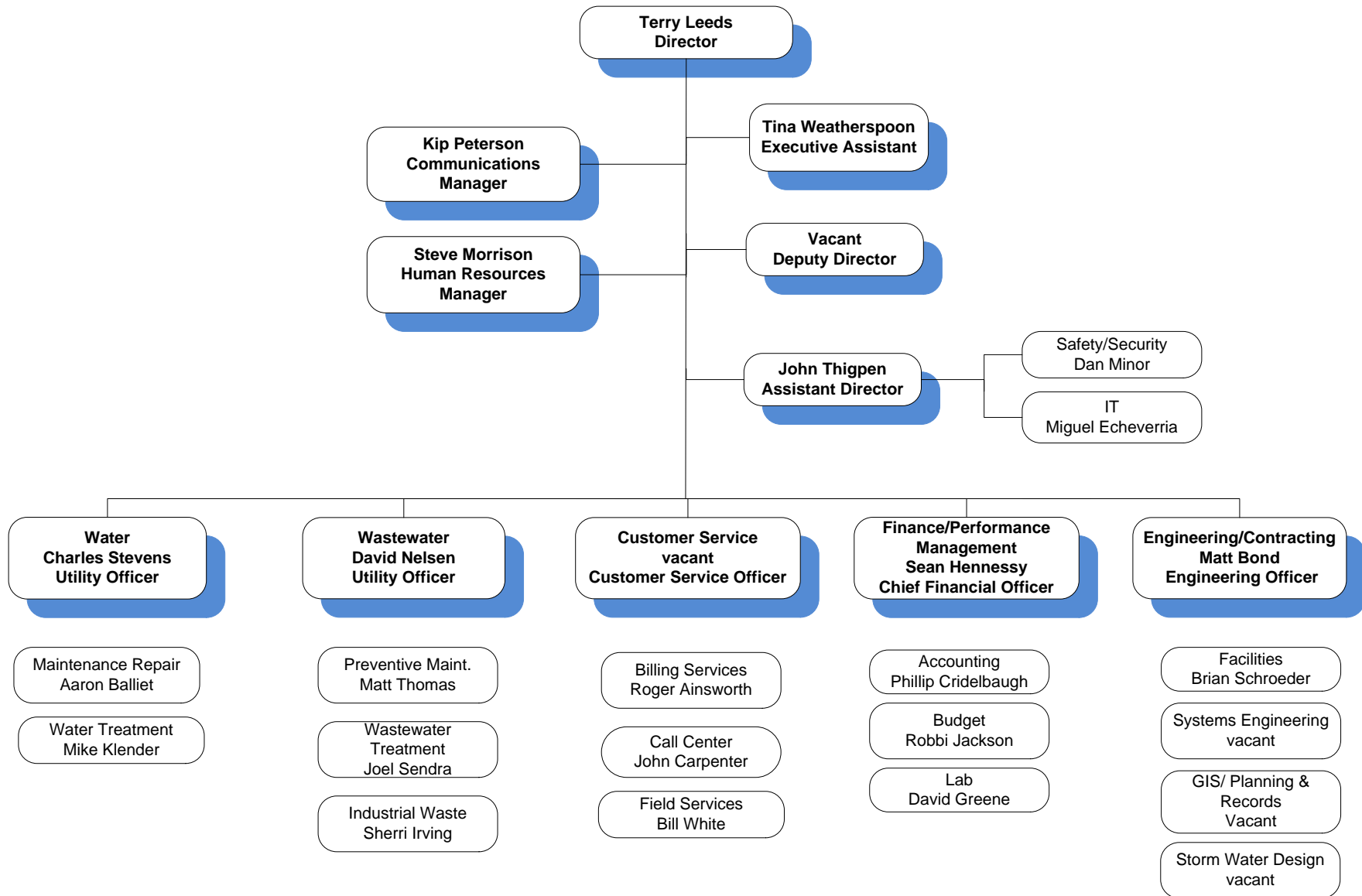
maintenance are expected to increase by approximately \$72 million. It is anticipated that OCP will be financed primarily by the Sewer Fund.

Respectfully submitted,

A handwritten signature in blue ink, appearing to read "Sean Hennessy", with a stylized flourish at the end.

Sean Hennessy  
Chief Financial Officer

# KC Water Organization Chart



## Independent Auditor's Report

The Honorable Mayor and  
Members of the City Council  
KC Water, a department of the  
City of Kansas City, Missouri  
Kansas City, Missouri

We have audited the accompanying financial statements of each major fund of the Water Services Department of the City of Kansas City, Missouri (KC Water), a department of the City of Kansas City, Missouri, as of and for the years ended April 30, 2017 and 2016, and the related notes to the financial statements, which collectively comprise KC Water's basic financial statements, as listed in the table of contents.

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

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

### *Auditor's Responsibility*

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the 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 the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

### ***Opinions***

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of each major fund of KC Water as of April 30, 2017 and 2016, and the respective changes in financial position and cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

### ***Emphasis of Matters***

As discussed in Note 1, the financial statements present only KC Water and do not purport to, and do not, present fairly the financial position of the City of Kansas City, Missouri as of April 30, 2017 and 2016, and the changes in its financial position, or, where applicable, its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

### ***Required Supplementary Information***

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis, pension information and other postemployment benefits listed in the table of contents be presented to supplement the basic financial statements. Such information, although not 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 audits 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 of KC Water's basic financial statements. The Introductory Section, Statistical Section, and combining schedule of revenues, expenses and changes in net position – Sewer Fund listed in the table of contents are presented for purposes of additional analysis and are not a required part of the basic financial statements.

The combining schedule of revenues, expenses and changes in net position – Sewer Fund 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 combining schedule of revenues, expenses and changes in net position – Sewer Fund is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Honorable Mayor and  
Members of the City Council  
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The Introductory Section and the Statistical Section 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.

*BKD, LLP*

Kansas City, Missouri  
October 31, 2017

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Management's Discussion and Analysis**  
**Years Ended April 30, 2017 and 2016**

Management's discussion and analysis (MD&A) of KC Water, a department of the City of Kansas City, Missouri (comprised of three separate and distinct enterprise funds: Water, and the combined Sewer and Storm Fund) provides readers a narrative overview and analysis of each Fund's financial statements and activities for the fiscal years ended April 30, 2017 and 2016, with selected comparative information for the fiscal year ended April 30, 2015.

Readers are encouraged to consider the information presented here in conjunction with the financial statements and notes in order to provide a complete understanding of the financial performance and activities during the years ended April 30, 2017 and 2016.

***Overview of the Financial Statements***

The accompanying financial statements are prepared on an accrual basis of accounting in accordance with U.S. generally accepted accounting principles as set forth by the Governmental Accounting Standards Board (GASB). Revenues and expenses are recognized when earned and incurred, not when received or paid. Capital assets include land, buildings, improvements, equipment and infrastructure assets, such as water mains, pumping stations and treatment plants. Capital assets, except land, are depreciated over their estimated useful lives. Major outlays for capital improvements are capitalized as projects during construction. Capital assets not completed by year-end have been reported as construction-in-progress. (See Notes to Financial Statements for significant accounting policies).

The statements of net position present information about each fund's assets, deferred outflows of resources, liabilities and deferred inflows of resources, with the difference between the sum of assets and deferred outflows of resources and the sum of liabilities and deferred inflows of resources reported as net position.

The statements of revenues, expenses and changes in net position present information showing how each fund's net position changed during the year. All changes in net position are reported as soon as the underlying event giving rise to the change occurs, regardless of the timing of related cash flows.

The statements of cash flows relate to the flows of cash and cash equivalents. Consequently, only transactions that affect each fund's cash accounts through operating activities, noncapital financing activities, capital and related financing activities and investing activities are presented in the statements.

## Financial Position and Assessment

### Summary of Net Position - KC Water

(In thousands)

	April 30,		
	2017	2016	2015*
<b>Assets</b>			
Current assets - unrestricted	\$ 104,141	\$ 105,862	\$ 75,584
Current assets - restricted	68,807	152,786	64,618
Noncurrent investments - unrestricted	292,648	220,425	229,786
Noncurrent investments - restricted	248,607	180,106	182,002
Capital assets	2,106,631	1,969,420	1,838,702
Other assets	6,296	6,939	7,516
Total assets	<u>2,827,130</u>	<u>2,635,538</u>	<u>2,398,208</u>
<b>Deferred Outflows of Resources</b>			
Loss on refunding	3,675	4,281	4,135
Pension plan	31,927	5,683	-
Total deferred outflows of resources	<u>35,602</u>	<u>9,964</u>	<u>4,135</u>
Total assets and deferred outflows of resources	<u>\$ 2,862,732</u>	<u>\$ 2,645,502</u>	<u>\$ 2,402,343</u>
<b>Liabilities</b>			
Current liabilities	\$ 45,535	\$ 37,247	\$ 36,910
Liabilities payable from restricted assets	60,452	57,706	53,762
Long-term liabilities	936,081	855,320	728,456
Total liabilities	<u>1,042,068</u>	<u>950,273</u>	<u>819,128</u>
<b>Deferred Inflows of Resources - Pension Plan</b>	<u>1,124</u>	<u>2,989</u>	<u>-</u>
<b>Net Position</b>			
Net investment in capital assets	1,425,852	1,354,131	1,286,347
Restricted-expendable	93,666	92,627	55,923
Unrestricted	300,022	245,482	240,945
Total net position	<u>1,819,540</u>	<u>1,692,240</u>	<u>1,583,215</u>
Total liabilities, deferred inflows of resources and net position	<u>\$ 2,862,732</u>	<u>\$ 2,645,502</u>	<u>\$ 2,402,343</u>

\* Prior year financial statements have not been restated for the adoption of GASB Statement Nos. 68 and 71 as it was not practical to do so.

## The Water Fund

Within the Water Fund, total assets increased by \$123.0 million or 10.6% from the previous year. Restricted cash and investments increased by \$43.2 million or 38.9% due to a sale of bonds in February 2017 for future construction use. Unrestricted cash and investments used in daily operation increased by 29.5% due to having reached the agreed upon Renewal and Replacements amounts last year. However, notes receivable decreased by 9.2%. The decrease is attributable to the \$484,124 of scheduled payments received from entities under intergovernmental construction cost agreements. Capital assets increased by \$47.6 million or 5.3% as anticipated by the ongoing capital improvement program.

Total liabilities increased by \$87.3 million or 20.1%. The increase in liabilities was due to the sale of bonds for \$78.1 million. The rest of the increase in liabilities, \$17.3 million, was due to the increase in the net pension liability.

At the close of FY2017, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in a net position of \$775.2 million, of this amount, \$122.7 million is considered unrestricted. The unrestricted net position may be used to meet ongoing business activities of the Water Fund and may not be used to fund the City's governmental activities. Total net position increased by \$50.3 million or 6.9% over the previous year, indicating that the Water Fund improved its financial position. The largest portion of net position, \$614.2 million or 79.2%, consists of investment in capital assets (*e.g.*, land, buildings, water treatment facility, water utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to the customers of the water collection, processing and distribution systems.

In FY2016, total assets of the Water Fund increased by \$23.8 million or 2.1% from the previous year. Unrestricted cash assets used in daily operations decreased by approximately 0.2%. Net accounts receivable rose by 10%, which is attributed to the 3% scheduled increase in water service fees. Capital assets increased by \$73.6 million or 8.9% as anticipated from the ongoing capital improvements program.

Total liabilities of the Water Fund decreased by \$23.1 million or 5%. Debt was reduced by the scheduled \$14.9 million retirement of outstanding bonds. Debt was also reduced by the early payoff of the AMR lease. The decrease in debt was also partially due to decreases of \$2.8 million in trade accounts payable. The rest of the decrease in liabilities, \$9 million, was due to the adoption of GASB 68 and GASB 71, which changed the method of reporting the single-employer defined benefit pension plan.

At the close of FY2016, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in net position of \$724.9 million, of this amount, \$94.2 million is considered unrestricted. The unrestricted net position may be used to meet ongoing business activities of the Fund and may not be used to fund the City's governmental activities. Total net position increased by \$48.1 million or 7.1% over the previous year, indicating that the Fund improved its financial position. The largest portion of net position, \$593.5 million or 81.9%, consists of investment in capital assets (*e.g.*, land, buildings, water treatment facilities, water utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to customers of the water collection, processing and distribution systems.

### ***Sewer and Storm Funds Combined***

Within the Sewer Fund, total assets increased by \$68.6 million or 4.7% from the prior year. During FY2017, there were no new Sewer Revenue Bonds issued. Current year cash provided by operating activities were higher. Cash, cash equivalents and investments that are restricted for debt service costs, construction and renewal & replacement decreased by approximately 26.6%. Unrestricted assets used in daily operations increased by approximately 19.9%. Most of the increase is attributable to the 2.0% rise in net accounts receivable resulting from the 13% scheduled increase in sewer service fees. Capital assets increased by \$89.6 million or 8.4% as anticipated from the ongoing capital improvements program.

Total liabilities increased by \$4.5 million or less than 1.0%. Contract retainage payable increased by \$2.3 million or 97.2% as the result of increased construction activity. The Fund's portion of claims liability increased by \$1.58 million or 27.3%. Post-employment benefits (pension and OPEB) increased by \$14.7 million or 92.5%.

At the close of the year, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in net position of \$1,044.3 million for the Sewer Fund. Of this amount, \$177.3 million is unrestricted net position. The unrestricted net position may be used to meet ongoing business activities of the Fund and may not be used to fund the City's governmental activities. Total net position increased by \$77.0 million or 8.0% from the previous year indicating that the Fund improved its financial position. The largest portion of net position, \$811.6 million or 77.7%, consists of net investment in capital assets (*e.g.*, land, buildings, wastewater treatment facilities, sewer and stormwater utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to customers of the wastewater and stormwater systems.

In FY2016, total assets of the Sewer Fund increased by \$213.5 million or 16.9% from the prior year. During the year, new Sewer Revenue Bonds were issued and netted the Fund \$162.8 million of new money to invest in sewer infrastructure improvements. Cash inflows were higher. Cash, cash equivalents and investments that are restricted for debt service costs, construction and renewal and replacement increased by approximately 159.2%. Unrestricted assets used in daily operations increased by approximately 11.9%. Most of the increase was attributable to the 27.3% rise in net accounts receivable resulting from the 13% scheduled increase in sewer service fees. Capital assets increased by \$57.1 million or 5.7% as anticipated from the ongoing capital improvements program.

Total liabilities increased by \$154.2 million or 42.7%. Contract retainage payable decreased by \$0.4 million or 14.9% as the result of completed construction activity. Claims liability increased by \$0.2 million or 3.6% and post-employment benefits (pension and OPEB) increased by \$8.2 million or 52.7%.

At the close of FY2016, total assets and deferred outflows of resources exceeded total liabilities and deferred inflows of resources resulting in net position of \$967.4 million for the Sewer Fund. Of this amount, \$151.3 million is unrestricted net position. The unrestricted net position may be used to meet ongoing business activities of the Fund and may not be used to fund the City's governmental activities. Total net position increased by \$68.6 million or 7.6% from the previous year indicating that the Fund improved its financial position. The largest portion of net position, \$760.6 million or 78.6%, consists of net investment in capital assets (*e.g.*, land, buildings, wastewater treatment facilities, sewer and stormwater utility lines and improvements, machinery and equipment) less any outstanding debt related to those assets. Capital assets were used to provide services to customers of the wastewater and stormwater systems.

### Summary of Revenues, Expenses and Changes in Net Position - KC Water

(In thousands)

	Year Ended April 30		
	2017	2016	2015*
Operating revenues	\$ 375,255	\$ 348,817	\$ 319,798
Operating expenses	<u>(237,887)</u>	<u>(216,717)</u>	<u>(205,503)</u>
Operating income	137,368	132,100	114,295
Nonoperating expenses, net	<u>(18,121)</u>	<u>(16,923)</u>	<u>(14,857)</u>
Increase in net position before capital contributions and transfers	119,247	115,177	99,438
Payment-in-lieu of taxes	(2,960)	-	-
Capital contributions	<u>11,013</u>	<u>9,904</u>	<u>30,978</u>
Change in net position	<u>127,300</u>	<u>125,081</u>	<u>130,416</u>
Total net position - beginning of the year, as previously reported	1,692,240	1,583,215	1,452,799
Adjustment for change in accounting principle	<u>-</u>	<u>(16,056)</u>	<u>-</u>
Net position, beginning of year, as adjusted	<u>1,692,240</u>	<u>1,567,159</u>	<u>1,452,799</u>
Total net position - end of the year	<u>\$ 1,819,540</u>	<u>\$ 1,692,240</u>	<u>\$ 1,583,215</u>

\* Prior year financial statements have not been restated for the adoption of GASB Statement Nos. 68 and 71 as it was not practical to do so.

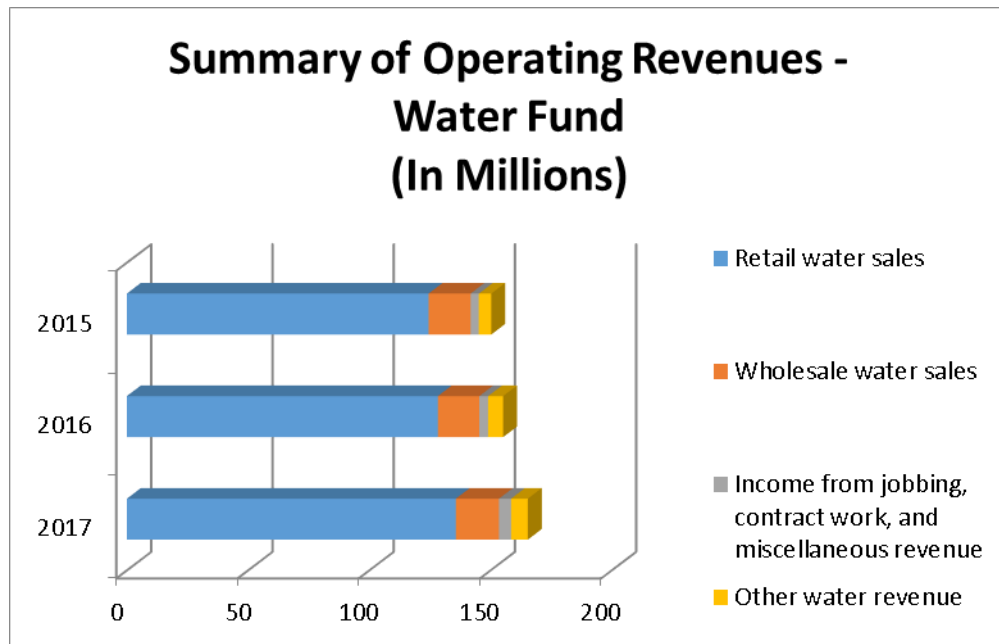
### Summary of Operating Revenues

(In thousands)

	Year Ended April 30		
	2017	2016	2015
Residential and commercial sales	\$ 324,597	\$ 296,959	\$ 274,506
Intermunicipal sewer charges	33,688	37,243	32,701
Other operating revenue	10,110	8,432	7,457
Income from jobbing, contract work and miscellaneous revenue	<u>6,860</u>	<u>6,183</u>	<u>5,134</u>
Total operating revenues	<u>\$ 375,255</u>	<u>\$ 348,817</u>	<u>\$ 319,798</u>
Operating revenues - water	\$ 165,357	\$ 155,209	\$ 150,304
Operating revenues - sewer	<u>209,898</u>	<u>193,608</u>	<u>169,494</u>
Total operating revenues	<u>\$ 375,255</u>	<u>\$ 348,817</u>	<u>\$ 319,798</u>

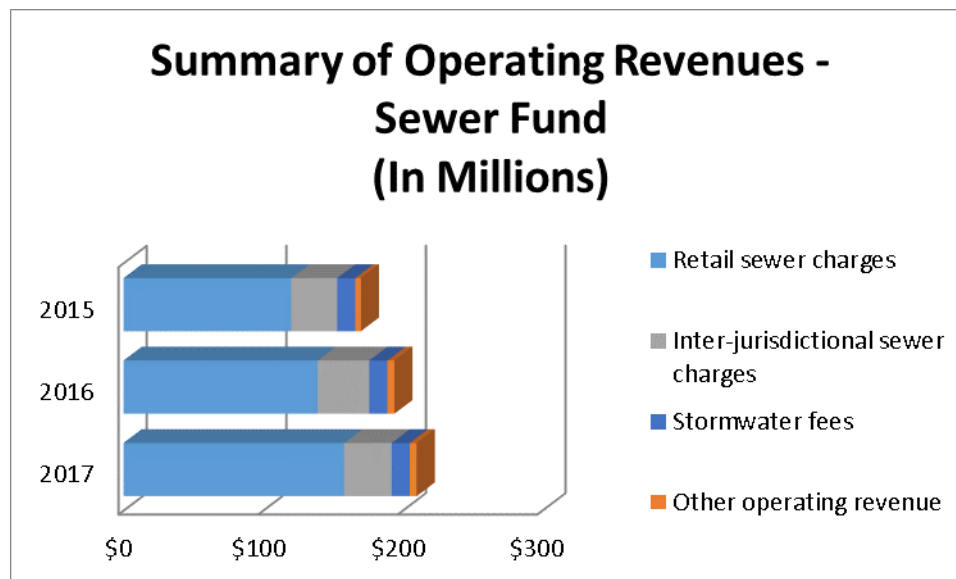
## ***The Water Fund***

Within the Water Fund, in FY2017, total operating revenues increased by \$10.2 million or 6.5%. The scheduled 3% rate increase contributed additional revenue and water consumption also increased. Water consumption by retail residential and commercial customers increased by 1.28 million CCF (hundred cubic feet) or 5.6%. Consumption by wholesale or governmental customer increased by 0.26 million CCF or 3.6%, with the resulting increase of sales of \$8.1 million or 5.1%. Income from jobbing, contract work and miscellaneous revenue increased by \$0.7 million, including reimbursable revenue from prorating the cost of Consumer Services to the Sewer Fund.



### ***Sewer and Storm Funds Combined***

Within the Sewer Fund, total operating revenues increased by \$16.3 million or 8.4% in FY2017. Residential and commercial retail sewer charges contributed \$19.8 million or 121.5% to the increase, primarily due to the scheduled 13% sewer rate increase in effect all year. Revenue from inter-jurisdictional services decreased \$3.6 million, which lowered the overall operating revenue increase by 21.8%. Sales to inter-jurisdictional customers decreased by 9.5% over the prior year due primarily to lower metered flows. Stormwater fees declined \$0.3 million or 2.1% during the year. There was a 7% increase in other operating revenue that consists primarily of forfeitures and penalties, and rentals of equipment, miscellaneous facilities and parking lots.



### ***The Water Fund***

At the close of FY2016, the Water Fund total operating revenues increased by \$4.9 million or 3.3%. Although the full year effect of the scheduled 3% rate increase contributed additional revenue, water consumption declined. This usually occurs during rainier seasons. Water consumption by retail residential and commercial customers declined by 1.08 million CCF or 4.5%. Consumption by wholesale or governmental customers declined by 0.42 million CCF or 5.5%, with the resulting decline in sales of \$0.24 million or 1.4%. Income from jobbing, contract work and miscellaneous revenue increased by \$1.05 million, including reimbursable revenue from prorating the cost of Consumer Services to the Sewer Fund.

### ***Sewer and Storm Funds Combined***

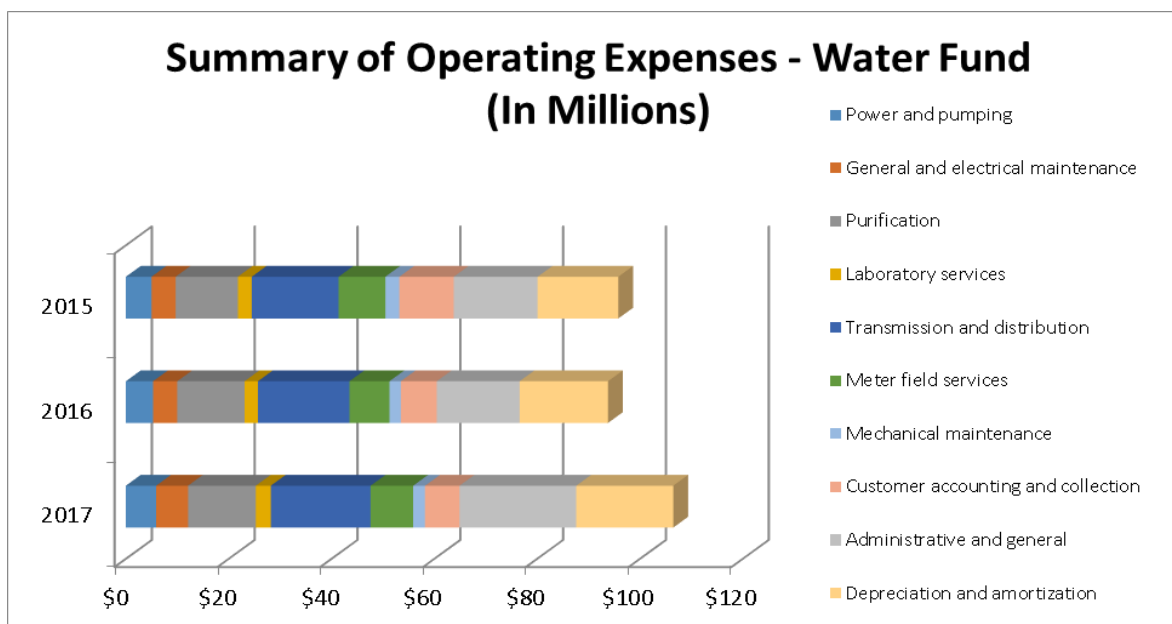
At the close of FY2016, the Sewer Fund total operating revenues increased by \$24.1 million or 14.2%. The increase was attributable mostly to the scheduled 13% sewer rate increase in effect all year. Additional sales, net of bad debt expense, to residential and commercial retail customers contributed \$18.8 million to operating revenues. Other operating revenue consists primarily of forfeitures and penalties, and rentals of equipment, miscellaneous facilities and parking lots. Other operating revenue increased by approximately \$0.7 million or 17.1%.

**Summary of Operating Expenses - KC Water**  
*(In thousands)*

	<b>Year Ended April 30</b>		
	<b>2017</b>	<b>2016</b>	<b>2015</b>
Power and pumping	\$ 5,901	\$ 5,288	\$ 4,958
General and electrical maintenance	6,152	4,676	4,733
Purification	13,186	13,081	12,141
Laboratory services	2,907	2,642	2,689
Transmission and distribution	19,437	17,819	16,869
Customer service	8,263	7,769	9,122
Mechanical maintenance	2,306	2,152	2,680
Customer accounting and collection	6,659	6,984	10,559
Sewage treatment and pumping	29,346	30,674	24,479
Sewer maintenance	30,900	30,082	30,296
Industrial and household hazardous waste control	1,409	1,339	1,323
Administrative and general	62,393	48,429	43,546
Depreciation and amortization	49,028	45,782	42,108
<b>Total operating expenses</b>	<b>\$ 237,887</b>	<b>\$ 216,717</b>	<b>\$ 205,503</b>
Operating expenses - water	\$ 106,344	\$ 93,722	\$ 95,720
Operating expense - sewer	131,543	122,995	109,783
<b>Total operating expenses</b>	<b>\$ 237,887</b>	<b>\$ 216,717</b>	<b>\$ 205,503</b>

## The Water Fund

Total operating expenses of the Water Fund increased by \$12.6 million or 13.5% over the previous year. Power and pumping expense increase by \$0.6 million or 11.6% mostly because of an increase in electricity expenses to pump water. General and electrical maintenance expenses rose by \$1.5 million or 31.6%. This was due to an increase in repairs and maintenance of equipment costs. Transmission and distribution expense increased by \$1.6 million or 9.1%. This was due to using more supplemental work forces for pipeline repair in FY2017. Administrative and general expenses increased by \$6.5 million or 40.7%. This was due to an increase in general liability insurance due to an increase in lawsuits. Depreciation and amortization increased by \$1.7 million or 9.7% as anticipated by the ongoing capital improvement plan.

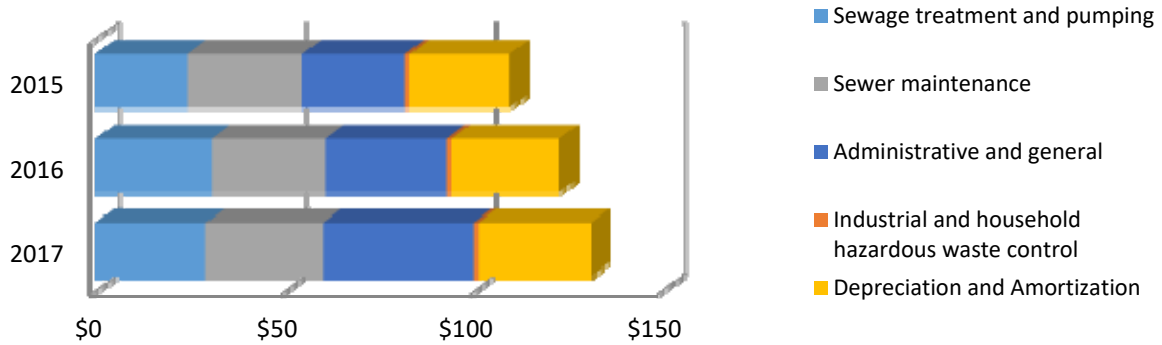


In FY2016, total operating expenses of the Water Fund decreased by \$2 million or 2.1% over the previous year. Power and pumping increased by \$0.3 million or 6.6% mostly because of an increase of electricity rates used to pump water. Purification expense rose by \$0.9 million or 7.7%. This was due to an increase in repairs and maintenance of equipment costs. Transmission and distribution expense increased by \$1.0 million or 5.6%. This was due to using additional supplemental work forces for pipeline repair. Customer accounting and collection expenses decreased by \$3.6 million or 33.9%, primarily due to the completion of the implementation of the Customer Improvement Program. Depreciation and amortization increased by \$1.6 million or 10.3% as anticipated by the ongoing capital improvement plan.

## Sewer and Storm Funds Combined

Total operating expenses of the Sewer Fund increased by \$8.5 million or 7% over the previous year. The Fund continues investing in sewer system improvements in order to comply with the Overflow Control Program (OCP) as mandated by the Environmental Protection Agency (EPA). Sewage treatment and pumping expenses decreased by \$1.3 million or 4.3%, sewer maintenance expenses increased slightly, administrative and general expenses increased by \$7.4 million or 22.9% and depreciation and amortization expenses increased by \$1.6 million or 5.5%.

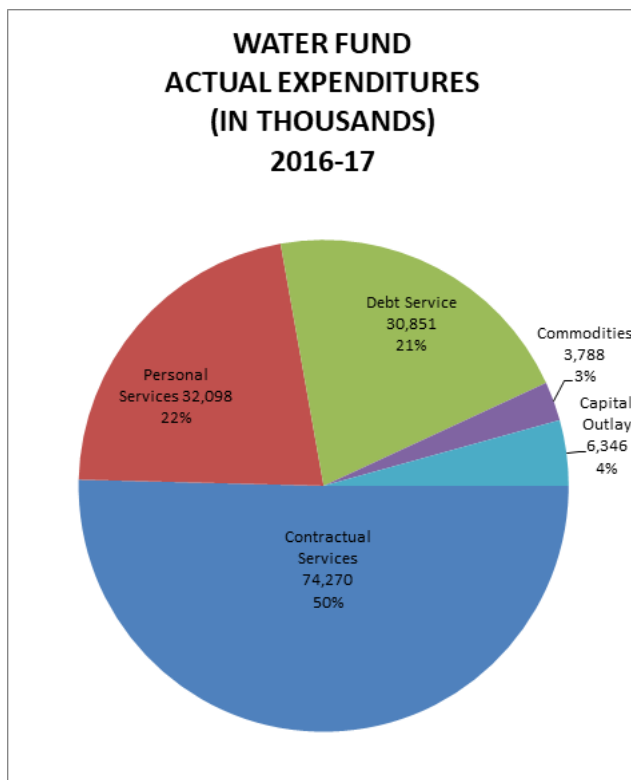
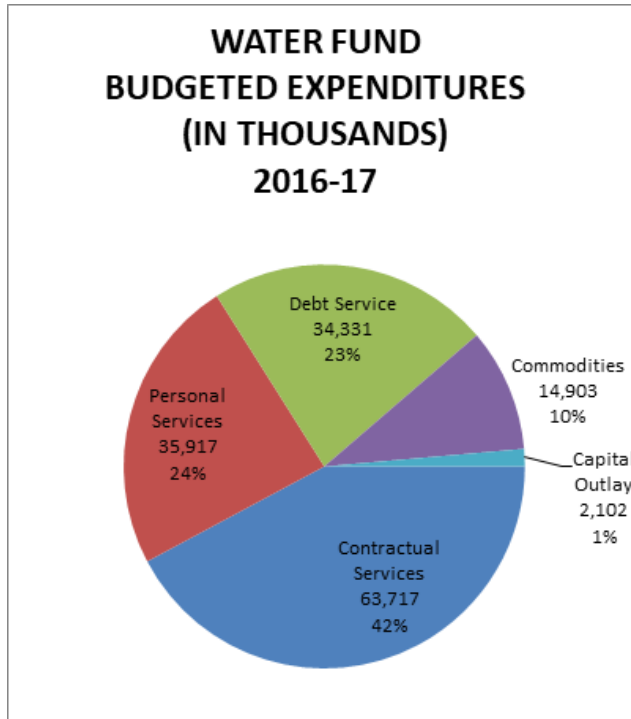
## Summary of Operating Expenses - Sewer Fund (In Millions)



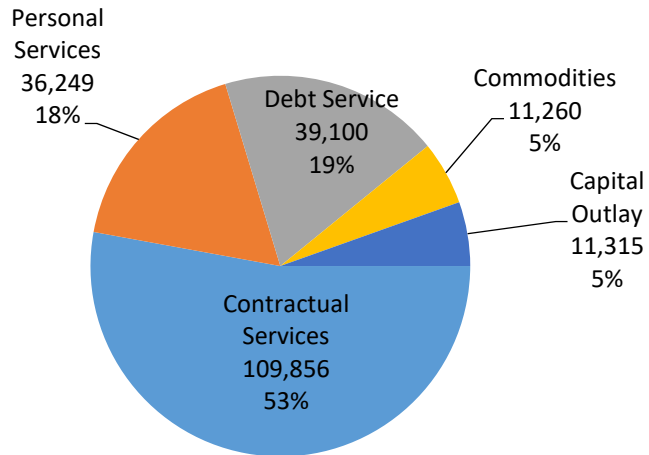
In FY2016, total operating expenses of the Sewer Fund increased by \$13.2 million or 12% over the previous year. The Fund continues investing in sewer system improvements in order to comply with the Overflow Control Program (OCP) as mandated by the Environmental Protection Agency (EPA). Sewage treatment and pumping expenses increased by \$6.2 million or 25.3%, sewer maintenance expenses decreased slightly, administrative and general expenses increased by \$5.1 million or 18.9% and depreciation and amortization expenses increased by \$2.1 million or 7.8%.

### Comparison of Budget to Actual Expenditures for FY2017

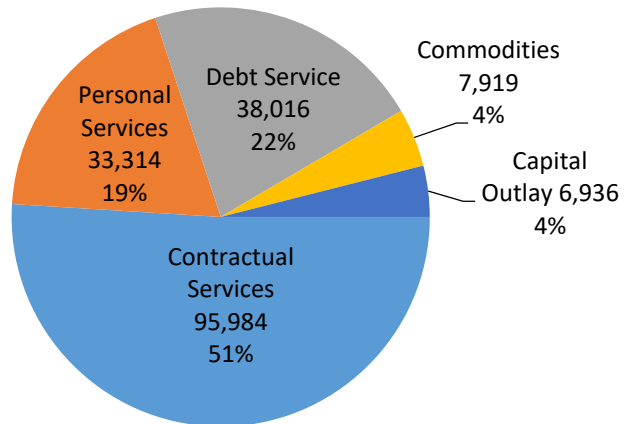
Note: The Adopted Budget includes only the operating fund on a cash basis. Accordingly, actual expenditures are presented only for the operating fund on a cash basis. Bond funds and accruals are excluded.



# SEWER FUND BUDGETED EXPENDITURES (IN THOUSANDS) 2016-17



# SEWER FUND ACTUAL EXPENDITURES (IN THOUSANDS) 2016-17



## **Capital Assets**

### **Water Fund**

Capital assets in the Water Fund totaled \$949.3 million (net of accumulated depreciation) and accounted for 74% of total assets at April 30, 2017. Construction activities are ongoing to replace older and undersized water mains throughout the City, upgrade and improve water treatment plant operations, and modernize infrastructure. During the year, projects totaling \$99.0 million were completed. They included \$63.5 million of constructed water mains and appurtenances and \$10.5 million for treatment plant and equipment upgrades. In addition to completed projects, there was \$2.3 million in assets contributed from property developers. Additions and replacements of motorized vehicles and equipment totaled \$4.7 million. The increases in depreciable capital assets were offset by disposals and retirements of \$12.6 million.

At year end 2016 capital assets totaled \$901.7 million (net of accumulated depreciation) and accounted for 78% of total assets at April 30, 2016. Construction activities are ongoing to replace older and undersized water mains throughout the City, upgrade and improve water treatment plant operations, and modernize infrastructure. During the year, projects totaling \$72.4 million were completed. They included \$61.7 million of constructed water mains and appurtenances and \$6.3 million for treatment plant and equipment upgrades. In addition to completed projects, there was \$1.7 million in assets contributed from property developers. Additions and replacements of machinery and equipment totaled \$2.5 million. The increases in depreciable capital assets were offset by disposals and retirements of \$7.0 million.

### **Sewer Fund**

At April 30, 2017, capital assets of the Sewer Fund totaled \$1,157.3 million (net of accumulated depreciation) and accounted for 74.7% of total assets. Construction activities are ongoing to repair and improve the City's wastewater system and comply with the Federal Consent Decree to reduce pollutants discharged into streams and waterways. See additional discussion of the Overflow Control Program (OCP) in the next section. During the year, projects totaling \$85.6 million were completed. The investment in infrastructure included \$59 million for sanitary sewer rehabilitation and replacement; \$7.3 million for storm sewer and waterways improvements; and \$21.1 million for pumping stations and equipment. In addition to completed projects, there was \$7.5 million in contributed assets from property developers and assets transferred from Public Works. The increases in depreciable capital assets were offset by disposals and retirements of \$11.2 million.

At April 30, 2016, capital assets totaled \$1,067.7 million (net of accumulated depreciation) and accounted for 72.1% of total assets. Construction activities are ongoing to repair and improve the City's wastewater system and comply with the Federal Consent Decree to reduce pollutants discharged into streams and waterways. See additional discussion of the Overflow Control Program (OCP) in the next section. During the year, projects totaling \$35.2 million were completed. The investment in infrastructure included \$18.8 million for sanitary sewer rehabilitation and replacement; \$3.6 million for storm sewer improvements; \$1.0 million for treatment plant upgrades; and \$0.3 million for pumping stations and equipment. In addition to completed projects, there was \$2.4 million in contributed assets from property developers and \$2.7 million of assets transferred from Public Works. Additions and replacements of machinery and equipment totaled \$0.6 million. The increases in depreciable capital assets were offset by disposals and retirements of \$6.7 million.

## **Debt Administration**

Debt Administration provides long-term debt planning, issuance and administration in accordance with the approved Capital Improvement Program to meet the City's capital infrastructure needs. The City promotes effective communication with bond rating agencies in order to maintain its high credit rating and manages debt in accordance with established debt policies. Water revenue bond proceeds are used to finance improvements to the water collection, processing and distribution systems. Wastewater revenue bond proceeds are used to finance improvements to the stormwater management and control systems, and wastewater collection and processing systems. The Fund's outstanding debt is aligned in such a manner to meet the most stringent debt service requirements. In addition, water system net revenues secure outstanding bonds of the Water Fund and wastewater system net revenues secure outstanding bonds of the Sewer Fund.

Moody's Investors Service maintains an Aa2 rating on the City's senior lien water revenue debt and the senior and junior sanitary sewer revenue bonds. Water Revenue Bond proceeds have been used to fund critical water main replacements and extensions, water treatment plant and pump station improvements and enhancements to service reliability for customers. Sanitary sewer bond proceeds will fund treatment plant, pumping station and sewer conveyance system improvements.

Moody's rating affirmation reflects the:

- Large service area that covers the majority of the Kansas City, Missouri, metropolitan area
- Stable regional economy
- Debt service coverage levels that have improved following consecutive rate increases
- Adequate net working capital
- Favorable debt profile with future borrowing expected
- Satisfactory legal covenants for bondholders

Credit Rating Agencies	Water and Wastewater Bonds Credit Rating
Moody's	Aa2
Standard & Poor's	Water - AA+, Wastewater - AA

Standard & Poor's Ratings Services has maintained an AA+ rating on the City's existing water revenue secured debt and AA rating on the City's existing wastewater secured debt. The rating reflects their assessment of the water and sewer systems:

- Large service base that serves much of the Kansas City metropolitan area (MSA)
- Rates are affordable, given the combined water and sewer rates are above 4% of the City's median household effective buying income
- Strong financial performance

In April 2014, the City received citizens' approval of an additional \$500 million in water revenue bonds, of which \$362.1 million remains for the purpose of extending and improving the water system.

In August 2012, citizens voted to authorize \$500 million in additional sewer revenue bonds. Following the Series 2016A bond issue, the City will have approximately \$324.7 million remaining from its original bond authorization.

The Water and Sewer Funds have the right under the respective bond ordinances to issue additional bonds payable from the same sources and secured by the same revenues, but only in accordance with and subject to the terms and conditions set forth in the respective bond ordinances. The Funds are both required to meet an earnings test before issuing any additional bonds on parity with existing debt. See Notes to Financial Statements.

### ***Request for Information***

This financial report is designed to provide the Department's management, investors, creditors and customers with a general view of the Department's finances and to demonstrate the Department's accountability for the funds it receives and expends. For additional information about this report or if you need additional financial information, please contact:

Sean P. Hennessy  
Chief Financial Officer  
KC Water  
4800 East 63rd Street  
Kansas City, Missouri 64130

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Net Position**  
**April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Assets</b>			
<b>Current assets</b>			
Cash and cash equivalents	\$ 6,752,581	\$ 9,186,720	\$ 15,939,301
Investments	12,578,071	17,156,604	29,734,675
Accounts receivable, net	20,492,504	32,210,995	52,703,499
Accrued interest receivable	346,343	494,428	840,771
Current portion of notes receivable	508,778	-	508,778
Inventories	3,306,707	845,716	4,152,423
Due from other City funds	253,929	7,254	261,183
	<u>44,238,913</u>	<u>59,901,717</u>	<u>104,140,630</u>
<b>Restricted assets</b>			
Cash and cash equivalents	8,263,340	7,703,553	15,966,893
Investments	31,018,467	21,038,276	52,056,743
Accrued interest receivable	373,423	410,172	783,595
	<u>39,655,230</u>	<u>29,152,001</u>	<u>68,807,231</u>
<b>Total current assets</b>	<u>83,894,143</u>	<u>89,053,718</u>	<u>172,947,861</u>
Investments	123,832,470	168,816,009	292,648,479
Restricted assets - investments	115,074,250	133,533,055	248,607,305
Notes receivable	4,375,483	-	4,375,483
Prepaid bond insurance, net of accumulated amortization	1,919,583	-	1,919,583
Capital assets, depreciable, net	906,955,007	1,033,382,823	1,940,337,830
Capital assets, nondepreciable	42,393,545	123,899,918	166,293,463
<b>Total assets</b>	<u>1,278,444,481</u>	<u>1,548,685,523</u>	<u>2,827,130,004</u>
<b>Deferred Outflows of Resources</b>			
Loss on refunding	2,390,817	1,284,265	3,675,082
Items related to pension plan	17,314,711	14,611,847	31,926,558
<b>Total deferred outflows of resources</b>	<u>19,705,528</u>	<u>15,896,112</u>	<u>35,601,640</u>
 <b>Total assets and deferred outflows of resources</b>	 <u><u>\$ 1,298,150,009</u></u>	 <u><u>\$ 1,564,581,635</u></u>	 <u><u>\$ 2,862,731,644</u></u>

See Notes to Financial Statements

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Liabilities, Deferred Inflows of Resources and Net Position</b>			
Current liabilities			
Accounts payable	\$ 9,725,360	\$ 23,280,576	\$ 33,005,936
Current portion of compensated absences	833,384	731,196	1,564,580
Accrued payroll and related expenses	1,535,185	1,262,052	2,797,237
Contracts and retainage payable	437,373	708,047	1,145,420
Other liabilities	319,126	-	319,126
Current portion of due to other City funds	389,681	253,885	643,566
Current portion of claims liability	4,158,719	1,900,183	6,058,902
	<u>17,398,828</u>	<u>28,135,939</u>	<u>45,534,767</u>
Total current liabilities, less liabilities payable from restricted assets			
Liabilities payable from restricted assets			
Accrued interest and fiscal agent fees	6,576,120	5,719,527	12,295,647
Current portion of revenue bonds and notes payable	19,610,000	19,961,818	39,571,818
Contracts and retainage payable	2,114,050	3,985,092	6,099,142
Customer deposits	2,485,195	-	2,485,195
	<u>30,785,365</u>	<u>29,666,437</u>	<u>60,451,802</u>
Total liabilities payable from restricted assets			
Total current liabilities	<u>48,184,193</u>	<u>57,802,376</u>	<u>105,986,569</u>
Claims liability	12,504,927	5,448,602	17,953,529
Compensated absences	2,721,618	2,118,543	4,840,161
Net pension liability	30,723,968	25,927,891	56,651,859
Other postemployment benefit obligation	5,437,790	4,592,153	10,029,943
Revenue bonds and capital leases payable, net of current portion	<u>422,761,618</u>	<u>423,843,789</u>	<u>846,605,407</u>
Total liabilities	<u>522,334,114</u>	<u>519,733,354</u>	<u>1,042,067,468</u>
<b>Deferred Inflows of Resources - Pension Plan</b>	<u>609,750</u>	<u>514,569</u>	<u>1,124,319</u>
<b>Net Position</b>			
Net investment in capital assets	614,223,737	811,627,922	1,425,851,659
Restricted-expendable	38,260,756	55,405,867	93,666,623
Unrestricted	<u>122,721,652</u>	<u>177,299,923</u>	<u>300,021,575</u>
Total net position	<u>775,206,145</u>	<u>1,044,333,712</u>	<u>1,819,539,857</u>
Total liabilities, deferred inflows of resources and net position	<u>\$ 1,298,150,009</u>	<u>\$ 1,564,581,635</u>	<u>\$ 2,862,731,644</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Net Position**  
**April 30, 2016**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Assets</b>			
Current assets			
Cash and cash equivalents	\$ 1,483,340	\$ 2,112,098	\$ 3,595,438
Investments	18,375,224	26,296,250	44,671,474
Accounts receivable, net	20,155,466	31,581,666	51,737,132
Accrued interest receivable	233,283	269,799	503,082
Current portion of notes receivable	484,124	-	484,124
Inventories	3,709,003	831,266	4,540,269
Due from other City funds	326,316	3,480	329,796
Total unrestricted current assets	<u>44,766,756</u>	<u>61,094,559</u>	<u>105,861,315</u>
Restricted assets			
Cash and cash equivalents	933,483	5,932,032	6,865,515
Investments	11,622,140	133,697,735	145,319,875
Accrued interest receivable	234,478	366,011	600,489
Total restricted current assets	<u>12,790,101</u>	<u>139,995,778</u>	<u>152,785,879</u>
Total current assets	<u>57,556,857</u>	<u>201,090,337</u>	<u>258,647,194</u>
Investments	90,690,099	129,735,254	220,425,353
Restricted assets - investments	98,559,260	81,547,301	180,106,561
Notes receivable	4,896,532	-	4,896,532
Prepaid bond insurance, net of accumulated amortization	2,042,765	-	2,042,765
Capital assets, depreciable, net	812,695,018	963,300,180	1,775,995,198
Capital assets, nondepreciable	89,045,872	104,378,750	193,424,622
Total assets	<u>1,155,486,403</u>	<u>1,480,051,822</u>	<u>2,635,538,225</u>
<b>Deferred Outflows of Resources</b>			
Loss on refunding	2,848,534	1,431,779	4,280,313
Items related to pension plan	3,082,377	2,601,211	5,683,588
Total deferred outflows of resources	<u>5,930,911</u>	<u>4,032,990</u>	<u>9,963,901</u>
Total assets and deferred outflows of resources	<u>\$ 1,161,417,314</u>	<u>\$ 1,484,084,812</u>	<u>\$ 2,645,502,126</u>

See Notes to Financial Statements

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Liabilities, Deferred Inflows of Resources and Net Position</b>			
Current liabilities			
Accounts payable	\$ 12,166,846	\$ 14,951,520	\$ 27,118,366
Current portion of compensated absences	899,888	683,038	1,582,926
Accrued payroll and related expenses	1,333,332	1,163,055	2,496,387
Contracts and retainage payable	186,468	384,287	570,755
Other liabilities	313,140	112,608	425,748
Current portion of due to other City funds	385,000	230,225	615,225
Current portion of claims liability	2,893,181	1,544,973	4,438,154
	<u>18,177,855</u>	<u>19,069,706</u>	<u>37,247,561</u>
Total current liabilities, less liabilities payable from restricted assets			
Liabilities payable from restricted assets			
Accrued interest and fiscal agent fees	6,198,802	5,285,524	11,484,326
Current portion of revenue bonds and notes payable	16,485,000	21,493,700	37,978,700
Contracts and retainage payable	3,808,381	1,995,423	5,803,804
Customer deposits	2,438,682	-	2,438,682
	<u>28,930,865</u>	<u>28,774,647</u>	<u>57,705,512</u>
Total liabilities payable from restricted assets			
Total current liabilities	<u>47,108,720</u>	<u>47,844,353</u>	<u>94,953,073</u>
Claims liability	8,175,320	4,227,555	12,402,875
Compensated absences	2,792,778	1,886,391	4,679,169
Net pension liability	13,380,125	11,291,458	24,671,583
Other postemployment benefit obligation	5,403,488	4,561,977	9,965,465
Revenue bonds and notes payable, net of current portion	<u>358,217,353</u>	<u>445,383,540</u>	<u>803,600,893</u>
Total liabilities	<u>435,077,784</u>	<u>515,195,274</u>	<u>950,273,058</u>
<b>Deferred Inflows of Resources - Pension Plan</b>	<u>1,470,919</u>	<u>1,517,835</u>	<u>2,988,754</u>
<b>Net Position</b>			
Net investment in capital assets	593,543,635	760,587,456	1,354,131,091
Restricted-expendable	37,103,229	55,523,858	92,627,087
Unrestricted	<u>94,221,747</u>	<u>151,260,389</u>	<u>245,482,136</u>
Total net position	<u>724,868,611</u>	<u>967,371,703</u>	<u>1,692,240,314</u>
Total liabilities, deferred inflows of resources and net position	<u>\$ 1,161,417,314</u>	<u>\$ 1,484,084,812</u>	<u>\$ 2,645,502,126</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Revenues, Expenses and Changes in Net Position**  
**Year Ended April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Revenues</b>			
Residential and commercial sales	\$ 153,502,388	\$ 171,095,023	\$ 324,597,411
Intermunicipal sewer charges	-	33,687,701	33,687,701
Other operating revenue	4,995,566	5,114,883	10,110,449
Income from jobbing, contract work and miscellaneous revenues	6,859,793	-	6,859,793
Total operating revenues	<u>165,357,747</u>	<u>209,897,607</u>	<u>375,255,354</u>
<b>Operating Expenses</b>			
Power and pumping	5,900,861	-	5,900,861
General and electrical maintenance	6,151,741	-	6,151,741
Purification	13,185,929	-	13,185,929
Laboratory services	2,906,656	-	2,906,656
Transmission and distribution	19,436,953	-	19,436,953
Customer service	8,263,111	-	8,263,111
Mechanical maintenance	2,305,651	-	2,305,651
Customer accounting and collection	6,658,713	-	6,658,713
Sewage treatment and pumping	-	29,345,704	29,345,704
Sewer maintenance	-	30,899,733	30,899,733
Industrial and household hazardous waste control	-	1,409,208	1,409,208
Administrative and general	22,639,576	39,753,428	62,393,004
Depreciation and amortization	18,893,810	30,134,434	49,028,244
Total operating expenses	<u>106,343,001</u>	<u>131,542,507</u>	<u>237,885,508</u>
<b>Operating Income</b>	<u>59,014,746</u>	<u>78,355,100</u>	<u>137,369,846</u>
<b>Nonoperating Revenues (Expenses)</b>			
Interest income	1,238,646	2,166,678	3,405,324
Interest expense and fiscal agent fees	(12,005,062)	(9,459,096)	(21,464,158)
Other	(3,961)	(59,551)	(63,512)
Total nonoperating expenses, net	<u>(10,770,377)</u>	<u>(7,351,969)</u>	<u>(18,122,346)</u>
<b>Excess of Revenues Over Expenses Before Capital Contributions and Transfers</b>	48,244,369	71,003,131	119,247,500
<b>Capital Contributions</b>	3,465,581	7,547,696	11,013,277
<b>Payment-in-Lieu of Taxes</b>	<u>(1,372,416)</u>	<u>(1,588,818)</u>	<u>(2,961,234)</u>
<b>Increase in Net Position</b>	50,337,534	76,962,009	127,299,543
<b>Net Position, Beginning of Year</b>	<u>724,868,611</u>	<u>967,371,703</u>	<u>1,692,240,314</u>
<b>Net Position, End of Year</b>	<u>\$ 775,206,145</u>	<u>\$ 1,044,333,712</u>	<u>\$ 1,819,539,857</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Revenues, Expenses and Changes in Net Position**  
**Year Ended April 30, 2016**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Revenues</b>			
Residential and commercial sales	\$ 145,387,719	\$ 151,572,150	\$ 296,959,869
Intermunicipal sewer charges	-	37,242,952	37,242,952
Other operating revenue	3,638,548	4,792,703	8,431,251
Income from jobbing, contract work and miscellaneous revenues	6,183,139	-	6,183,139
	<u>155,209,406</u>	<u>193,607,805</u>	<u>348,817,211</u>
Total operating revenues			
<b>Operating Expenses</b>			
Power and pumping	5,287,722	-	5,287,722
General and electrical maintenance	4,676,138	-	4,676,138
Purification	13,081,316	-	13,081,316
Laboratory services	2,641,992	-	2,641,992
Transmission and distribution	17,818,781	-	17,818,781
Customer service	7,768,625	-	7,768,625
Mechanical maintenance	2,151,887	-	2,151,887
Customer accounting and collection	6,983,041	-	6,983,041
Sewage treatment and pumping	-	30,673,879	30,673,879
Sewer maintenance	-	30,082,417	30,082,417
Industrial and household hazardous waste control	-	1,339,267	1,339,267
Administrative and general	16,090,363	32,340,109	48,430,472
Depreciation and amortization	17,222,379	28,558,919	45,781,298
	<u>93,722,244</u>	<u>122,994,591</u>	<u>216,716,835</u>
Total operating expenses			
<b>Operating Income</b>	<u>61,487,162</u>	<u>70,613,214</u>	<u>132,100,376</u>
<b>Nonoperating Revenues (Expenses)</b>			
Interest income	1,516,951	2,052,642	3,569,593
Interest expense and fiscal agent fees	(9,554,013)	(10,797,250)	(20,351,263)
Other	(113,555)	(28,187)	(141,742)
	<u>(8,150,617)</u>	<u>(8,772,795)</u>	<u>(16,923,412)</u>
Total nonoperating expenses, net			
<b>Excess of Revenues Over Expenses Before Capital Contributions and Transfers</b>	53,336,545	61,840,419	115,176,964
<b>Capital Contributions</b>	<u>3,188,326</u>	<u>6,716,328</u>	<u>9,904,654</u>
<b>Increase in Net Position</b>	56,524,871	68,556,747	125,081,618
<b>Net Position, Beginning of Year</b>	<u>668,343,740</u>	<u>898,814,956</u>	<u>1,567,158,696</u>
<b>Net Position, End of Year</b>	<u>\$ 724,868,611</u>	<u>\$ 967,371,703</u>	<u>\$ 1,692,240,314</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows**  
**Year Ended April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Operating Activities</b>			
Cash received from customers	\$ 158,942,906	\$ 208,051,063	\$ 366,993,969
Receipts from interfund services provided	6,196,703	1,213,441	7,410,144
Cash paid to employees, including benefits	(31,759,866)	(31,495,163)	(63,255,029)
Cash paid to suppliers	(44,612,351)	(60,118,039)	(104,730,390)
Cash paid for interfund services used	(8,849,124)	(12,046,846)	(20,895,970)
Net cash provided by operating activities	<u>79,918,268</u>	<u>105,604,456</u>	<u>185,522,724</u>
<b>Noncapital Financing Activities</b>			
Payment-in-lieu of taxes	<u>(1,372,416)</u>	<u>(1,588,818)</u>	<u>(2,961,234)</u>
Net cash used in noncapital financing activities	<u>(1,372,416)</u>	<u>(1,588,818)</u>	<u>(2,961,234)</u>
<b>Capital and Related Financing Activities</b>			
Acquisition and construction of capital assets	(57,835,976)	(90,051,614)	(147,887,590)
Proceeds from issuance of revenue bonds and capital leases	85,306,327	-	85,306,327
Principal payments on revenue bonds and capital leases	(16,485,000)	(21,493,700)	(37,978,700)
Fiscal agent fees and interest paid on revenue bonds and capital leases	(15,274,199)	(16,375,297)	(31,649,496)
Proceeds from sale of capital assets	115,593	120,632	236,225
Proceeds from repayment of notes receivable	<u>496,395</u>	<u>-</u>	<u>496,395</u>
Net cash used in capital and related financing activities	<u>(3,676,860)</u>	<u>(127,799,979)</u>	<u>(131,476,839)</u>
<b>Investing Activities</b>			
Investment purchases	(320,828,144)	(252,738,280)	(573,566,424)
Investment maturities and sales	258,413,339	284,519,125	542,932,464
Interest received on investments	<u>144,911</u>	<u>849,639</u>	<u>994,550</u>
Net cash provided by (used in) investing activities	<u>(62,269,894)</u>	<u>32,630,484</u>	<u>(29,639,410)</u>
<b>Net Increase in Cash and Cash Equivalents</b>	12,599,098	8,846,143	21,445,241
<b>Cash and Cash Equivalents, Beginning of Year</b>	<u>2,416,823</u>	<u>8,044,130</u>	<u>10,460,953</u>
<b>Cash and Cash Equivalents, End of Year</b>	<u><u>\$ 15,015,921</u></u>	<u><u>\$ 16,890,273</u></u>	<u><u>\$ 31,906,194</u></u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows (Continued)**  
**Year Ended April 30, 2017**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Reconciliation of Operating Income to Net Cash</b>			
<b>Provided by Operating Activities</b>			
Operating income	\$ 59,014,746	\$ 78,355,100	\$ 137,369,846
Adjustments to reconcile operating income to net cash provided by operating activities			
Depreciation and amortization	18,893,810	30,134,434	49,028,244
Changes in assets and liabilities			
Accounts receivable and special assessments receivable	(331,052)	(629,329)	(960,381)
Inventories	402,296	(14,450)	387,846
Due from other funds	72,387	(3,774)	68,613
Accounts payable	(6,129,089)	(5,756,846)	(11,885,935)
Compensated absences	(137,664)	280,310	142,646
Accrued payroll and related expenses	201,853	98,997	300,850
Due to other funds	4,681	23,660	28,341
Other liabilities	-	(112,608)	(112,608)
Claims liability	5,595,145	1,576,257	7,171,402
Customer deposits	46,513	-	46,513
Net pension liability	17,343,843	13,633,165	30,977,008
Deferred inflows/outflows of resources - pensions	(15,093,503)	(12,010,636)	(27,104,139)
Other post-employment benefit obligation	34,302	30,176	64,478
Total adjustments	20,903,522	27,249,356	48,152,878
Net cash provided by operating activities	\$ 79,918,268	\$ 105,604,456	\$ 185,522,724
<b>Components of Cash and Cash Equivalents at End of Year</b>			
Unrestricted	\$ 6,752,581	\$ 9,186,720	\$ 15,939,301
Restricted	8,263,340	7,703,553	15,966,893
	\$ 15,015,921	\$ 16,890,273	\$ 31,906,194
<b>Noncash Activities</b>			
Contributions of capital assets	\$ 3,465,581	\$ 7,547,696	\$ 11,013,277
Change in fair value of investments	(841,730)	(1,048,249)	(1,889,979)
Accounts payable incurred for purchase of capital assets	5,698,786	17,501,373	23,200,159

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows**  
**Year Ended April 30, 2016**

	Water	Sewer	Total
<b>Operating Activities</b>			
Cash received from customers	\$ 147,369,241	\$ 186,388,860	\$ 333,758,101
Receipts from interfund services provided	5,766,088	456,955	6,223,043
Cash paid to employees, including benefits	(30,777,208)	(30,864,655)	(61,641,863)
Cash paid to suppliers	(50,506,057)	(61,148,979)	(111,655,036)
Cash paid for interfund services used	(7,201,865)	(10,684,131)	(17,885,996)
Net cash provided by operating activities	<u>64,650,199</u>	<u>84,148,050</u>	<u>148,798,249</u>
<b>Noncapital Financing Activities</b>			
Payments received on loan to Capital Improvements Fund	<u>2,500,000</u>	<u>-</u>	<u>2,500,000</u>
Net cash provided by noncapital financing activities	<u>2,500,000</u>	<u>-</u>	<u>2,500,000</u>
<b>Capital and Related Financing Activities</b>			
Acquisition and construction of capital assets	(72,867,365)	(66,663,816)	(139,531,181)
Proceeds from issuance of revenue bonds and capital leases	-	202,474,031	202,474,031
Refunding of bond principal	-	(39,295,000)	-
Principal payments on revenue bonds and capital leases	(31,483,704)	(18,282,100)	(49,765,804)
Fiscal agent fees and interest paid on revenue bonds and capital leases	(14,842,907)	(15,501,758)	(30,344,665)
Debt issuance costs	-	95,756	95,756
Proceeds from sale of capital assets	100,477	202,992	303,469
Proceeds from repayment of notes receivable	456,573	-	456,573
Net cash provided by (used in) capital and related financing activities	<u>(118,636,926)</u>	<u>63,030,105</u>	<u>(16,311,821)</u>
<b>Investing Activities</b>			
Investment purchases	(249,925,926)	(247,671,341)	(497,597,267)
Investment maturities and sales	292,777,617	91,913,626	384,691,243
Interest received on investments	1,181,064	1,642,224	2,823,288
Net cash provided by (used in) investing activities	<u>44,032,755</u>	<u>(154,115,491)</u>	<u>(110,082,736)</u>
<b>Net Increase (Decrease) in Cash and Cash Equivalents</b>	(7,453,972)	(6,937,336)	24,903,692
<b>Cash and Cash Equivalents, Beginning of Year</b>	<u>9,870,795</u>	<u>14,981,466</u>	<u>24,852,261</u>
<b>Cash and Cash Equivalents, End of Year</b>	<u>\$ 2,416,823</u>	<u>\$ 8,044,130</u>	<u>\$ 10,460,953</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Statement of Cash Flows (Continued)**  
**Year Ended April 30, 2016**

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
<b>Reconciliation of Operating Income to Net Cash</b>			
<b>Provided by Operating Activities</b>			
Operating income	<u>\$ 61,487,162</u>	<u>\$ 70,613,214</u>	<u>\$ 132,100,376</u>
Adjustments to reconcile operating income to net cash provided by operating activities			
Depreciation and amortization	17,222,379	28,558,919	45,781,298
Changes in assets and liabilities			
Accounts receivable and special assessments receivable	(1,824,252)	(6,773,112)	(8,597,364)
Inventories	(1,167,118)	(362,145)	(1,529,263)
Due from other funds	(316,554)	11,122	(305,432)
Accounts payable	(11,072,645)	(7,737,749)	(18,810,394)
Compensated absences	288,127	157,821	445,948
Accrued payroll and related expenses	170,472	130,701	301,173
Due to other funds	(14,381)	230,225	215,844
Other liabilities	-	(77,704)	(77,704)
Claims liability	597,921	200,170	798,091
Customer deposits	66,730	-	66,730
Pension liability	(1,003,558)	(991,122)	(1,994,680)
Other post-employment benefit obligation	<u>215,916</u>	<u>187,710</u>	<u>403,626</u>
Total adjustments	<u>3,163,037</u>	<u>13,534,836</u>	<u>16,697,873</u>
Net cash provided by operating activities	<u><u>\$ 64,650,199</u></u>	<u><u>\$ 84,148,050</u></u>	<u><u>\$ 148,798,249</u></u>
<b>Components of Cash and Cash Equivalents at End of Year</b>			
Unrestricted	\$ 1,483,340	\$ 2,112,098	\$ 3,595,438
Restricted	<u>933,483</u>	<u>5,932,032</u>	<u>6,865,515</u>
	<u><u>\$ 2,416,823</u></u>	<u><u>\$ 8,044,130</u></u>	<u><u>\$ 10,460,953</u></u>
<b>Noncash Activities</b>			
Contributions of capital assets	\$ 3,188,326	\$ 6,716,328	\$ 9,904,654
Change in fair value of investments	(344,120)	(367,950)	(712,070)
Accounts payable incurred for purchase of capital assets	11,025,229	12,346,299	23,371,528

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2017 and 2016**

**Note 1: Nature of Operations and Summary of Significant Accounting Policies**

***Nature of Operations and Reporting Entity***

The financial statements of the Water Services Department (KC Water or the “Department”) of the City of Kansas City, Missouri (the City) have been prepared in conformity with accounting principles generally accepted in the United States of America.

KC Water is comprised of the Water, Sewer and Storm funds, enterprise funds of the City of Kansas City, Missouri. The financial statements of KC Water present each major fund and the respective changes in their financial position and, where applicable, cash flows thereof as of April 30, 2017 and 2016, and for the years then ended in conformity with accounting principles generally accepted in the United States of America. The financial statements are not intended to present fairly the financial position of the City. The Water Fund is supported wholly by water service charges and is responsible for the administration, promotion, operation and maintenance of the water system. The Sewer Fund includes sewer and stormwater accounts. The Sewer Fund is supported wholly by sewer service charges and is responsible for the administration, promotion, operation and maintenance of the wastewater and stormwater systems.

***Basis of Accounting and Presentation***

The financial statements of KC Water have been prepared on the accrual basis of accounting using the economic resources measurement focus. Revenues, expenses, gains, losses, assets, liabilities and deferred inflows and outflows of resources from exchange and exchange-like transactions are recognized when the exchange transaction takes place, while those from government-mandated nonexchange transactions are recognized when all applicable eligibility requirements are met. Operating revenues and expenses include exchange transactions and program-specific, government-mandated nonexchange transactions. Government-mandated non-exchange transactions that are not program specific, investment income and interest on capital assets-related debt are included in non-operating revenues and expenses. KC Water first applies restricted net position when an expense or outlay is incurred for purposes for which both restricted and unrestricted net position are available.

***Cash and Cash Equivalents***

For purposes of the statements of cash flows, KC Water’s cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with original maturities of three months or less from date of acquisition.

***Investments***

All investments are reported at fair value. The fair value of marketable securities is based on quotations that are generally obtained from national securities exchanges. Where marketable securities are not listed on an exchange, quotations are obtained from brokerage firms or pricing services.

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***Accounts Receivable***

Accounts receivable balances are recorded at the invoiced amount. KC Water provides an allowance for doubtful accounts based upon a review of outstanding receivables, historical collection information and existing economic conditions.

***Revenue Recognition***

Revenues are recognized when earned. Unbilled revenue representing estimated consumer usage for the period between the last billing date and the end of the period is accrued by the Department.

***Inventories***

Inventories, consisting of repair parts, materials, supplies, chemicals, rock and fuel are valued at the lower of weighted average cost or market.

***Prepaid Bond Insurance***

Prepaid bond insurance, net of accumulated amortization, represents insurance costs incurred in connection with the issuance of long-term debt. Such costs are being amortized over the term of the respective debt using the straight-line method.

***Capital Assets and Depreciation/Amortization***

Capital assets are stated at cost, including capitalized interest on construction, or estimated historical cost. These include assets funded by revenue and general obligation bonds, contributions and special assessments. Contributed assets are valued at acquisition value at the date of contribution.

Depreciation is provided on the straight-line method. Buildings, water lines and improvements are depreciated on a composite basis ranging from 40 to 100 years. Machinery and equipment are depreciated on a unit basis over useful lives of three to 20 years. Sewer and storm lines are depreciated on a composite basis with a useful life of 100 and 40 years, respectively. Treatment plants and other facilities are depreciated on a composite basis with useful lives of 25 to 55 years.

At the time of retirement or other disposition of assets for which depreciation is computed on the composite method, the original cost of the assets, net of any proceeds from their sale, are removed from the asset and accumulated depreciation accounts and no retirement gain or loss is recorded. For retirements or dispositions of assets for which depreciation is computed on the unit method, the asset and related depreciation accounts are eliminated and the difference between the net carrying value and any proceeds is recorded as a gain or loss.

Any conspicuous or known events, or changes in circumstances, affecting a capital asset are reviewed by the Department to determine whether there is a significant and unexpected decline in the service utility of the capital asset, which could indicate asset impairment.

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Expenses for maintenance and repairs of property are charged to operations as incurred.

Interest costs capitalized on project-related debt for the years ended April 30, 2017 and 2016 totaled \$2,952,110 and \$5,271,470 for the Water Fund, respectively; \$5,919,785 and \$2,666,969 for the Sewer Fund, respectively.

***Deferred Outflows and Inflows of Resources***

A deferred outflow of resources is a consumption of net position by the Department that is applicable to a future reporting period and a deferred inflow of resources is an acquisition of net position that is applicable to a future reporting period.

**Water Fund:** As of April 30, 2017 and 2016, the Fund's deferred outflows of resources of \$19,705,528 and \$5,930,911, respectively, were comprised of deferred losses on bond refundings, changes in assumptions for the net pension liability, difference between projected and actual earnings on pension plan investments and the Water Fund's contributions made subsequent to the measurement date of the net pension liability. As of April 30, 2017 and 2016, the Fund's deferred inflows of resources of \$609,750 and \$1,470,919, respectively, were comprised of the difference between projected and actual experience of plan participants, difference between projected and actual earnings on pension plan investments and the change in the Fund's proportion of the net pension liability.

**Sewer Fund:** As of April 30, 2017 and 2016, the Sewer Fund's deferred outflows of resources of \$15,896,112 and \$4,032,990, respectively, were comprised of deferred losses on bond refunding changes in assumptions for the net pension liability, difference between projected and actual earnings on pension plan investments and the Sewer Fund's contributions made subsequent to the measurement date of the net position liability. As of April 30, 2017 and 2016, the Sewer Fund's deferred inflows of resources of \$514,569 and \$1,517,835, respectively, were comprised of the difference between projected and actual experience of plan participants, the difference between projected and actual earnings on pension plan investments and the change in the Sewer Fund's proportion of the net pension liability.

***Compensated Absences***

Under the terms of the City's personnel policy, KC Water employees are granted vacation and sick leave in varying amounts. Vacation is accumulated at the annual rate of 10 to 20 days, depending on the employee's length of service. Sick leave is accumulated at the rate of 3.7 hours per two-week pay period. The maximum amount of vacation that may be carried forward, which is accrued in the Water and Sewer Funds, is two times the amount earned in a year. Sick leave with pay may be accumulated up to a limit of 2,080 hours. Upon separation from service, employees may convert accrued sick leave at the ratio of four hours of sick leave to one hour of vacation leave credit.

Retiring employees 55 years or older with at least 25 years of creditable service; employees who are to receive a line-of-duty disability pension; and employees who qualify for a City pension and retire with a normal retirement, take early retirement at age 60 or thereafter, or die are entitled to sick leave credit at the rate of two hours of sick leave to one hour of vacation leave credit.

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***Pension Plan***

For the purpose of measuring the net pension asset or liability, deferred outflows of resources and deferred inflows of resources related to pensions and pension expense, information about the fiduciary net position of the Employees' Retirement System (the Plan) and additions/deductions from the Plan's fiduciary net position have been determined on the same basis as they are reported by the Plan. For this purpose, benefit payments (including refunds of employer contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value. See *Note 10* for the retirement plan description.

***Net Position***

Net position of each major fund is classified in three components. Net investment in capital assets consists of capital assets net of accumulated depreciation and reduced by the outstanding balances of borrowings used to finance the purchase or construction of those assets, net of unspent proceeds. Restricted expendable net position is made up of noncapital assets that must be used for a particular purpose as specified by creditors, grantors or donors external to each respective Fund, including amounts deposited with trustees as required by bond indentures, reduced by the outstanding balances of any related borrowings. Unrestricted net position is the remaining net position that does not meet the definition of net investment in capital assets or restricted.

***Use of Estimates***

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

***Implementation of New Accounting Principle***

The Department adopted fair value guidance as set forth in Governmental Accounting Standards Board Statement No. 72, *Fair Value Measurement and Application* (GASB 72). The Statement sets forth guidance for determining and disclosing fair value of assets and liabilities reported in the financial statements. Adoption of GASB 72 did not have a significant impact on amounts reported or disclosed.

***New Accounting Pronouncements Not Yet Adopted***

In June 2015, the GASB issued 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 Statement No. 73). The principal objective of this Statement is to improve the usefulness of information for decisions made by the various users of the general purpose external financial reports (financial reports) of governments whose employees—both active employees and inactive employees—are provided

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with pensions that are not within the scope of Statement No. 68, *Accounting and Financial Reporting for Pensions*, as amended.

In June 2015, the GASB issued Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans* (GASB Statement No. 74). The objective of this Statement is to improve the usefulness of information about postemployment benefits other than pensions (other postemployment benefits or OPEB) included in the general purpose external financial reports of state and local governmental OPEB plans for making decisions and assessing accountability. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for all postemployment benefits (pensions and OPEB) with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity and creating additional transparency. Currently, the Fund does not have an OPEB plan that issues general purpose external financial reports. If applicable, the Department will implement GASB Statement No. 74 beginning with the year ending April 30, 2018.

In June 2015, the GASB issued Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions* (GASB Statement No. 75). The primary objective of this Statement is to improve accounting and financial reporting by state and local governments for postemployment benefits other than pensions (other postemployment benefits or OPEB). It also improves information provided by state and local governmental employers about financial support for OPEB that is provided by other entities. This Statement results from a comprehensive review of the effectiveness of existing standards of accounting and financial reporting for all postemployment benefits (pensions and OPEB) with regard to providing decision-useful information, supporting assessments of accountability and interperiod equity and creating additional transparency. The Department will implement GASB Statement No. 75 beginning with the year ending April 30, 2019.

In March 2016, the GASB issued Statement No. 82, *Pension Issues – Amendment of GASB Statements No. 67, No. 68 and No. 73*, effective for periods beginning after June 15, 2016. The objective of this Statement is to address certain issues that have been raised with respect to Statements No. 67, *Financial Reporting for Pension Plans*, No. 68, *Accounting and Financial Reporting for Pensions* and 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*. Specifically, this Statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements.

In November 2016, the GASB issued Statement No. 83, *Certain Asset Retirement Obligations*, effective for periods beginning after June 15, 2018. The Statement establishes uniform criteria for governments to recognize and measure certain asset retirement obligations (AROs).

In May 2017, the GASB issued Statement No. 86, *Certain Debt Extinguishment Issues*, effective for financial statements for fiscal years beginning after June 15, 2017. GASB 86 eliminates an inconsistency in the literature related to in-substance defeasance of debt. Under previous guidance, debt could only be considered defeased if there was a refunding. GASB 86 now allows defeasance

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treatment even if the government uses existing assets and does not issue new debt. However, any resulting gain or loss will be recognized in the period of the defeasance. GASB 86 also includes guidance on handling prepaid insurance in any debt extinguishment. Additionally, there is a new requirement for all in-substance defeasances to disclose any ability to substitute risk-free monetary assets with those that are not.

In June 2017, the GASB issued Statement No. 87, *Leases*, effective for reporting periods beginning after December 15, 2019. GASB 87 establishes a single approach to accounting for and reporting leases by state and local governments based on the principle that leases are financing of the right to use an underlying asset.

The main rules of GASB 87 with respect to government entities that are lessees require that the lessees:

- Recognize the following: (a) a lease liability and (b) an intangible asset representing the lessee's right to use the leased asset; and
- Report in its financial statements: (a) amortization expense for using the lease asset over the shorter of the term of the lease or the useful life of the underlying asset, (b) interest expense on the lease liability and (c) note disclosures about the lease.

Under GASB 87, government entities that are lessors must:

- Recognize: (a) a lease receivable and (b) a deferred inflow of resources and continue to report the leased asset in its financial statements; and
- Report in its financial statements: (a) lease revenue, recognized over the term of the lease, corresponding with the reduction of the deferred inflow, (b) interest income on the receivable; and (c) note disclosures about the lease.

GASB 87 provides exceptions from the single-approach for short-term leases, financial purchases, leases of assets that are investments and certain regulated leases. GASB 87 also addresses accounting for lease terminations and modifications, sale-leaseback transactions, nonlease components embedded in lease contracts (such as service agreements), and leases with related parties.

The Department has not completed its assessment of the impact of the adoption of these statements.

## **Note 2: Deposits and Investments**

The City maintains a cash and investment pool that is available for use by all funds. The pool is comprised of demand and time deposits, repurchase agreements and other investments with maturities of less than five years. The Department's allocation of this pool was approximately 47.1% and 45.1% as of April 30, 2017 and 2016, respectively. As of April 30, 2017 and 2016, the carrying amount (book value) of the City's deposits, including certificates of deposit and the collateralized money market account was approximately \$30,794,000 and \$17,315,000, respectively, which was covered by federal depository insurance or by collateral held by the City's agents under joint custody agreements in accordance with the City's administrative code. The

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Department's allocation of deposits was \$27,967,973 and \$5,492,123 at April 30, 2017 and 2016, respectively.

The City of Kansas City, Missouri is empowered by City Charter to invest in the following types of securities:

1. *United States Treasury Securities (Bills, Notes, Bonds and Strips).* The City may invest in obligations of the United States government for which the full faith and credit of the United States are pledged for the payment of principal and interest.
2. *United States Agency/GSE Securities.* The City may invest in obligations issued or guaranteed by any agency of the United States government and in obligations issued by any government-sponsored enterprise (GSE) that has a liquid market and a readily determinable market value that are described as follows:
  - a. U.S. Government Agency Coupon and Zero Coupon Securities.
  - b. U.S. Government Agency Callable Securities. Restricted to securities callable at par only.
  - c. U.S. Government Agency Step-Up Securities. The coupon rate is fixed for an initial term. At coupon date, the coupon rate rises to a new, higher fixed interest rate.
  - d. U.S. Government Agency Floating Rate Securities. Restricted to coupons with no interim caps that reset at least quarterly and that float off of only one index.
  - e. U.S. Government Agency Mortgage-Backed Securities (MBS, CMO, Pass-Thru Securities). Restricted to securities with final maturities of five (5) years or less or have the final projected payment no greater than four (4) years when analyzed in a +300 basis point interest rate environment.
3. *Repurchase Agreements.* The City may invest in contractual agreements between the City and commercial banks or primary government securities dealers. The Bond Market Association's guidelines for the Master Repurchase Agreement will be used and will govern all repurchase agreement transactions. All repurchase agreement transactions will be either physical delivery or tri-party.
4. *Bankers' Acceptances.* The City may invest in bankers' acceptances issued by domestic commercial banks possessing the highest rating issued by Moody's Investor Services, Inc. or Standard and Poor's Corporation.
5. *Commercial Paper.* The City may invest in commercial paper issued by domestic corporations, which has received the highest rating issued by Moody's Investor Services, Inc. or Standard and Poor's Corporation. Eligible paper is further limited to issuing corporations that have total assets in excess of five hundred million dollars (\$500,000,000) and are not listed on Credit Watch with negative implications by any nationally recognized rating agency at the time of purchase. In addition, the City's portfolio may not contain commercial paper of any one corporation, the total value of which exceeds 2% of the City's aggregate investment portfolio.

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6. *Municipal Securities (State and Local Government Obligations).* The City may invest in municipal obligations that are issued in either tax-exempt or taxable form. The City's portfolio may not contain municipal obligations of any one issuer, the total value of which exceeds two percent (2%) of the City's aggregate investment portfolio, unless the obligation is pre-refunded or escrowed to maturity with securities guaranteed by the United States government.
- a. Any full faith and credit obligations of the State of Missouri rated at least A or A2 by Standard and Poor's or Moody's.
  - b. Any full faith and credit obligations of any city, county or school district in the State of Missouri rated at least AA or Aa2 by Standard and Poor's or Moody's.
  - c. Any full faith and credit obligations or revenue bonds of the City of Kansas City, Missouri rated at least A or Aa2 by Standard and Poor's or Moody's.
  - d. Any full faith and credit obligation of any state or territory of the United States of America rated at least AA or Aa2 by Standard and Poor's or Moody's.
  - e. Any full faith and credit obligations of any city, county or school district in any state or territory of the United States of America rated at least AAA or Aaa by Standard and Poor's or Moody's.
  - f. Any revenue bonds issued by the Missouri Department of Transportation rated at least AA or Aa2 by Standard and Poor's or Moody's.
  - g. Any municipal obligation that is pre-refunded or escrowed to maturity as to both principal and interest with escrow securities that are fully guaranteed by the United States government, without regard to rating by Standard and Poor's or Moody's.

***Interest Rate Risk***

Interest rate risk is the risk that the fair value of the City's investments will decrease as a result of an increase in interest rates. As a means of limiting its exposure to fair value losses arising from rising interest rates, the City's investment policy limits the final maturity on any security owned to a maximum of five years. In addition, the City compares the weighted average maturity of its portfolio to the weighted average maturity of the Bank of America Merrill Lynch 1-3 year Government/Agency index, and relative to the index, may decrease the weighted average maturity of the portfolio during periods of rising interest rates or increase it during periods of declining rates.

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As of April 30, 2017, the City had the following investments and maturities (amounts are in thousands):

Investment Type	Fair Value	Investment Maturities (in Years)				Weighted Average
		Less Than 1	1 – 2	2 – 3	3 – 5	
Pooled investments						
U.S. Treasury bills	\$ 6,999	\$ 6,999	\$ -	\$ -	\$ -	1.01
U.S. Treasury notes/bonds	213,168	46,063	70,799	68,811	27,495	1.80
U.S. agency discounts	19,989	19,989	-	-	-	0.07
U.S. agencies – noncallable	553,281	251,433	155,655	72,662	73,531	1.50
U.S. agencies – callable	186,366	88,553	9,974	13,574	74,265	2.28
Total pooled	979,803	413,037	236,428	155,047	175,291	1.39
Non-pooled investments						
U.S. Treasury notes/bonds	9,920	-	-	9,920	-	1.38
U.S. agency discounts	29,914	29,914	-	-	-	0.87
U.S. agencies – noncallable	136,716	76,937	49,732	10,047	-	1.10
U.S. agencies – callable	7,431	-	-	1,989	5,442	1.38
Total non-pooled	183,981	106,851	49,732	21,956	5,442	1.16
	<u>\$ 1,163,784</u>	<u>\$ 519,888</u>	<u>\$ 286,160</u>	<u>\$ 177,003</u>	<u>\$ 180,733</u>	<u>1.37</u>

The Department's allocation of pooled investments at April 30, 2017 was \$453,986,782. The Department's non-pooled investments at April 30, 2017 were \$169,066,270.

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As of April 30, 2016, the City had the following investments and maturities (amounts are in thousands):

Investment Type	Fair Value	Investment Maturities (in Years)				Weighted Average
		Less Than 1	1 – 2	2 – 3	3 – 5	
Pooled investments						
U.S. Treasury bills	\$ 14,982	\$ 14,982	\$ -	\$ -	\$ -	0.40
U.S. Treasury notes/bonds	220,382	171,304	20,265	28,813	-	0.80
U.S. agency discounts	44,905	44,905	-	-	-	0.52
U.S. agencies – noncallable	458,937	130,117	213,397	82,018	33,405	1.55
U.S. agencies – callable	154,496	45,729	68,275	12,307	28,185	1.80
Total pooled	893,702	407,037	301,937	123,138	61,590	1.34
Non-pooled investments						
U.S. agency discounts	94,950	94,950	-	-	-	0.17
U.S. agencies – noncallable	90,367	68,002	5,000	17,365	-	0.95
U.S. agencies – callable	15,483	5,010	2,987	4,488	2,998	2.09
Total non-pooled	200,800	167,962	7,987	21,853	2,998	0.67
	<u>\$ 1,094,502</u>	<u>\$ 574,999</u>	<u>\$ 309,924</u>	<u>\$ 144,991</u>	<u>\$ 64,588</u>	<u>1.22</u>

The Department's allocation of pooled investments at April 30, 2016 was \$405,214,800. The Water Fund's non-pooled investments at April 30, 2016 were \$185,308,463.

Some of the restricted assets are held by a trustee associated with the proceeds from sewer state revolving bonds within the Sewer Fund. The amount held by the trustee includes investments that are insured or registered or for which securities are held by the Sewer Fund or its agent in the Sewer Fund's name or under joint agreements. Restricted assets held by the trustee were \$3,930,371 and \$4,968,830 at April 30, 2017 and 2016, respectively, and consisted primarily of money market funds.

**Callable Agency Securities.** The City actively monitors its callable bond portfolio with respect to probability of call relative to market rates of interest. As of April 30, 2017 and 2016, the total fair value of the City's callable bond portfolio (pooled and non-pooled) is \$193,796,940 and \$169,978,994, respectively.

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**Credit Risk**

Credit risk is the risk that the City will not recover its investments due to the ability of the counterparty to fulfill its obligation. In order to prevent over concentration by investment type and thereby mitigate credit risk, the City's Investment Policy provides for diversification of the portfolio by investment type as follows:

<b>Investment Type</b>	<b>Maximum</b>
U.S. Treasury securities and government guaranteed securities	100%
Collateralized time and demand deposits	100%
U.S. government agency and GSE securities	80%
Collateralized repurchase agreements	50%
U.S. agency callable securities	30%
Commercial paper	30%
Bankers acceptances	30%
Qualified municipal obligations	30%

As of April 30, 2017, the City had the following nongovernmental guaranteed securities that are rated by both Moody's and Standard & Poor's (amounts are in thousands):

	<b>Fair Value</b>	<b>Moody's/ S&amp;P Ratings</b>
U.S. agency securities	\$ 933,697	Aaa/AA+

As of April 30, 2016, the City had the following nongovernmental guaranteed securities that are rated by both Moody's and Standard & Poor's (amounts are in thousands):

	<b>Fair Value</b>	<b>Moody's/ S&amp;P Ratings</b>
U.S. agency securities	\$ 859,138	Aaa/AA+

**Custodial Credit Risk**

Custodial credit risk is the risk that, in the event of the failure of the counterparty, the City will not be able to recover the value of its deposits, investments or collateral securities that are in the possession of an outside party (*i.e.*, the City's safekeeping institution).

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The City's investment policy requires that all funds on deposit with any financial institution be secured with collateral securities in an amount equal to at least 102 percent of the deposit less any amount insured by the Federal Deposit Insurance Corporation (FDIC), or any other governmental agency performing a similar function. As of April 30, 2017 and 2016, all deposits were adequately and fully collateralized.

The City's investment policy required that all investment securities be held in the City's name in the City's safekeeping account at its safekeeping institution, thereby mitigating custodial credit risk. As of April 30, 2017 and 2016, all investment securities were in the City's name in the City's safekeeping accounts at its safekeeping institutions. In addition, all collateral securities were in the City's joint custody account(s) at the Federal Reserve Bank and were either U.S. Treasury (U.S. government guaranteed) or U.S. agency (Aaa/AA+ rated) obligations with the exception of an Irrevocable Letter of Credit issued in the City's favor by the Federal Home Loan Bank in the amount of \$35,000,000 to secure the City's deposits at Commerce Bank. The current Letter of Credit expires November 30, 2017, and is safekept in the City's cash vault in the Cash Operations section of the Treasury Division. In addition, there are two Irrevocable Letters of Credit issued in the City's favor by the Federal Home Loan Bank in the amount of \$5,000,000 each to secure Certificates of Deposit. The two Letters of Credit expire November 16, 2017 and December 17, 2018, respectively, and are also safekept in the City's cash vault in the Cash Operations section of the Treasury Division.

***Concentration of Credit Risk***

At April 30, 2017, more than five percent of the City's investments are in the following U.S. agency discount note/securities: Federal Farm Credit Bank, Federal Home Loan Bank, Federal Home Loan Mortgage Corporation and Federal National Mortgage Association. These investments are 12%, 29%, 13% and 24%, respectively, of the City's total investments.

At April 30, 2016, more than five percent of the City's investments are in the following U.S. agency discount note/securities: Federal Farm Credit Bank, Federal Home Loan Bank, Federal Home Loan Mortgage Corporation and Federal National Mortgage Association. These investments are 13%, 25%, 11% and 29%, respectively, of the City's total investments.

In the City's opinion, the debt securities issued by these agencies do not have an explicit government guarantee, but rather an implied guarantee and, therefore, the City does not impose limits as to the concentration of any one agency. However, total agency securities in the portfolio are limited by the investment policy to 80% of the total portfolio value.

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**Summary**

The following is a complete listing of cash and investments held by KC Water at April 30, 2017 and 2016:

	<b>2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Deposits	\$ 15,009,021	\$ 12,960,952	\$ 27,969,973
Pooled investments	202,550,158	251,436,624	453,986,782
Non-pooled investments	79,960,000	89,106,270	169,066,270
Trustee accounts	-	3,930,371	3,930,371
Total	<u>\$ 297,519,179</u>	<u>\$ 357,434,217</u>	<u>\$ 654,953,396</u>

	<b>2016</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Deposits	\$ 2,416,823	\$ 3,075,300	\$ 5,492,123
Pooled investments	178,026,488	227,188,312	405,214,800
Non-pooled investments	41,220,235	144,088,228	185,308,463
Trustee accounts	-	4,968,830	4,968,830
Total	<u>\$ 221,663,546</u>	<u>\$ 379,320,670</u>	<u>\$ 600,984,216</u>

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The deposits and investments of KC Water at April 30, 2017 and 2016 are reflected in the statements of net position as follows:

	<b>2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Current assets			
Unrestricted			
Cash and cash equivalents	\$ 6,752,581	\$ 9,186,720	\$ 15,939,301
Investments	12,578,071	17,156,604	29,734,675
Restricted			
Cash and cash equivalents	8,263,340	7,703,553	15,966,893
Investments	31,018,467	21,038,276	52,056,743
Investments	123,832,470	168,816,009	292,648,479
Restricted investments	115,074,250	133,533,055	248,607,305
	<u>\$ 297,519,179</u>	<u>\$ 357,434,217</u>	<u>\$ 654,953,396</u>
	<b>2016</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Current assets			
Unrestricted			
Cash and cash equivalents	\$ 1,483,340	\$ 2,112,098	\$ 3,595,438
Investments	18,375,224	26,296,250	44,671,474
Restricted			
Cash and cash equivalents	933,483	5,932,032	6,865,515
Investments	11,622,140	133,697,735	145,319,875
Investments	90,690,099	129,735,254	220,425,353
Restricted investments	98,559,260	81,547,301	180,106,561
	<u>\$ 221,663,546</u>	<u>\$ 379,320,670</u>	<u>\$ 600,984,216</u>

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**Note 3: Accounts Receivable**

A summary of accounts receivable at April 30, 2017 and 2016 is as follows:

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Residential and commercial customers	\$ 24,512,510	\$ 26,312,964	\$ 50,825,474
Unbilled utility revenue	9,167,630	10,420,970	19,588,600
Intermunicipal sewer customers	-	9,238,862	9,238,862
Other accounts receivable	-	193,052	193,052
	<u>33,680,140</u>	<u>46,165,848</u>	<u>79,845,988</u>
Less allowance for doubtful accounts	<u>13,187,636</u>	<u>13,954,853</u>	<u>27,142,489</u>
Net accounts receivable	<u>\$ 20,492,504</u>	<u>\$ 32,210,995</u>	<u>\$ 52,703,499</u>

	<b>April 30, 2016</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Residential and commercial customers	\$ 23,229,675	\$ 23,479,351	\$ 46,709,026
Unbilled utility revenue	9,098,161	9,235,367	18,333,528
Intermunicipal sewer customers	-	10,488,464	10,488,464
Other accounts receivable	-	173,932	173,932
	<u>32,327,836</u>	<u>43,377,114</u>	<u>75,704,950</u>
Less allowance for doubtful accounts	<u>12,172,370</u>	<u>11,795,448</u>	<u>23,967,818</u>
Net accounts receivable	<u>\$ 20,155,466</u>	<u>\$ 31,581,666</u>	<u>\$ 51,737,132</u>

**Note 4: Notes Receivable**

The Water Fund has built several major transmission mains to reach wholesale customers. These customers agree to pay for a proportionate share of the main based on their projected use of the capacity. At the time they start using the main, they can either pay the entire amount or pay the Water Fund over a time period at an interest rate tied to the bond interest rate. The monthly payment is included in their water billing.

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Notes receivable outstanding consist of the following issues at April 30, 2017 and 2016:

<b>Customer</b>	<b>Interest Rates</b>	<b>Loan Completion Date</b>	<b>2017</b>	<b>2016</b>
Dogwood Energy	5.565%	February 2023	\$ 1,715,085	\$ 1,950,370
Platte County PWSD #2	4.126	April 2026	234,310	255,379
City of Dearborn	4.126	April 2026	201,543	243,759
Cass County PWSD #3	4.394	January 2028	100,208	107,278
Lee's Summit	4.238	March 2028	2,046,698	2,202,895
Cass County PWSD #10	4.238	November 2029	586,417	620,975
			<u>4,884,261</u>	<u>5,380,656</u>
Less current portion			<u>(508,778)</u>	<u>(484,124)</u>
Noncurrent portion			<u>\$ 4,375,483</u>	<u>\$ 4,896,532</u>

**Note 5: Capital Assets**

Capital asset activity for the year ended April 30, 2017 is as follows:

	<b>May 1, 2016</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2017</b>
<b>Water Fund</b>				
Depreciable assets				
Buildings	\$ 173,549,863	\$ 12,998,983	\$ (8,398,765)	\$ 178,150,081
Utility lines and improvements	773,237,115	75,274,425	(3,002,193)	845,509,347
Machinery and equipment	75,320,442	24,872,932	(1,170,217)	99,023,157
Total depreciable assets	<u>1,022,107,420</u>	<u>113,146,340</u>	<u>(12,571,175)</u>	<u>1,122,682,585</u>
Accumulated depreciation				
Buildings	(79,274,944)	(2,402,638)	8,398,765	(73,278,817)
Utility lines and improvements	(97,923,491)	(11,166,577)	3,002,193	(106,087,875)
Machinery and equipment	(32,213,967)	(5,201,414)	1,054,495	(36,360,886)
Total accumulated depreciation	<u>(209,412,402)</u>	<u>(18,770,629)</u>	<u>12,455,453</u>	<u>(215,727,578)</u>
Total depreciable assets, net	<u>812,695,018</u>	<u>94,375,711</u>	<u>(115,722)</u>	<u>906,955,007</u>
Nondepreciable assets				
Land and permanent right of ways	4,089,224	89,088	-	4,178,312
Construction in process	84,956,648	52,217,360	(98,958,775)	38,215,233
Total nondepreciable assets	<u>89,045,872</u>	<u>52,306,448</u>	<u>(98,958,775)</u>	<u>42,393,545</u>
Capital assets, net	<u>\$ 901,740,890</u>	<u>\$ 146,682,159</u>	<u>\$ (99,074,497)</u>	<u>\$ 949,348,552</u>

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<b>Sewer Fund</b>	<b>May 1, 2016</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2017</b>
Depreciable assets				
Sewerage treatment plant and other facilities	\$ 341,153,397	\$ 3,490,054	\$ (5,058,688)	\$ 339,584,763
Sewer lines	892,921,550	73,782,375	(4,161,307)	962,542,618
Equipment	105,420,212	23,193,551	(2,021,490)	126,592,273
Total depreciable assets	<u>1,339,495,159</u>	<u>100,465,980</u>	<u>(11,241,485)</u>	<u>1,428,719,654</u>
Accumulated depreciation				
Sewerage treatment plant and other facilities	(218,381,759)	(8,236,021)	5,058,688	(221,559,092)
Sewer lines	(111,793,340)	(14,546,657)	4,161,307	(122,178,690)
Equipment	(46,019,880)	(7,420,376)	1,841,207	(51,599,049)
Total accumulated depreciation	<u>(376,194,979)</u>	<u>(30,203,054)</u>	<u>11,061,202</u>	<u>(395,336,831)</u>
Total depreciable assets, net	<u>963,300,180</u>	<u>70,262,926</u>	<u>(180,283)</u>	<u>1,033,382,823</u>
Nondepreciable assets				
Land and permanent right of ways	13,384,572	16,506	-	13,401,078
Construction in process	90,994,178	105,143,209	(85,638,547)	110,498,840
Total nondepreciable assets	<u>104,378,750</u>	<u>105,159,715</u>	<u>(85,638,547)</u>	<u>123,899,918</u>
Capital assets, net	<u>\$1,067,678,930</u>	<u>\$ 175,422,641</u>	<u>\$ (85,818,830)</u>	<u>\$1,157,282,741</u>
Total Department Capital Asset, net	<u>\$1,969,419,820</u>	<u>\$ 322,104,800</u>	<u>\$(184,893,327)</u>	<u>\$2,106,631,293</u>

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Capital asset activity for the year ended April 30, 2016 is as follows:

<b>Water Fund</b>	<b>May 1, 2015</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2016</b>
Depreciable assets				
Buildings	\$ 171,884,881	\$ 3,949,511	\$ (2,284,529)	\$ 173,549,863
Utility lines and improvements	706,386,816	70,001,450	(3,151,151)	773,237,115
Machinery and equipment	63,040,126	13,826,037	(1,545,721)	75,320,442
Total depreciable assets	<u>941,311,823</u>	<u>87,776,998</u>	<u>(6,981,401)</u>	<u>1,022,107,420</u>
Accumulated depreciation				
Buildings	(79,318,059)	(2,224,274)	2,267,389	(79,274,944)
Utility lines and improvements	(90,744,003)	(10,347,780)	3,168,292	(97,923,491)
Machinery and equipment	(28,890,081)	(4,527,143)	1,203,257	(32,213,967)
Total accumulated depreciation	<u>(198,952,143)</u>	<u>(17,099,197)</u>	<u>6,638,938</u>	<u>(209,412,402)</u>
Total depreciable assets, net	<u>742,359,680</u>	<u>70,677,801</u>	<u>(342,463)</u>	<u>812,695,018</u>
Nondepreciable assets				
Land and permanent right of ways	4,089,224	-	-	4,089,224
Construction in process	81,721,427	77,142,395	(73,907,174)	84,956,648
Total nondepreciable assets	<u>85,810,651</u>	<u>77,142,395</u>	<u>(73,907,174)</u>	<u>89,045,872</u>
Capital assets, net	<u>\$ 828,170,331</u>	<u>\$ 147,820,196</u>	<u>\$ (74,249,637)</u>	<u>\$ 901,740,890</u>

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<b>Sewer Fund</b>	<b>May 1, 2015</b>	<b>Additions</b>	<b>Retirements/ Adjustments</b>	<b>April 30, 2016</b>
Depreciable assets				
Sewerage treatment plant and other facilities	\$ 339,182,134	\$ 4,663,507	\$ (2,692,244)	\$ 341,153,397
Sewer lines	866,486,321	27,919,872	(1,484,643)	892,921,550
Equipment	91,472,892	16,421,238	(2,473,918)	105,420,212
Total depreciable assets	<u>1,297,141,347</u>	<u>49,004,617</u>	<u>(6,650,805)</u>	<u>1,339,495,159</u>
Accumulated depreciation				
Sewerage treatment plant and other facilities	(212,993,469)	(8,080,548)	2,692,258	(218,381,759)
Sewer lines	(99,167,754)	(14,110,231)	1,484,645	(111,793,340)
Equipment	(41,109,811)	(6,368,140)	1,458,071	(46,019,880)
Total accumulated depreciation	<u>(353,271,034)</u>	<u>(28,558,919)</u>	<u>5,634,974</u>	<u>(376,194,979)</u>
Total depreciable assets, net	<u>943,870,313</u>	<u>20,445,698</u>	<u>(1,015,831)</u>	<u>963,300,180</u>
Nondepreciable assets				
Land and permanent right of ways	12,739,488	645,084	-	13,384,572
Construction in process	53,922,769	72,280,601	(35,209,192)	90,994,178
Total nondepreciable assets	<u>66,662,257</u>	<u>72,925,685</u>	<u>(35,209,192)</u>	<u>104,378,750</u>
Capital assets, net	<u>\$1,010,532,570</u>	<u>\$ 93,371,383</u>	<u>\$ (36,225,023)</u>	<u>\$1,067,678,930</u>
Total Department Capital Asset, net	<u>\$1,838,702,901</u>	<u>\$ 241,191,579</u>	<u>\$(110,474,660)</u>	<u>\$1,969,419,820</u>

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**Note 6: Long-Term Obligations and Restricted Assets**

Revenue bonds and notes payable outstanding consist of the following issues at April 30, 2017 and 2016:

<b>Issue</b>	<b>Interest Rates</b>	<b>Maturity Through</b>	<b>2017</b>	<b>2016</b>
<b>Water Fund</b>				
2008 Series A	4.66%	December 2027	\$ 23,885,000	\$ 25,520,000
2009 Series A	2.00 – 5.25%	December 2032	107,905,000	118,525,000
2012 Series A	1.00 – 5.00%	December 2036	40,700,000	42,100,000
2013 Series A	2.00 – 4.00%	December 2037	52,655,000	53,350,000
2014 Series A	2.00 – 5.00%	December 2038	51,975,000	53,185,000
2015 Series A	3.25 – 5.00%	December 2039	58,865,000	59,790,000
2017 Series A	3.13 – 5.00%	December 2041	78,130,000	-
<b>Sewer Fund</b>				
State Series 1997A	3.95% – 5.75%	January 2017	-	1,365,000
State Series 1998A	3.90% – 5.25%	January 2019	1,360,000	1,990,000
State Series 1999A	3.625% – 5.25%	January 2020	1,275,000	1,660,000
State Series 2000A	4.60% – 5.75%	July 2020	3,055,000	3,775,000
State Series 2000B	4.25% – 5.625%	July 2020	2,755,000	3,405,000
Stormwater 2000	1.70%	December 2020	289,600	359,200
Stormwater 2001 & 2002	1.60%	December 2021	1,632,000	1,946,000
State Series 2001B	3.00% – 5.375%	July 2022	5,985,000	6,895,000
State Series 2002J	2.00% – 5.50%	July 2022	3,570,000	4,110,000
Series 2004H	3.00% – 5.25%	January 2025	4,775,000	5,300,000
Stormwater 2007	1.40%	June 2027	243,000	263,000
Series 2009A	2.50% – 5.25%	January 2034	55,400,000	57,615,000
Series 2009B	1.480%	July 2030	10,065,900	10,726,000
Series 2011A	2.00% – 5.00%	January 2037	76,060,000	78,865,000
Series 2012A	2.00% – 5.00%	January 2037	68,295,000	71,230,000
Series 2016A	2.00% – 5.00%	January 2040	176,990,000	183,740,000
			825,865,500	785,714,200
Add premiums			61,585,379	57,034,188
Less				
Current portion			(39,571,818)	(37,978,700)
Discount			(1,273,654)	(1,168,795)
			<u>\$ 846,605,407</u>	<u>\$ 803,600,893</u>
Noncurrent revenue bonds and notes payable			<u>\$ 846,605,407</u>	<u>\$ 803,600,893</u>

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Changes in long-term obligations during the year ended April 30, 2017 are as follows:

	<b>May 1, 2016</b>	<b>Additions</b>	<b>Reductions</b>	<b>April 30, 2017</b>
<b>Water Fund</b>				
Revenue bonds	\$ 352,470,000	\$ 78,130,000	\$ (16,485,000)	\$ 414,115,000
Less				
Unamortized bond discount	(364,233)	(161,925)	17,289	(508,869)
Add				
Unamortized bond premium	22,596,586	7,338,252	(1,169,351)	28,765,487
Net pension liability	13,380,125	20,316,304	(2,972,461)	30,723,968
Net other post-employment benefit obligations	5,403,488	553,270	(518,968)	5,437,790
Compensated absences	3,692,666	476,000	(613,664)	3,555,002
Claims payable	11,068,501	9,664,009	(4,068,864)	16,663,646
	<u>408,247,133</u>	<u>116,315,910</u>	<u>(25,811,019)</u>	<u>498,752,024</u>
<b>Total Water Fund</b>				
	<u>408,247,133</u>	<u>116,315,910</u>	<u>(25,811,019)</u>	<u>498,752,024</u>
<b>Sewer Fund</b>				
Revenue bonds and notes payable	433,244,200	-	(21,493,700)	411,750,500
Less				
Unamortized bond discount	(804,562)	-	39,777	(764,785)
Add				
Unamortized bond premium	34,437,602	-	(1,617,710)	32,819,892
Net pension liability	11,291,458	17,144,886	(2,508,453)	25,927,891
Net other post-employment benefit obligations	4,561,977	473,782	(443,606)	4,592,153
Compensated absences	2,569,429	850,000	(569,690)	2,849,739
Claims payable	5,772,528	3,648,323	(2,072,066)	7,348,785
	<u>491,072,632</u>	<u>22,116,991</u>	<u>(28,665,448)</u>	<u>484,524,175</u>
<b>Total Sewer Fund</b>				
	<u>491,072,632</u>	<u>22,116,991</u>	<u>(28,665,448)</u>	<u>484,524,175</u>
<b>Total Department</b>	<u>\$ 899,319,765</u>	<u>\$ 138,432,901</u>	<u>\$ (54,476,467)</u>	<u>\$ 983,276,199</u>

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Changes in long-term obligations during the year ended April 30, 2016 are as follows:

	<b>May 1, 2015</b>	<b>Additions</b>	<b>Reductions</b>	<b>April 30, 2016</b>
<b>Water Fund</b>				
Revenue bonds	\$ 383,953,704	\$ -	\$ (31,483,704)	\$ 352,470,000
Less				
Unamortized bond discount	(380,431)	-	16,198	(364,233)
Add				
Unamortized bond premium	23,716,521	-	(1,119,935)	22,596,586
Net pension liability	4,301,357	12,190,768	(3,112,000)	13,380,125
Net other post-employment benefit obligations	5,187,572	669,000	(453,084)	5,403,488
Compensated absences	3,404,539	893,000	(604,873)	3,692,666
Claims payable	10,470,580	3,131,746	(2,533,825)	11,068,501
	<u>430,653,842</u>	<u>16,884,514</u>	<u>(39,291,223)</u>	<u>408,247,133</u>
<b>Total Water Fund</b>				
	<u>430,653,842</u>	<u>16,884,514</u>	<u>(39,291,223)</u>	<u>408,247,133</u>
<b>Sewer Fund</b>				
Revenue bonds and notes payable	307,081,300	183,740,000	(57,577,100)	433,244,200
Less				
Unamortized bond discount	(566,990)	(463,172)	225,600	(804,562)
Add				
Unamortized bond premium	17,567,955	18,734,031	(1,864,384)	34,437,602
Net pension liability	3,614,516	10,846,942	(3,170,000)	11,291,458
Net other post-employment benefit obligations	4,374,267	578,000	(390,290)	4,561,977
Compensated absences	2,411,608	699,000	(541,179)	2,569,429
Claims payable	5,572,358	2,530,842	(2,330,672)	5,772,528
	<u>340,055,014</u>	<u>216,665,643</u>	<u>(65,648,025)</u>	<u>491,072,632</u>
<b>Total Sewer Fund</b>				
	<u>340,055,014</u>	<u>216,665,643</u>	<u>(65,648,025)</u>	<u>491,072,632</u>
<b>Total Department</b>	<u>\$ 770,708,856</u>	<u>\$ 233,550,157</u>	<u>\$ (104,939,248)</u>	<u>\$ 899,319,765</u>

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The annual requirements to retire the bonds and notes payable outstanding as of April 30, 2017 are as follows:

Year Ending April 30	Water Fund		Sewer Fund		Total	
	Principal	Interest	Principal	Interest	Principal	Interest
2018	\$ 19,610,000	\$ 16,722,648	\$ 19,961,818	\$ 17,068,847	\$ 39,571,818	\$ 37,030,665
2019	19,625,000	16,645,268	20,523,319	16,420,429	40,148,319	33,065,697
2020	20,425,000	15,854,824	20,431,020	15,674,602	40,856,020	31,529,426
2021	21,245,000	15,011,019	20,747,321	14,799,424	41,992,321	29,810,443
2022	20,515,000	14,047,592	19,898,022	13,955,449	40,413,022	28,003,041
2023 – 2027	96,365,000	56,615,955	90,792,000	58,213,376	187,157,000	114,829,331
2028 – 2032	87,730,000	36,444,621	99,712,100	37,348,767	187,442,100	73,793,388
2033 – 2037	83,740,000	18,422,438	92,650,000	15,917,887	176,390,000	34,340,325
2038 – 2042	44,860,000	4,204,900	27,034,900	2,073,319	71,894,900	6,278,219
	<u>\$ 414,115,000</u>	<u>\$ 193,969,265</u>	<u>\$ 411,750,500</u>	<u>\$ 191,472,100</u>	<u>\$ 825,865,500</u>	<u>\$ 388,680,535</u>

During the fiscal year ended April 30, 2016, the Sewer Fund issued the 2016A Sanitary Sewer System Improvement Refunding Bonds, in the amount of \$183,740,000 with an interest rate range between 2.00% - 5.00%. The bond proceeds, along with available funds of the Sewer Fund, were used to currently refund \$8,530,000 of the Series 2005B issuance with an interest rate of 3.00% - 5.00% as well as \$342,055,095 of the Series 2007A bonds with an interest range of 4.00% - 5.00%. A total of \$150,000,000 of this par amount was new money to finance and refinance extensions and improvements of the Sanitary Sewer System. The remaining net proceeds along with the available funds totaling \$40,658,861, after payment of \$1,162,499 of underwriter's discounts and issuance costs, were deposited in an irrevocable trust with an escrow agent to provide for the future payment of principal and interest of the aforementioned Series 2005B and 2007A bonds. As a result, the bonds are considered defeased and the liability for those bonds has been removed from the Sewer Fund's statement of net position.

As a result of the refunding, the Sewer Fund decreased its total debt service requirements by \$6,462,587, which resulted in an economic gain of \$4,933,349. The Series 2005B and 2007A bonds were originally used to finance extensions and improvements of the Sanitary Sewer System.

The amount of outstanding advance refunding of insubstance defeased debt as of April 30, 2017 and 2016 of the Water Fund was a total of \$37,250,000 and \$40,065,000, respectively.

All funds obtained through the issuance of water revenue bonds are restricted for the purpose of extending and improving the facilities of the Water Fund. All debt service requirements are payable solely from revenues generated by the Water Fund. Under the terms of the ordinances enacted at the time of the issuance of the revenue bonds, the 2009A, 2012A, 2013A, 2014A, 2015A and 2017A bonds (Senior Bonds) share equal claim to the revenue generated by the Water Fund. The pledge of revenue is senior to the pledge of such revenues for the payment of the 2008A bonds (Subordinate Bond). The ordinances require the City to maintain adequate insurance coverage and establish the priority for the allocation of revenue generated by the Water Fund.

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All funds obtained through the issuance of sewer revenue bonds are restricted for the purpose of extending and improving the Sewerage System. All debt service requirements of these bonds are payable solely from revenues generated by the Sewer Fund. The revenue bond ordinances require the Sewer Fund to maintain adequate insurance coverage and employ an independent consulting engineer to evaluate the physical condition and operation of the sewerage system on a periodic basis. In addition, the ordinance established the priority for the allocation of revenue generated by the sewerage system.

After the Water and Sewer Funds meet normal operating and maintenance expenses of each fund, respectively, all remaining moneys are to be allocated to the following accounts in the order listed below:

<b>Account</b>	<b>Restriction</b>
Principal and interest	For the monthly accumulation of moneys to meet the maturing revenue bond principal and interest requirement. Each month, the City is to set aside 1/6 of the next semiannual interest payment and 1/12 of the next annual principal payment.
Construction	For recording bond proceeds to be used to finance construction.
Renewal and replacement	For the monthly accumulation of moneys, up to an amount equal to the prior year annual depreciation plus additional amounts to cover future budgeted capital improvements, to pay for the maintenance and replacements necessary to keep the system operating efficiently.

The bond ordinances also require that the Water and Sewer Funds establish additional reserve accounts for the retirement of the bonds totaling \$34,986,702 and \$31,692,693 at April 30, 2017, respectively. However, in lieu of setting aside cash, the ordinances allow the Funds to obtain insurance policies. The Water and Sewer Funds have obtained insurance policies to satisfy \$15,304,827 and \$1,496,429 of the reserve requirements, respectively. As of April 30, 2017 and 2016, both the Water and Sewer Fund's debt service coverage ratios were above the 130% threshold, so the remaining bond reserve accounts were not required to be funded.

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Restricted accounts are reported on the accompanying statements of net position as restricted assets for 2017 and 2016 as follows:

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Principal and interest	\$ 14,498,410	\$ 14,553,831	\$ 29,052,241
Debt service reserve	-	5,140,876	5,140,876
Construction	107,667,363	101,850,493	209,517,856
Renewal and replacement	30,072,505	41,088,042	71,160,547
Retention pond maintenance	-	51,814	51,814
Customer deposits	2,491,202	-	2,491,202
	<u>\$ 154,729,480</u>	<u>\$ 162,685,056</u>	<u>\$ 317,414,536</u>

	<b>April 30, 2016</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Principal and interest	\$ 13,095,128	\$ 14,328,402	\$ 27,423,530
Debt service reserve	-	5,096,220	5,096,220
Construction	65,747,097	160,998,395	226,745,492
Renewal and replacement	30,063,307	41,068,723	71,132,030
Retention pond maintenance	-	51,339	51,339
Customer deposits	2,443,829	-	2,443,829
	<u>\$ 111,349,361</u>	<u>\$ 221,543,079</u>	<u>\$ 332,892,440</u>

**Note 7: Pledged Revenues**

Water Fund – The City has pledged revenues of the Water Fund, net of specified operating expenses, to repay \$414,115,000 in water revenue bonds. The bonds were issued to provide improvements to the water system and facilities. The various issues and maturity dates are listed in *Note 6*. The bonds are payable solely from the revenues derived by the Water Fund. Annual principal and interest payments on the bonds and capital leases are expected to require 29% of net revenues on average over the next 25 years. The total principal and interest remaining to be paid on the bonds is \$608,084,265. Principal and interest paid for the year ended April 30, 2017 and total net revenues were \$28,537,894 and \$83,730,083, respectively.

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Sewer Fund – They City has pledged revenues of the Sewer Fund, net of specified operating expenses, to repay sewer system revenue bonds and loans. The bonds were issued to provide improvements to the sewer system and facilities. The loans were issued to fund stormwater basin studies and improvements. The various issues and maturity dates are listed in *Note 6*.

The sewer bonds through and including 1998A are senior bonds that have claim to both sewer and stormwater revenue. Those bonds will be paid off in 2019. Total principal and interest on those bonds is \$1,462,750, which is expected to require 1% of net sewer and stormwater revenues. The remaining sewer bonds are subordinate bonds that have claim to only sewer revenues. Total principal and interest on those bonds is \$600,947,522 and is expected to require 23% of net sewer revenues. The stormwater loans are payable from stormwater revenues. Total principal and interest on those loans is \$2,275,079 and is expected to require 126% of net stormwater revenues. Principal and interest paid for the year ended April 30, 2017 and net revenues for the Sewer Fund were \$38,574,801 and \$110,656,212, respectively.

**Note 8: Due to/from Other City Funds**

Amounts due to/from other City funds at April 30, 2017 were as follows:

	<b>Receivables</b>			<b>Total</b>
	<b>Water</b>	<b>Sewer</b>	<b>General</b>	
<b>Payables</b>				
Water fund	\$ -	\$ 4,680	\$ 385,001	\$ 389,681
Sewer fund	253,885	-	-	253,885
General fund	44	2,574	-	2,618
	<u>\$ 253,929</u>	<u>\$ 7,254</u>	<u>\$ 385,001</u>	<u>\$ 646,184</u>

Amounts due to/from other City funds at April 30, 2016 were as follows:

	<b>Receivables</b>			<b>Total</b>
	<b>Water</b>	<b>Sewer</b>	<b>General</b>	
<b>Payables</b>				
Water fund	\$ -	\$ -	\$ 385,000	\$ 385,000
Sewer fund	230,225	-	-	230,225
General fund	96,091	3,480	-	99,571
	<u>\$ 326,316</u>	<u>\$ 3,480</u>	<u>\$ 385,000</u>	<u>\$ 714,796</u>

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Amounts due from and due to the Water and Sewer funds represent reimbursement of operating costs between the two funds. Amounts due from and due to the General fund represent reimbursement of operating costs between the funds.

**Note 9: Payment-in-Lieu of Taxes (PILOT) and Administrative Service Fees**

The Water and Sewer Funds are exempt from federal and state income taxes and local property taxes because they are enterprise funds of the City of Kansas City, Missouri. However the Funds are required by a City Ordinance to pay a percentage of gross operating revenues to the General Fund of the City of Kansas City, Missouri. The payment-in-lieu of tax was established at 1.0% of residential and commercial revenue, effective as of May 1, 2016.

In addition to these PILOT payments, the Water and Sewer Funds make payments to the General Fund of the City for office space and certain administrative, data processing and accounting services. For the years ended April 30, 2017 and 2016, total payments for administrative and general expenses and transfers for PILOT's are as follows:

	<u>2017</u>	<u>2016</u>
Water Fund		
Administrative, data processing and accounting	\$ 5,498,379	\$ 5,756,822
PILOT	1,372,416	-
Sewer Fund		
Administrative, data processing and accounting	5,272,354	5,214,023
PILOT	1,588,818	-
	<u>\$ 13,731,967</u>	<u>\$ 10,970,845</u>

The Water Fund provides billing and collection services for the City of Kansas City, Missouri Sewer Fund and charged the City of Kansas City, Missouri Sewer Fund \$5,106,255 and \$4,313,505 for these services for the years ended April 30, 2017 and 2016, respectively.

**Note 10: Employees' Retirement System**

The City sponsors a contributory, single-employer defined benefit pension plan, the Employees' Retirement System (the Plan), covering substantially all employees of the Department. However, for purposes of the Department's financial statements, the City has allocated the pension related items and disclosed the Plan as a cost-sharing multiple employer defined benefit pension plan in accordance with the requirements of GASB statement No. 68.

The Board of Trustees of the Employees' Retirement System of the City of Kansas City, Missouri (the Board) administers the Plan.

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The Plan was established in the code of ordinances under part II, Chapter II, Article IX, Division 2, Section 2-1172 which states, "All full-time, permanent employees in the classified and unclassified services shall become members of the retirement system as a condition of employment, including all full-time, permanent former Metropolitan Ambulance Service Trust (MAST) employees who became city employees as of April 25, 2010, and who did not become members of the Firefighters' Pension System. Former MAST employees have the option within 60 days of the passage of this ordinance to elect to become members of this plan in lieu of participation in the defined contribution plan set out in Division 10. Also included in membership are those who have retired in circumstances establishing eligibility for an annuity in this pension system and inactive members on leave of absence."

The Board of Trustees of the Plan shall consist of nine members, including the Director of Human Resources and Director of Finance, and seven shall be appointed by the mayor as follows:

- a. One shall be a retired member of the system.
- b. Four, other than the forgoing, shall be recognized business and/or civic leaders with financial backgrounds, such as investments, management of employees benefit plans, who are not employees of the City. At the mayor's option, one of this group may be a City Council person with a financial background who shall serve as an ex-officio member of the Board with a right to vote.
- c. Two shall be active employees and members of the retirement system as recommended by the union.
- d. In the event that Local 42, IAFF, has 200 or more members, including retirees, participating in the Employees' Retirement System, Local 42 will have one designated member who will be vested with the same voting rights as the other trustees.

The Board is responsible for establishing or amending plan provisions. The Board issues publicly available financial reports that include financial statements and required supplementary information. The financial reports may be obtained by writing to:

**Employees' Pension Systems**

The Retirement Division  
City Hall-10th Floor  
414 East 12th Street  
Kansas City, Missouri 64106  
Phone 816.513.1928

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***Retirement Benefits***

Benefit terms for the Plan are established in the City administrative code and can only be amended by the City Council. The Plan provides retirement benefits as well as pre-retirement death benefits as noted below:

**Tier I Members**

The Plan provides retirement benefits, for those employees hired before April 20, 2014 (Tier I Members). Employees become vested for retirement benefits after five years of service. Members who retire with total age and creditable service equal to 80, or the later of age 60 and 10 years of creditable service, are entitled to an annual pension based on a percentage of final average compensation multiplied by years and months of creditable service. If married at the time of retirement, the percentages is 2.0% for general employees and 2.2% for elected officials, and if unmarried at the date of retirement, the percentage is 2.2% up to a maximum of 70% of final average compensation as defined in the Plan. If the employee has at least 10 years of creditable service, the minimum benefit is \$400 per month.

If members terminate prior to retirement and before rendering five years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to City contributions and are refunded their member contributions with interest. Such refunds result in the forfeiture of all other benefits under the Plan. Members terminating prior to retirement with five or more years of service may elect to receive a refund of their member contributions with interest as a lump-sum distribution, or they may elect to receive a deferred pension. An automatic annual cost-of-living adjustment of 3%, non-compounded, is provided annually.

**Tier II Members**

The Plan provides retirement benefits, for those employees hired on or after April 20, 2014 (Tier II Members). Employees become vested for retirement benefits after ten years of service. Members who retire with total age and creditable service equal to 85, or the later of age 62 and 10 years of creditable service are entitled to an annual pension of 1.75% of final average compensation multiplied by the number of years of creditable service, subject to a maximum limit of 70% of final average compensation as defined in the Plan.

If employees terminate prior to retirement and before rendering ten years of service, they forfeit the right to receive the portion of their accumulated plan benefits attributable to City contributions and are refunded their member contributions with interest. An annual cost-of-living adjustment, not to exceed 2.5%, non-compounded, per year is provided to pensioners age 62 and older if the prior year funding ratio is equal to or greater than 80% and will be equal to the percentage increase in the prior 12 months of the final national Consumer Price Index.

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***Death Benefits***

If a retired member dies, the following benefits shall be paid:

To the member's spouse until death, a retirement benefit equal to one-half of the member's normal retirement benefit. To the member's designated beneficiary or estate, if there is no surviving spouse, any remaining member contributions and interest. If an active member dies, the member contributions and interest are distributed to the surviving spouse or, if none, to the designated beneficiary. The surviving spouse, however, may elect to receive monthly benefit payments instead of the lump-sum distribution if the member had five or more years of creditable service.

***Contributions***

Funding is provided by contributions from Plan members, the Fund and earnings on investments. Members contribute 5% of their base salary. The Water and Sewer Fund's contributions are set by the City Council in conjunction with its approval of the annual budget, based on the actuarially determined contribution rate set by the Plan's consulting actuary. For the years beginning May 1, 2016 and 2015, both the Water and Sewer Funds contributed 13.81% and 14.64% of payroll, respectively, which is the actuarially determined Board contribution rates for the respective years. Future Fund contributions will be determined through each Fund's budgeting process.

The Department's governing body has the authority to establish and amend the contribution requirements of each major fund and active employees. The governing body establishes rates based on an actuarially determined rate recommended by an independent actuary. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The Water and Sewer Funds are required to contribute the difference between the actuarially determined rate and the contribution rate of employees. For the years ended April 30, 2017 and 2016, employees within the Water Fund contributed \$998,950 and \$1,032,828, respectively, and the Water Fund contributed \$2,972,461 and \$3,082,377, respectively, to the Plan. For the years ended April 30, 2017 and 2016, employees within the Sewer Fund contributed \$842,814 and \$871,602, respectively, and the Sewer Fund contributed \$2,508,453 and \$2,601,211, respectively, to the Plan.

***Pension Liabilities, Pension Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to Pensions***

At April 30, 2017 and 2016, the Water Fund reported a liability of \$30,723,968 and \$13,380,125, respectively, for its proportionate share of the net pension liability. At April 30, 2017 and 2016, the Sewer Fund reported a liability of \$25,927,891 and \$11,291,458, respectively, for its proportionate share of the net pension liability. The net pension liability was measured as of April 30, 2016 and 2015, respectively, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of April 30, 2015 and 2014 rolled forward one year to the measurement dates. The Water and Sewer Fund's proportion of the net pension liability was based on the respective Fund's actual contributions to the pension plan for the

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years ended April 30, 2016 and 2015. At April 30, 2017 and 2016, the Water Fund's proportion was 12.54%. At April 30, 2017 and 2016, the Sewer Fund's proportion was 10.58%.

For the years ended April 30, 2017 and 2016, the Water Fund recognized pension expense of \$5,193,216 and \$2,454,030, respectively. For the years ended April 30, 2017 and 2016, the Sewer Fund recognized pension expense of \$4,159,127 and \$1,926,731, respectively.

At April 30, 2017 and 2016, KC Water reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

	<b>2017</b>		<b>2016</b>	
	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>	<b>Deferred Outflows of Resources</b>	<b>Deferred Inflows of Resources</b>
<b>Water Fund</b>				
Net difference between projected and actual earnings on pension plan investments	\$ 10,021,742	\$ -	\$ -	\$ 878,990
Changes in assumptions	4,320,508	-	-	-
Differences between expected and actual experience	-	609,750	-	-
Changes in Fund proportion	-	-	-	591,929
Fund contributions made subsequent to the measurement date of the net pension liability	2,972,461	-	3,082,377	-
	<u>17,314,711</u>	<u>609,750</u>	<u>3,082,377</u>	<u>1,470,919</u>
<b>Sewer Fund</b>				
Net difference between projected and actual earnings on pension plan investments	8,457,326	-	-	741,778
Changes in assumptions	3,646,068	-	-	-
Differences between expected and actual experience	-	514,569	-	-
Changes in Fund proportion	-	-	-	776,057
Fund contributions made subsequent to the measurement date of the net pension liability	2,508,453	-	2,601,211	-
	<u>14,611,847</u>	<u>514,569</u>	<u>2,601,211</u>	<u>1,517,835</u>
<b>Total Department</b>	<u>\$ 31,926,558</u>	<u>\$ 1,124,319</u>	<u>\$ 5,683,588</u>	<u>\$ 2,988,754</u>

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At April 30, 2017 and 2016, the Water Fund reported \$2,972,461 and \$3,082,377, respectively, and the Sewer Fund reported \$2,508,453 and \$2,601,211, respectively, of deferred outflows of resources resulting from contributions subsequent to the measurement date that will be recognized as a reduction of the net pension liability in the next fiscal year. Other amounts reported as deferred outflows of resources and deferred inflows of resources at April 30, 2017, related to pensions, will be recognized in pension expense as follows:

	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
2018	\$ 3,433,125	\$ 2,897,207	\$ 6,330,332
2019	3,433,125	2,897,207	6,330,332
2020	3,433,125	2,897,207	6,330,332
2021	3,433,125	2,897,204	6,330,329
	<u>\$ 13,732,500</u>	<u>\$ 11,588,825</u>	<u>\$ 25,321,325</u>

**Actuarial Assumptions**

The total pension liability in the April 30, 2015 and 2014 actuarial valuations was determined using the following actuarial assumptions, applied to all periods included in the measurement:

Inflation	3.0%
Salary increases	Ranges from 4.0% to 8.0%
Ad hoc cost-of-living adjustments	3.0%, simple for Tier I, 2.5% for Tier II
Investment rate of return	7.50%

Mortality rates were based on the 1994 Group Annuity Mortality Table for healthy individuals and the 1983 Railroad Retirement Board Disabled Life Mortality Table for disabled individuals.

The actuarial assumptions used in the April 30, 2015 and 2014 valuations were based on the results of an actuarial experience study for the period 2006 – 2010 and showed that there were sufficient margins in the rates to provide for potential future improvements in mortality.

The investment return assumption of 7.50% was selected based upon an analysis that included (a) capital market assumptions provided by the investment consultant, (b) the asset allocation of the fund and (c) investment return assumptions of other public retirement systems.

The inflation assumption of 3.0% was selected based upon an analysis that included (a) input from the investment consultant, (b) historical inflation as measured by Consumer Price Index and (c) implied inflation in long-term government bonds.

The long-term wage growth assumption of 4.0% was based upon the inflation assumption of 3.0% plus a real growth wage assumption of 1.0% which was derived from an analysis of historical increases in Social Security Average earnings.

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<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-term Expected Real Rate of Return</b>
Large Cap Equity	16.0%	4.7%
Small Cap Equity	5.5%	5.9%
Non-US Equity	7.0%	5.9%
Global Equity	19.0%	5.6%
Emerging Markets Equity	3.0%	8.5%
Opportunistic Equity	12.0%	3.8%
Fixed Income	26.5%	0.1%
Real Assets	10.0%	3.0%
Cash	1.0%	-0.8%

***Discount Rate***

The discount rate used to measure the total pension liability was 7.50%, which is the assumed long-term expected rate of return in Plan investments. The projection of cash flows used to determine the discount rate assumed that employee contributions will be made at the current contribution rate and that Fund contributions will be made at rates equal to the difference between actuarially determined contribution rates and the employee rate. Based on those assumptions, the pension plan's fiduciary net position will be greater than or equal to the benefit payments projected for each future period.

***Sensitivity of the Water and Sewer Fund's Proportionate Share of the Net Pension Liability to Changes in the Discount Rate***

The net pension liability of the Water and Sewer Funds have been calculated using a discount rate of 7.50%. The following presents the net pension liability using a discount rate 1% higher and 1% lower than the current rate.

	<b>1% Decrease</b>	<b>Current Discount Rate</b>	<b>1% Increase</b>
<b>2017</b>			
Water Fund's net pension liability	\$ 50,165,706	\$ 30,723,968	\$ 14,435,467
Sewer Fund's net pension liability	42,324,814	25,927,891	12,179,206
<b>Total Department</b>	<b>\$ 92,490,520</b>	<b>\$ 56,651,859</b>	<b>\$ 26,614,672</b>

***Pension Plan Fiduciary Net Position***

Detailed information about the pension plan's fiduciary net position is available in the separately issued Plan financial report, located at [www.kcmo.org](http://www.kcmo.org).

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***Payable to the Pension Plan***

At April 30, 2017 and 2016, the Water Fund reported a payable of \$158,000 and \$111,398, respectively, for the outstanding amount of contributions to the pension plan. At April 30, 2017 and 2016, the Sewer Fund reported a payable of \$133,000 and \$94,009, respectively, for the outstanding amount of contributions to the pension plan.

**Note 11: Other Postemployment Benefits**

In accordance with Governmental Accounting Standards Board (GASB) Statement No. 45, *Accounting and Financial Reporting by Employers for Postemployment Benefits Other Than Pensions* (GASB 45), other postemployment benefits (OPEB) are recorded in the financial statements as noncurrent liabilities on the statements of net position and are included as an operating expense in salaries and wages and employee benefits on the statements of revenues, expenses and changes in net position.

***Plan Description***

The City sponsors a single-employer, defined benefit health care plan that provides health care benefits to retirees and their dependents, including medical, dental and vision coverage. The City requires the retirees to pay 100% of the same medical premium charged to active participants. The rates being paid by retirees for benefits are typically lower than those for individual health insurance policies. The difference between these amounts is the implicit rate subsidy, which is considered OPEB under GASB 45.

Retirees and spouses have the same benefits as active employees. Retiree coverage terminates either when the retiree becomes covered under another employer health plan, or when the retiree reaches Medicare eligibility age, which is currently age 65. Spousal coverage is available until the retiree becomes covered under another employer health plan, attains Medicare eligibility age or dies.

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The net OPEB obligation at April 30, 2017 is as follows:

	<b>City</b>	<b>Water</b>	<b>Sewer</b>
Annual required contribution (ARC)	\$ 8,787,046	\$ 634,594	\$ 542,441
Interest on net OPEB obligation	3,225,023	243,157	205,289
Adjustment to annual required contribution	(7,705,432)	(324,481)	(273,948)
Annual OPEB cost (expense)	4,306,637	553,270	473,782
Contributions made (employer)	(7,183,542)	(518,968)	(443,606)
Change in net OPEB obligation	(2,876,905)	34,302	30,176
Net OPEB obligation, April 30, 2016	71,667,180	5,403,488	4,561,977
Net OPEB obligation, April 30, 2017	<u>\$ 68,790,275</u>	<u>\$ 5,437,790</u>	<u>\$ 4,592,153</u>

***Funded Status and Funding Progress***

As of May 1, 2016, the most recent actuarial valuation date, the OPEB plan was 0.0% funded. The actuarial accrued liability for benefits was \$89.1 million, and the actuarial value of assets was \$0, resulting in an unfunded actuarial accrued liability (UAAL) of \$89.1 million. The covered payroll (annual payroll of active employees covered by the OPEB plan) was \$226.1 million, and the ratio of UAAL to the covered payroll was 39.4%.

Although determinations of the actuarial status were not made for individual funds, the City has allocated its 2017 and 2016 overall net OPEB obligation of approximately \$68,800,000 and \$71,667,000, respectively, to each participating fund. For the years ended April 30, 2017 and 2016, the Water Fund's allocation was approximately \$5,438,000 and \$5,403,000, respectively, and the Sewer Fund's allocation was approximately \$4,592,000 and \$4,562,000, respectively.

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

***Actuarial Methods and Assumptions***

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

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liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the May 1, 2016 actuarial valuation, the individual entry age actuarial cost method was used. The actuarial assumptions included a 4.5% investment rate of return (net of administrative expenses), which is a blended rate of the expected long-term investment returns on plan assets (of which there are none) and on the employer's own investments calculated based on the funded level of the plan at the valuation date and an annual healthcare cost trend rate of 8.5 - 7.5% annually, reduced by decrements to an ultimate rate of 4.5% after nine years. The actuarial value of assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a five year period. The UAAL is being amortized as a 20-year level percentage of pay. The remaining amortization period at April 30, 2016 was 30 years.

**Note 12: Commitments**

At April 30, 2017 and 2016, the City had made purchase commitments, primarily for additions to utility lines and improvements on behalf of the Water Fund of approximately \$35,001,000 and \$56,113,000, respectively. These commitments will be funded by a combination of existing resources and future debt issuances.

At April 30, 2017 and 2016, the City had made purchase commitments, primarily for additions to plant on behalf of the Sewer Fund of approximately \$125,991,000 and \$110,540,000, respectively. These commitments will be funded by a combination of existing resources and future debt issuances.

**Note 13: Risk Management**

KC Water is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Department is self-insured for workers' compensation and general liability exposures and participates in the City's self-insurance programs. The City has purchased insurance to limit the exposure to \$1,000,000 on workers' compensation claims per occurrence occurring prior to fiscal year 1997, \$500,000 exposure for all claims originating in fiscal year 1997, \$400,000 exposure for all claims originating in fiscal year 1998, \$2,000,000 exposure for all claims originating in fiscal years 2003 through 2007, \$1,000,000 exposure for all claims originating in fiscal years 2008 through 2011, and \$2,000,000 for all claims originating thereafter. The City also purchases an excess liability policy to cover torts, which are not barred by sovereign immunity. The policy has a \$5,400,000 retention and a \$10,000,000 loss limit. Current sovereign tort immunity statutes and law limit general liability and automobile claim exposure to a maximum of \$409,123 per person and \$2,727,489 per occurrence. Settled claims have not exceeded the self-insured retention in any of the past three fiscal years.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2017 and 2016**

The City also maintains commercial insurance coverage for those areas not covered by the City's self-insurance programs, such as excess general liability, property, cyber and auto. Settled claims have not exceeded commercial insurance coverage for the past three years.

All funds of the City participate in the program and make payments based on estimates of the amounts needed to pay prior and current year claims. The claims liability for the Water and Sewer Funds includes an estimate of claims incurred but not reported (IBNR), which was determined based upon historical claims experience. Activity in the Water and Sewer Fund's claims liability for the years ended April 30, 2017, 2016 and 2015 is summarized as follows:

	<u><b>2017</b></u>	<u><b>2016</b></u>	<u><b>2015</b></u>
<b>Water</b>			
Balance, beginning of the year	\$ 11,068,501	\$ 10,470,580	\$ 9,589,612
Current year claims incurred and changes in estimates for claims incurred in prior years	9,664,009	3,131,746	3,817,573
Claims and expenses paid	<u>(4,068,864)</u>	<u>(2,533,825)</u>	<u>(2,936,605)</u>
Balance, end of the year	16,663,646	11,068,501	10,470,580
Less current portion	<u>(4,158,719)</u>	<u>(2,893,181)</u>	<u>(2,408,188)</u>
Noncurrent portion	<u><u>\$ 12,504,927</u></u>	<u><u>\$ 8,175,320</u></u>	<u><u>\$ 8,062,392</u></u>
<b>Sewer</b>			
Balance, beginning of the year	\$ 5,772,528	\$ 5,572,358	\$ 5,816,813
Current year claims incurred and changes in estimates for claims incurred in prior years	3,648,323	2,530,842	2,049,335
Claims and expenses paid	<u>(2,072,066)</u>	<u>(2,330,672)</u>	<u>(2,293,790)</u>
Balance, end of the year	7,348,785	5,772,528	5,572,358
Less current portion	<u>(1,900,183)</u>	<u>(1,544,973)</u>	<u>(1,376,581)</u>
Noncurrent portion	<u><u>\$ 5,448,602</u></u>	<u><u>\$ 4,227,555</u></u>	<u><u>\$ 4,195,777</u></u>

**Note 14: Disclosures About Fair Value of Assets**

KC Water categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; and Level 3 inputs are significant unobservable inputs.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2017 and 2016**

The City has the following recurring fair value measurements as of April 30, 2017 and 2016:

- U.S. Treasury Bills, U.S. Treasury Notes/Bonds and Federal agencies of approximately \$1,163,784,000 and \$1,094,502,000 as of April 30, 2017 and 2016, respectively, are valued using quoted prices for similar assets, quoted prices in markets that are not active or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets (Level 2) inputs.

**Note 15: Net Position**

Net investment in capital assets is comprised of the following:

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Capital Related Assets			
Land	\$ 4,178,312	\$ 13,401,078	\$ 17,579,390
Construction in progress	38,215,233	110,498,840	148,714,073
Buildings	178,150,081	-	178,150,081
Treatment plant and other facilities	-	339,584,763	339,584,763
Utility line and improvements	845,509,347	962,542,618	1,808,051,965
Machinery and equipment	99,023,157	126,592,273	225,615,430
	<u>1,165,076,130</u>	<u>1,552,619,572</u>	<u>2,717,695,702</u>
Less accumulated depreciation	<u>(215,727,578)</u>	<u>(395,336,831)</u>	<u>(611,064,409)</u>
Capital assets, net	<u>949,348,552</u>	<u>1,157,282,741</u>	<u>2,106,631,293</u>
Deferred outflows of resources - loss on refunding	<u>2,390,817</u>	<u>1,284,265</u>	<u>3,675,082</u>
Less Related Liabilities			
Current portion, bonds and capital leases payable	19,610,000	19,961,818	39,571,818
Bonds and notes payable, net of premium, discount and unspent proceeds	315,354,209	322,284,127	637,638,336
Contracts and retainages payable	<u>2,551,423</u>	<u>4,693,139</u>	<u>7,244,562</u>
Total capital related liabilities	<u>337,515,632</u>	<u>346,939,084</u>	<u>684,454,716</u>
Net investment in capital assets	<u>\$ 614,223,737</u>	<u>\$ 811,627,922</u>	<u>\$ 1,425,851,659</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2017 and 2016**

	<b>April 30, 2016</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Capital Related Assets			
Land	\$ 4,089,224	\$ 13,384,572	\$ 17,473,796
Construction in progress	84,956,648	90,994,178	175,950,826
Buildings	173,549,863	-	173,549,863
Treatment plant and other facilities	-	341,153,397	341,153,397
Utility line and improvements	773,237,115	892,921,550	1,666,158,665
Machinery and equipment	75,320,442	105,420,212	180,740,654
	<u>1,111,153,292</u>	<u>1,443,873,909</u>	<u>2,555,027,201</u>
Less accumulated depreciation	<u>(209,412,402)</u>	<u>(376,194,979)</u>	<u>(585,607,381)</u>
Capital assets, net	<u>901,740,890</u>	<u>1,067,678,930</u>	<u>1,969,419,820</u>
Deferred outflows of resources - loss on refunding	<u>2,848,534</u>	<u>1,431,779</u>	<u>4,280,313</u>
Less Related Liabilities			
Current portion, bonds and capital leases payable	16,485,000	21,493,700	37,978,700
Bonds and notes payable, net of premium, discount and unspent proceeds	290,565,940	284,649,843	575,215,783
Contracts and retainages payable	3,994,849	2,379,710	6,374,559
Total capital related liabilities	<u>311,045,789</u>	<u>308,523,253</u>	<u>619,569,042</u>
Net investment in capital assets	<u>\$ 593,543,635</u>	<u>\$ 760,587,456</u>	<u>\$1,354,131,091</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2017 and 2016**

Restricted net position at April 30, 2017 and 2016 are as follows:

	<b>April 30, 2017</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Restricted-Expendable Assets			
Cash and cash equivalents	\$ 8,263,340	\$ 7,703,553	\$ 15,966,893
Investments	146,092,717	154,571,331	300,664,048
Interest receivable	373,423	410,172	783,595
	<u>154,729,480</u>	<u>162,685,056</u>	<u>317,414,536</u>
Less Liabilities from Restricted Assets			
Debt related to unspent bond proceeds	107,407,409	101,559,662	208,967,071
Accrued interest and fiscal agent fees	6,576,120	5,719,527	12,295,647
Customer deposits	2,485,195	-	2,485,195
	<u>116,468,724</u>	<u>107,279,189</u>	<u>223,747,913</u>
Restricted-Expendable Net Position	<u>\$ 38,260,756</u>	<u>\$ 55,405,867</u>	<u>\$ 93,666,623</u>
	<b>April 30, 2016</b>		
	<b>Water</b>	<b>Sewer</b>	<b>Total</b>
Restricted-Expendable Assets			
Cash and cash equivalents	\$ 933,483	\$ 5,932,032	\$ 6,865,515
Investments	110,181,400	215,245,036	325,426,436
Interest receivable	234,478	366,011	600,489
	<u>111,349,361</u>	<u>221,543,079</u>	<u>332,892,440</u>
Less Liabilities from Restricted Assets			
Debt related to unspent bond proceeds	65,608,648	160,733,697	226,342,345
Accrued interest and fiscal agent fees	6,198,802	5,285,524	11,484,326
Customer deposits	2,438,682	-	2,438,682
	<u>74,246,132</u>	<u>166,019,221</u>	<u>240,265,353</u>
Restricted-Expendable Net Position	<u>\$ 37,103,229</u>	<u>\$ 55,523,858</u>	<u>\$ 92,627,087</u>

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Notes to Financial Statements**  
**April 30, 2017 and 2016**

**Note 16: City Sewer Overflow Control Plan**

The City submitted a plan to control overflows from the City's combined and separate sanitary sewer systems to the United States Environmental Protection Agency (the EPA) and the Missouri Department of Natural Resources (the MDNR). The control plan is being driven by requirements of the Clean Water Act and by policies of the EPA. The City has reached an agreement with the federal government, in the form of a consent decree that includes a sewer overflow control plan, resolution of past Clean Water Act violations and the imposition of a penalty. The Consent Decree was lodged on May 18, 2010, and the court issued an order approving and entering the Consent Decree. A separate agreement has been reached with the state, resolving past sewer overflow violations, imposing a penalty and developing a sewer overflow response plan. The City has been timely fulfilling its obligations under this settlement.

The current estimated capital costs of this control plan is \$4.5 billion with estimated inflation at the end of the 25-year timeframe. In addition, there will be a substantial increase in annual expenditures for operation and maintenance. It is anticipated that this plan will be funded primarily from the City's sewer fund, which is separate from the general fund. The City does not anticipate that the City's general fund will be relied upon to assist in the financing of the control plan; however, further future analysis will be required. Specifically, upon approval and implementation of the control plan, specific financing strategies to offset the cost of the control plan will be evaluated and implemented, which could include appropriation of moneys from the City's general fund.

**Required Supplementary  
Information  
(Unaudited)**

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of the Departments Proportionate Share of the Net Pension Liability**  
**Employees' Retirement System of the City of Kansas City, Missouri**  
**Last Ten Fiscal Years**

	<b>2017</b>	<b>2016</b>
Water Fund's proportion of the net pension liability	12.54%	12.54%
Water Fund's proportionate share of the net pension liability	\$ 30,723,968	\$ 13,380,125
Water Fund's covered payroll	\$ 20,923,378	\$ 21,020,683
Water Fund's proportionate share of the net pension liability as a percentage of its covered payroll	146.84%	63.65%
Plan fiduciary net position as a percentage of the total pension liability	80.69%	91.05%
	<b>2017</b>	<b>2016</b>
Sewer Fund's proportion of the net pension liability	10.58%	10.58%
Sewer Fund's proportionate share of the net pension liability	\$ 25,927,891	\$ 11,291,459
Sewer Fund's covered payroll	\$ 17,653,058	\$ 17,739,310
Sewer Fund's proportionate share of the net pension liability as a percentage of its covered payroll	146.87%	63.65%
Plan fiduciary net position as a percentage of the total pension liability	80.69%	91.05%

**Note to Schedule:** This schedule is intended to show a ten-year trend. Additional years will be reported as they become available.

This information is presented as of the measurement date for each fiscal year, which is April 30 of the prior year.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of the Departments Contributions**  
**Employees' Retirement System of the City of Kansas City, Missouri**  
**Last Ten Fiscal Years**

<b>Water</b>	<b>2017</b>	<b>2016</b>
Water's contractually required contribution	\$ 2,889,519	\$ 3,077,428
Contributions in relation to the contractually required contribution	<u>2,972,461</u>	<u>3,082,377</u>
Contribution deficiency (excess)	<u>\$ (82,942)</u>	<u>\$ (4,949)</u>
Water Fund's covered payroll	\$ 20,596,705	\$ 20,923,378
Contributions as a percentage of covered payroll	14.44%	14.73%

<b>Sewer</b>	<b>2017</b>	<b>2016</b>
Sewer's contractually required contribution	\$ 2,437,887	\$ 2,596,426
Contributions in relation to the contractually required contribution	<u>2,508,453</u>	<u>2,601,211</u>
Contribution deficiency (excess)	<u>\$ (70,566)</u>	<u>\$ (4,785)</u>
Sewer Fund's covered payroll	\$ 17,377,443	\$ 17,653,058
Contributions as a percentage of covered payroll	14.44%	14.73%

**Note to Schedule:** This schedule is intended to show a ten-year trend. Additional years will be reported as they become available.

This information is presented as of the Department's most recent fiscal year end.

There are no significant changes to benefit assumptions and/or actuarial methods.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of the Funding Progress**  
**Year Ended April 30, 2017**  
*(In thousands)*

Other Postemployment Benefits							
	(a)	(b)	(b-a)	(a/b)	(c)	[(b-a)/c]	
		Actuarial Accrued Liability (AAL)	Unfunded AAL (UAAL)		Covered Payroll	UAAL as a Percentage of Covered Payroll	
Actuarial Valuation Date	Value of Assets	Entry Age		Funded Ratio			
City of Kansas City - Employee/Firefighter Other Postemployment Benefits							
5/1/2012	\$ -	\$ 105,013	\$ 105,013	0%	\$ 221,197	47.47%	
5/1/2014	-	97,828	97,828	0%	227,039	43.09%	
5/1/2016	-	89,146	89,146	0%	226,100	39.43%	

**Note:** Valuation and determinations of the actuarial status were not made for individual funds, as such, the above information is for the entire City OPEB Plan.

# **Supplementary Information**

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Combining Schedule of Revenues, Expenses and Changes in Net Position –**  
**Sewer Fund**  
**Year Ended April 30, 2017**

	<b>Wastewater</b>	<b>Stormwater</b>	<b>Total</b>
<b>Operating Revenues</b>			
Residential and commercial sales	\$ 158,353,572	\$ 12,741,451	\$ 171,095,023
Intermunicipal sewer charges	33,687,701	-	33,687,701
Other operating revenues	4,365,057	749,826	5,114,883
	<u>196,406,330</u>	<u>13,491,277</u>	<u>209,897,607</u>
<b>Operating Expenses</b>			
Sewerage treatment and pumping	29,223,528	122,176	29,345,704
Sewer maintenance	23,208,801	7,690,932	30,899,733
Administrative and general	34,786,672	4,966,756	39,753,428
Industrial and household hazardous waste control	798,141	611,067	1,409,208
Depreciation and amortization	23,503,071	6,631,363	30,134,434
	<u>111,520,213</u>	<u>20,022,294</u>	<u>131,542,507</u>
<b>Operating Income (Loss)</b>	<u>84,886,117</u>	<u>(6,531,017)</u>	<u>78,355,100</u>
<b>Nonoperating Revenues (Expenses)</b>			
Interest income	2,086,536	80,142	2,166,678
Interest expense and fiscal agent fees	(9,405,474)	(53,622)	(9,459,096)
Other	(60,001)	450	(59,551)
	<u>(7,378,939)</u>	<u>26,970</u>	<u>(7,351,969)</u>
<b>Excess of Revenues Over (Under) Expenses Before Capital Contributions</b>	77,507,178	(6,504,047)	71,003,131
<b>Capital Contributions</b>	(230,639)	7,778,335	7,547,696
<b>Payment-in-Lieu of Taxes</b>	<u>(1,588,818)</u>	<u>-</u>	<u>(1,588,818)</u>
<b>Increase in Net Position</b>	<u>\$ 75,687,721</u>	<u>\$ 1,274,288</u>	<u>\$ 76,962,009</u>

# **STATISTICAL SECTION**

**(Unaudited)**

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**Financial Trends  
Revenue Capacity  
Debt Capacity  
Demographic and Economic Information  
Operating Information**

## Statistical Section (Unaudited)

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

<i>Contents</i>	<i>Page</i>
<b><u>Financial Trends</u></b>	73
These schedules contain trend information to help the reader understand how the utility's financial performance and well-being have changed over time.	
<b><u>Revenue Capacity</u></b>	76
These schedules contain information to help the reader assess the Department's most significant local revenue source.	
<b><u>Debt Capacity</u></b>	82
These schedules present information to help the reader assess the affordability of the Department's current levels of outstanding debt and the Department's ability to issue additional debt in the future.	
<b><u>Demographic and Economic Information</u></b>	88
These schedules offer demographic and economic indicators to help the reader understand how the information in the utility's financial activities takes place.	
<b><u>Operating Information</u></b>	90
These schedules contain service and infrastructure data to help the readers understand how the information in the utility's financial report relates to the services the utility provides and the activities it performs.	

# Financial Trends

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Net Position by Category**  
**Last Ten Fiscal Years**

	<b>FYE 2008</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>
<b>Water Fund</b>										
Net investment in capital assets	\$ 406,638,846	\$ 428,340,318	\$ 438,188,214	\$ 455,704,677	\$ 470,155,178	\$ 488,842,664	\$ 513,054,370	\$ 552,399,594	\$ 593,543,635	\$ 614,223,737
Restricted-expendable	8,512,872	4,887,540	12,703,629	11,382,337	10,008,982	13,199,410	26,454,618	24,439,399	37,103,229	38,260,756
Unrestricted	<u>21,272,098</u>	<u>14,458,602</u>	<u>15,160,220</u>	<u>35,888,149</u>	<u>57,021,378</u>	<u>83,331,615</u>	<u>83,631,558</u>	<u>99,975,615</u>	<u>94,221,747</u>	<u>122,721,652</u>
Total net position	<u>436,423,816</u>	<u>447,686,460</u>	<u>466,052,063</u>	<u>502,975,163</u>	<u>537,185,538</u>	<u>585,373,689</u>	<u>623,140,546</u>	<u>676,814,608</u>	<u>724,868,611</u>	<u>775,206,145</u>
<b>Sewer Fund</b>										
Net investment in capital assets	537,290,784	563,947,955	591,072,327	608,273,541	629,443,591	651,557,999	693,704,508	733,946,847	760,587,456	811,627,922
Restricted-expendable	4,907,788	7,418,277	7,377,826	7,465,340	7,815,116	11,664,261	22,724,620	31,483,449	55,523,858	55,405,867
Unrestricted	<u>27,674,297</u>	<u>29,211,764</u>	<u>29,102,652</u>	<u>53,640,792</u>	<u>73,415,975</u>	<u>87,048,093</u>	<u>113,228,784</u>	<u>140,969,348</u>	<u>151,260,389</u>	<u>177,299,923</u>
Total net position	<u>569,872,869</u>	<u>600,577,996</u>	<u>627,552,805</u>	<u>669,379,673</u>	<u>710,674,682</u>	<u>750,270,353</u>	<u>829,657,912</u>	<u>906,399,644</u>	<u>967,371,703</u>	<u>1,044,333,712</u>
<b>Total Department</b>										
Net investment in capital assets	943,929,630	992,288,273	1,029,260,541	1,063,978,218	1,099,598,769	1,140,400,663	1,206,758,878	1,286,346,441	1,354,131,091	1,425,851,659
Restricted-expendable	13,420,660	12,305,817	20,081,455	18,847,677	17,824,098	24,863,671	49,179,238	55,922,848	92,627,087	93,666,623
Unrestricted	<u>48,946,395</u>	<u>43,670,366</u>	<u>44,262,872</u>	<u>89,528,941</u>	<u>130,437,353</u>	<u>170,379,708</u>	<u>196,860,342</u>	<u>240,944,963</u>	<u>245,482,136</u>	<u>300,021,575</u>
Total net position	<u>\$ 1,006,296,685</u>	<u>\$ 1,048,264,456</u>	<u>\$ 1,093,604,868</u>	<u>\$ 1,172,354,836</u>	<u>\$ 1,247,860,220</u>	<u>\$ 1,335,644,042</u>	<u>\$ 1,452,798,458</u>	<u>\$ 1,583,214,252</u>	<u>\$ 1,692,240,314</u>	<u>\$ 1,819,539,857</u>

Source: Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years.

Note: The Water and Sewer Funds adopted GASB 65 starting in 2013. Previous years have not been restated for adoption of GASB 65.

Note: The Water and Sewer Funds adopted GASB 68 starting in 2016. Previous years have not been restated for adoption of GASB 68.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Changes in Net Position - Water Fund**  
**Last Ten Fiscal Years**

	<b>FYE 2008</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>
<b>Operating Revenues</b>										
Water sales	\$ 78,251,144	\$ 79,369,329	\$ 79,402,865	\$ 104,809,250	\$ 113,795,787	\$ 139,044,243	\$ 136,645,032	\$ 141,805,902	\$ 145,387,719	\$ 153,502,388
Other water revenue	1,802,063	2,401,532	3,051,231	3,043,482	4,425,641	4,128,038	3,132,691	3,363,610	3,638,548	4,995,566
Income form jobbing and contract work and miscellaneous revenues	3,986,649	4,360,006	5,729,988	7,355,893	7,026,768	6,470,794	4,459,597	5,133,697	6,183,139	6,859,793
Total operating revenues	84,039,856	86,130,867	88,184,084	115,208,625	125,248,196	149,643,075	144,237,320	150,303,209	155,209,406	165,357,747
<b>Operating Expenses</b>										
Power and pumping	5,417,959	5,065,124	4,540,886	4,955,130	4,844,668	5,391,806	4,924,274	4,958,291	5,287,722	5,900,861
General and electrical maintenance	3,019,538	2,282,020	2,517,212	2,541,658	4,034,162	4,347,317	4,758,471	4,733,179	4,676,138	6,151,741
Purification	10,971,583	11,078,707	11,549,618	11,892,058	11,020,685	12,245,660	12,159,176	12,141,165	13,081,316	13,185,929
Laboratory services	2,605,167	2,960,532	2,433,467	2,477,521	2,470,682	2,471,376	2,593,992	2,688,627	2,641,992	2,906,656
Transmission and distribution	10,242,782	13,925,182	13,303,041	11,488,867	21,122,053	23,062,262	20,756,589	16,869,006	17,818,781	19,436,953
Customer service	7,574,259	7,156,669	7,040,500	7,295,986	7,236,663	7,851,497	8,229,725	9,122,385	7,768,625	8,263,111
Mechanical maintenance	2,916,693	3,122,413	2,634,981	2,754,732	2,751,426	2,929,851	2,928,413	2,680,090	2,151,887	2,305,651
Customer accounting and collection	4,331,504	4,520,029	4,258,158	4,963,537	5,184,265	5,650,757	9,215,812	10,558,460	6,983,041	6,658,713
Administrative and general	14,278,131	13,423,079	14,477,547	16,123,070	14,585,368	14,748,958	19,056,962	16,352,602	16,090,363	22,639,576
Depreciation and amortization	10,181,650	10,270,730	10,260,837	10,708,385	13,793,442	14,375,320	15,024,352	15,616,130	17,222,379	18,893,810
Total operating expenses	71,539,266	73,804,485	73,016,247	75,200,944	87,043,414	93,074,804	99,647,766	95,719,935	93,722,244	106,343,001
<b>Operating Income</b>	12,500,590	12,326,382	15,167,837	40,007,681	38,204,782	56,568,271	44,589,554	54,583,274	61,487,162	59,014,746
<b>Non-Operating Expenses</b>										
Interest income	2,949,674	1,564,504	2,555,115	1,625,220	1,457,756	977,115	632,555	1,851,862	1,516,951	1,238,646
Interest expense and fiscal agent fees	(5,998,133)	(6,375,875)	(7,208,735)	(9,103,896)	(9,774,619)	(9,772,564)	(9,586,155)	(11,600,786)	(9,554,013)	(12,005,062)
Other	(27,291)	225,141	(7,600)	(214,237)	(192,146)	(472,629)	(7,312)	78,478	(113,555)	(3,961)
Total nonoperating expenses, net	(3,075,750)	(4,586,230)	(4,661,220)	(7,692,913)	(8,509,009)	(9,268,078)	(8,960,912)	(9,670,446)	(8,150,617)	(10,770,377)
<b>Excess of Revenues Over Expenses Before Capital Contributions</b>	9,424,840	7,740,152	10,506,617	32,314,768	29,695,773	47,300,193	35,628,642	44,912,828	53,336,545	48,244,369
<b>Capital Contributions</b>	10,014,871	3,522,492	7,858,986	4,608,332	4,514,602	2,617,234	2,138,215	8,761,234	3,188,326	3,465,581
<b>Payment-in-Lieu of Taxes</b>	-	-	-	-	-	-	-	-	-	(1,372,416)
<b>Increase in Net Position</b>	\$ 19,439,711	\$ 11,262,644	\$ 18,365,603	\$ 36,923,100	\$ 34,210,375	\$ 49,917,427	\$ 37,766,857	\$ 53,674,062	\$ 56,524,871	\$ 50,337,534

Source: Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Changes in Net Position - Sewer Fund**  
**Last Ten Fiscal Years**

	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017
<b>Operating Revenues</b>										
Retail sewer charges	\$ 46,125,920	\$ 48,752,005	\$ 52,411,606	\$ 70,226,412	\$ 76,448,889	\$ 93,951,330	\$ 106,689,690	\$ 119,719,601	\$ 138,557,694	\$ 158,353,571
Intermunicipal sewer charges	18,722,855	21,098,061	21,707,817	23,123,947	23,925,569	24,508,149	28,047,478	32,700,685	37,242,952	33,687,701
Stormwater fees	11,210,134	9,957,532	11,647,996	10,380,081	11,306,712	12,648,966	12,866,145	12,980,291	13,014,456	12,741,452
Other operating revenues	3,870,231	5,074,154	6,149,271	5,636,666	4,650,554	3,873,393	3,647,080	4,093,029	4,792,703	5,114,883
Total operating revenues	79,929,140	84,881,752	91,916,690	109,367,106	116,331,724	134,981,838	151,250,393	169,493,606	193,607,805	209,897,607
<b>Operating Expenses</b>										
Sewerage treatment and pumping	17,998,162	19,061,496	19,572,886	20,448,799	21,568,513	21,530,125	22,025,549	24,479,377	30,673,879	29,345,704
Sewer maintenance	17,066,247	21,348,055	23,275,663	19,492,673	23,594,922	25,169,485	26,767,154	30,295,934	30,082,417	30,899,733
Administrative and general	16,287,798	17,740,844	18,255,432	17,963,877	17,401,764	22,351,473	23,205,978	27,192,886	32,340,109	39,753,428
Industrial and household hazardous waste control	2,021,275	2,264,239	2,214,016	1,422,844	1,268,901	1,318,222	1,277,181	1,322,689	1,339,268	1,409,208
Depreciation and amortization	15,736,974	16,790,094	18,295,727	21,821,399	22,376,178	22,450,445	23,947,433	26,491,741	28,558,919	30,134,434
Total operating expenses	69,110,456	77,204,728	81,613,724	81,149,592	86,210,278	92,819,750	97,223,295	109,782,627	122,994,592	131,542,507
Operating Income	10,818,684	7,677,024	10,302,966	28,217,514	30,121,446	42,162,088	54,027,098	59,710,979	70,613,213	78,355,100
<b>Non-Operating Revenues (expenses)</b>										
Interest income	3,468,255	1,725,557	3,123,824	2,407,523	2,916,533	1,803,044	1,073,477	2,612,752	2,052,642	2,166,678
Interest expense and fiscal agent fees	(4,984,772)	(4,404,748)	(4,562,766)	(5,427,078)	(6,077,376)	(6,463,942)	(6,813,348)	(7,760,680)	(10,797,250)	(9,459,096)
Other	(22,750)	109,101	12,826	(596,737)	4,389	(722,436)	244,250	(38,763)	(28,187)	(59,551)
Total non-operating expenses	(1,539,267)	(2,570,090)	(1,426,116)	(3,616,292)	(3,156,454)	(5,383,334)	(5,495,621)	(5,186,691)	(8,772,795)	(7,351,969)
Net income before capital contributions	9,279,417	5,106,934	8,876,850	24,601,222	26,964,992	36,778,754	48,531,477	54,524,288	61,840,418	71,003,131
<b>Capital Contributions</b>	47,569,990	25,598,193	18,097,959	17,225,646	14,330,017	5,693,415	30,856,082	22,217,444	6,716,328	7,547,696
<b>Payment-in-lieu of taxes</b>	-	-	-	-	-	-	-	-	-	(1,588,818)
<b>Increase in Net Position</b>	<u>\$ 56,849,407</u>	<u>\$ 30,705,127</u>	<u>\$ 26,974,809</u>	<u>\$ 41,826,868</u>	<u>\$ 41,295,009</u>	<u>\$ 42,472,169</u>	<u>\$ 79,387,559</u>	<u>\$ 76,741,732</u>	<u>\$ 68,556,746</u>	<u>\$ 76,962,009</u>

Source: Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years.

Retail sewer charges and stormwater revenues are combined within the Statement of Revenues, Expenses and Changes in Net Position.

# Revenue Capacity

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Residential Water Service Rates**  
**Last Ten Fiscal Years**

Water Rates										
	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017
<b>Residential Rates</b>										
<b>Service Charges - Meter size (inches)</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>
5/8	\$ 9.00	\$ 9.00	\$ 10.35	\$ 11.40	\$ 10.85	\$ 10.85	\$ 11.90	\$ 13.09	\$ 13.50	\$ 13.90
3/4	9.50	9.50	10.95	12.05	11.70	11.70	12.80	14.08	14.50	14.95
1	12.00	12.00	13.80	15.20	14.25	14.30	15.65	17.22	17.75	18.30
1 1/2	18.00	18.00	20.70	22.80	17.70	17.80	19.50	21.45	22.10	22.08
2	23.50	23.50	27.00	29.70	27.00	27.40	30.00	33.00	34.00	35.00
3	50.50	50.50	57.50	63.50	86.50	93.50	102.50	112.75	116.00	119.50
4	63.00	63.00	72.50	80.00	108.50	118.00	129.00	141.90	146.00	150.50
6	92.50	92.50	106.50	117.00	161.50	176.00	192.00	211.20	217.50	224.00
8	142.00	142.00	163.00	179.00	246.00	254.00	278.00	305.80	315.00	324.00
10	195.00	195.00	224.00	246.00	322.00	333.00	365.00	401.50	414.00	426.00
12	227.00	227.00	261.00	287.00	380.00	393.00	430.00	473.00	487.00	502.00
<b>Ordinary Commodity Charge</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
First 600 cubic feet	1.86	2.16	2.39	2.70	3.18	3.67	4.02	4.45	4.60	4.60
Next 4,400 cubic feet	2.07	2.40	2.65	3.00	3.58	4.08	4.50	4.75	4.85	5.09
Next 995,000 cubic feet	1.79	2.10	2.25	2.45	2.71	3.19	3.65	4.00	4.10	4.29
Over 1,000,000 cubic feet	1.32	1.51	1.61	1.75	2.04	2.25	2.50	2.75	2.90	3.03
<b>Seasonal off-peak commodity charges</b>	1.32	1.51	1.61	1.75	2.04	2.34	2.48	2.65	2.80	2.93
<b>Fire Protection - Size of Connection</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>	<b>Annually</b>
4 inch or less	67.00	72.00	76.00	87.00	87.00	91.00	100.00	107.00	110.00	116.00
6 inch	147.00	177.00	185.00	211.00	217.00	268.00	293.00	315.00	323.00	341.00
8 inch	274.00	334.00	350.00	399.00	435.00	572.00	625.00	670.00	688.00	726.00
10 inch	455.00	546.00	572.00	652.00	745.00	1,028.00	1,123.00	1,205.00	1,237.00	1,306.00
12 inch	682.00	818.00	857.00	977.00	1,159.00	1,662.00	1,815.00	1,948.00	2,000.00	2,110.00
16 inch	1,287.00	1,545.00	1,618.00	1,845.00	2,326.00	3,541.00	3,868.00	4,150.00	4,261.00	4,496.00

Source: Annual Schedule of: Water & Sanitary Sewer Service Rates, Stormwater Fees, Meter Readings, Billing Practices and Bill Payment Guarantees

**City of Kansas City, Missouri Water Service Department**  
**Suburban Water Service Rates**  
**Last Ten Fiscal Years**

Water Rates											
	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017	
<b>Suburban Rate</b>											
<b>Service Charges - Meter size (inches)</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>	<b>Monthly</b>
5/8	\$ 10.00	\$ 10.00	\$ 11.50	\$ 12.65	\$ 12.10	\$ 12.10	\$ 13.25	\$ 14.25	\$ 14.70	\$ 15.15	
3/4	10.50	10.50	12.10	13.30	13.05	13.05	14.30	15.35	15.80	16.25	
1	12.50	12.50	14.40	15.85	15.95	15.95	17.45	18.75	19.30	19.90	
1 1/2	18.50	18.50	21.30	23.40	19.80	19.80	21.70	23.30	24.00	24.70	
2	24.00	24.00	27.60	30.40	30.40	30.40	33.30	35.80	36.90	38.00	
3	52.50	52.50	60.50	66.50	90.50	96.00	105.00	113.00	116.50	120.00	
4	66.00	66.00	76.00	83.50	114.00	121.50	133.50	143.50	148.00	152.50	
6	97.00	97.00	111.50	122.50	169.50	181.00	198.00	213.00	219.50	226.00	
8	144.00	144.00	166.00	183.00	254.00	260.00	285.00	306.00	315.00	324.00	
10	201.00	201.00	231.00	254.00	348.00	348.00	381.00	410.00	422.00	435.00	
12	235.00	235.00	270.00	297.00	408.00	409.00	448.00	482.00	496.00	511.00	
<b>Retail Commodity Charge</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
First 600 cubic feet	1.99	2.25	2.52	2.84	-	-	3.74	-	-	-	
Next 4,400 cubic feet	2.20	2.50	2.80	3.15	-	-	4.15	-	-	-	
First 5,000	-	-	-	-	3.25	3.45	-	4.45	4.90	5.00	
Over 5,000 cubic feet	1.81	2.10	2.25	2.45	2.76	3.07	3.25	3.50	3.90	3.98	
<b>Wholesale Customers</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
Unrestricted	1.33	1.45	1.59	1.67	1.74	1.95	2.00	2.10	2.17	2.26	
Restricted	1.29	1.40	1.54	1.62	1.69	1.89	1.94	2.04	2.10	2.18	
<b>Repumping Charge</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>	<b>per 100 CCF</b>
1st repumping charge	0.11	0.12	0.13	0.15	0.16	0.18	0.18	0.19	0.19	0.20	
2nd repumping charge	0.23	0.23	0.23	0.23	0.23	0.25	0.25	0.26	0.26	0.27	

Source: Annual Schedule of: Water & Sanitary Sewer Service Rates, Stormwater Fees, Meter Readings, Billing Practices and Bill Payment Guarantees

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Sewer and Stormwater Service Rates**  
**Last Ten Fiscal Years**

	Sewer and Stormwater Rates									
	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017
<b>Residential Rates</b>										
<b>Service Charges</b>										
Sanitary sewer - monthly	\$ 7.89	\$ 8.60	\$ 8.60	\$ 9.90	\$ 9.90	\$ 11.55	\$ 12.20	\$ 15.10	\$ 17.05	\$ 18.05
Volume charge - per 100 CCF	1.80	2.05	2.28	2.62	3.16	3.82	4.54	5.25	6.05	7.18
Residential accounts	12.41	15.38	17.13	19.70	23.70	28.65	34.05	37.00	39.75	41.00
<b>Commercial and Industrial discharges</b>										
Biochemical oxygen demand (per pound of excess BOD)	0.06	0.23	0.23	0.26	0.30	0.30	0.30	0.32	0.32	0.32
Suspended solids (per pound of excess SS)	0.13	0.14	0.14	0.16	0.18	0.18	0.18	0.19	0.19	0.19
Oil and grease (per pound of excess O&G)	0.07	0.09	0.10	0.11	0.13	0.13	0.13	0.14	0.14	0.14
<b>Nonresidential Users</b>										
Metered connections - per 100 CCF	1.27	1.39	1.55	1.78	2.01	2.01	2.50	2.80	2.92	3.00
Metered connections directly to treatment plant - per 100 CCF	-	-	-	-	-	2.13	2.13	-	-	-
Service charges - monthly	7.89	8.50	8.60	9.90	9.90	9.90	9.90	11.15	12.40	12.50
Unmetered connections per 100 CCF	1.80	1.98	2.14	2.46	2.79	2.79	3.21	3.55	3.70	3.85
Unmetered connections - no consumption data	18.45	20.25	21.90	25.20	28.55	30.26	34.50	37.00	39.75	41.00
Customers billed directly by KC Water										
Service charges - monthly	8.89	9.69	10.50	12.30	13.50	17.84	17.84	20.50	24.10	25.55
Volume charges	1.97	2.25	2.51	2.94	3.38	5.56	6.35	7.10	8.00	9.35
<b>High concentration discharges</b>										
Biochemical oxygen demand (per pound of excess BOD)	0.206	0.225	0.255	0.293	0.335	0.341	0.382	0.400	0.400	0.400
Suspended solids (per pound of excess SS)	0.126	0.137	0.456	0.790	0.205	0.205	0.205	0.215	0.215	0.215
Oil and grease (per pound of excess O&G)	0.070	0.085	0.101	0.116	0.133	0.133	0.133	0.141	0.141	0.141
<b>Stormwater Rates</b>										
	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.	500 sq ft.
Stormwater fee amount	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50	0.50

Source: Annual Schedule of: Water & Sanitary Sewer Service Rates, Stormwater Fees, Meter Readings, Billing Practices and Bill Payment Guarantees

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Revenue Base and Revenues by Customer Class**  
**Last Ten Fiscal Years**

	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017
<b>Water Revenues</b>										
Water sales	\$ 65,125,835	\$ 67,164,669	\$ 68,196,914	\$ 91,072,250	\$ 97,503,707	\$ 118,403,327	\$ 118,795,707	\$ 124,494,777	\$ 128,315,706	\$ 135,664,964
Wholesale water sales	13,125,308	12,204,660	11,205,950	13,737,000	16,292,080	20,640,916	17,849,325	17,311,125	17,072,013	17,837,424
Other water revenues	3,986,649	4,360,006	5,729,988	7,355,893	7,026,768	6,470,794	4,459,597	5,133,697	6,183,139	4,995,566
Income from jobbing and contract work and miscellaneous revenues	-	-	-	-	-	-	-	-	-	-
Total operating revenues	<u>\$ 84,039,856</u>	<u>\$ 86,130,867</u>	<u>\$ 88,184,084</u>	<u>\$ 115,208,625</u>	<u>\$ 125,248,196</u>	<u>\$ 149,643,075</u>	<u>\$ 144,237,320</u>	<u>\$ 150,303,209</u>	<u>\$ 155,209,406</u>	<u>\$ 165,357,747</u>
<b>Water Customers Served (Res. &amp; Comm.)</b>	153,004	153,004	158,826	159,000	163,608	167,608	167,912	168,938	170,094	171,094
<b>Average Revenue Per Customer (Res. &amp; Comm.)</b>	\$ 425.65	\$ 438.97	\$ 429.38	\$ 572.78	\$ 595.96	\$ 706.43	\$ 707.49	\$ 736.93	\$ 754.38	\$ 792.93
<b>Water Consumption (millions of gallons)</b>	40,115	36,400	31,359	34,367	38,780	40,945	38,920	31,616	31,336	30,043
<b>Sewer and Stormwater Revenues</b>										
Retail Sewer Charges	\$ 46,125,920	\$ 48,752,005	\$ 52,411,606	\$ 70,226,412	\$ 76,448,889	\$ 93,951,330	\$ 106,689,690	\$ 119,719,601	\$ 138,557,694	\$ 158,353,571
Intermunicipal sewer charges	18,722,855	21,098,061	21,707,817	23,123,947	23,925,569	24,508,149	28,047,478	32,700,685	37,242,952	33,687,701
Stormwater fees	11,210,134	9,957,532	11,647,996	10,380,081	11,306,712	12,648,966	12,866,145	12,980,291	13,014,456	12,741,452
Other operating revenues	3,870,231	5,074,154	6,149,271	5,636,666	4,650,554	3,873,393	3,647,080	4,093,029	4,792,703	5,114,883
Total operating revenues	<u>79,929,140</u>	<u>84,881,752</u>	<u>91,916,690</u>	<u>109,367,106</u>	<u>116,331,724</u>	<u>134,981,838</u>	<u>151,250,393</u>	<u>169,493,606</u>	<u>193,607,805</u>	<u>209,897,607</u>
Total utility operating revenues	<u>\$ 163,968,996</u>	<u>\$ 171,012,619</u>	<u>\$ 180,100,774</u>	<u>\$ 224,575,731</u>	<u>\$ 241,579,920</u>	<u>\$ 284,624,913</u>	<u>\$ 295,487,713</u>	<u>\$ 319,796,815</u>	<u>\$ 348,817,211</u>	<u>\$ 375,255,354</u>
<b>Sewer Customers Served (Res. &amp; Comm.)</b>	148,384	151,649	152,700	153,445	158,482	162,485	163,464	164,060	164,609	165,163
<b>Average Revenue Per Customer (Res. &amp; Comm.)</b>	\$ 310.86	\$ 321.48	\$ 343.23	\$ 457.67	\$ 482.38	\$ 578.22	\$ 652.68	\$ 729.73	\$ 841.74	\$ 958.77
<b>Average daily sewage treatment (million of gallons)</b>	101	115	117	117	103	91	72	93	111	96

Source: Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years.

The source for the revenue base and customers served is from the performance management division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Largest Users of the System - Water Fund**  
**Last Ten Fiscal Years**

User	Type of Business	FYE 2008		FYE 2009		FYE 2010		FYE 2011		FYE 2012	
		Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)
City of Lee's Summit	Wholesale Water	1	1,979,085	1	1,392,116	3	754,852	3	903,288	1	1,390,387
Jackson County PWSO No. 1	Wholesale Water	2	1,279,430	2	1,163,850	1	1,105,095	1	1,242,452	2	1,241,662
City of Belton	Wholesale Water	3	996,027	3	937,997	2	826,540	2	936,325	3	960,495
City of Raymore	Wholesale Water	4	680,215	4	676,215	4	600,968	4	685,295	5	593,028
City of Blue Springs	Wholesale Water	5	662,115	6	547,796	7	322,358	5	655,340	4	902,400
Raytown Water Company	Wholesale Water	6	619,636	5	600,375	5	552,155	6	575,210	7	465,216
KCP&L	Utility	7	553,567								
Ford Motor Co.	Commercial	8	444,268								
Public Water Dist No. 2 - Cass Co.	Wholesale Water	9	345,298		309,804	8	309,804			10	285,266
City of Platte City	Wholesale Water	10	325,505	9	361,084	9	297,185	10	298,040	9	330,140
Veolia - Kansas City	Utility							7	368,803	8	403,892
Bayer Crop Science	Commercial										
Dogwood Energy Facility	Utility			7	408,293	10	204,323	7	313,248		
Pollution Control Department	Utility									6	473,051
Jackson County PWSO No. 2	Wholesale Water							8	311,712		
Trigen - Kansas City	Utility			8	405,662	6	405,662				

User	Type of Business	FYE 2013		FYE 2014		FYE 2015		FYE 2016		FYE 2017	
		Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)	Rank	Consumption (100 cubic ft.)
City of Lee's Summit	Wholesale Water	1	1,992,454	1	1,337,990	1	1,158,421	1	1,085,887	1	1,299,392
Jackson County PWSO No. 1	Wholesale Water	2	1,107,227	2	1,165,515	2	1,086,747	2	993,062	2	1,091,671
City of Belton	Wholesale Water	3	1,028,837	3	892,774	3	756,111	3	896,335	6	551,936
City of Raymore	Wholesale Water	5	801,522	5	681,226	4	694,981	4	659,421	3	707,192
City of Blue Springs	Wholesale Water	4	902,400	4	775,864	6	539,390	10	230,650	7	528,055
Raytown Water Company	Wholesale Water	6	693,977	6	536,878	5	564,064	5	550,473	5	562,841
KCP&L	Utility	9	464,498	8	504,550	8	444,332	7	514,356		
Ford Motor Co.	Commercial			10	347,806	10	389,774	6	546,240	9	466,116
Public Water Dist No. 2 - Cass Co.	Wholesale Water									10	465,054
City of Platte City	Wholesale Water							9	428,825		
Veolia - Kansas City	Utility	8	514,161	7	525,638	7	478,288	8	504,291	4	706,133
Bayer Crop Science	Commercial			9	389,998						
Dogwood Energy Facility	Utility	7	608,731			9	400,258			8	518,856
Pollution Control Department	Utility										
Jackson County PWSO No. 2	Wholesale Water	10	354,444								
Trigen - Kansas City	Utility										

Source: Personnel Management Division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Largest Users of the System - Sewer Fund**  
**Last Ten Fiscal Years**

User	FYE 2008		FYE 2009		FYE 2010		FYE 2011		FYE 2012	
	Rank	% of Total Revenue	Rank	% of Total Revenue	Rank	% of Total Revenue	Rank	% of Total Revenue	Rank	% of Total Revenue
Johnson County, KS	1	14.80%	1	13.23%	1	14.00%	1	11.08%	1	10.40%
Liberty, MO	2	4.20%	2	3.81%	2	4.00%	2	3.45%	2	3.52%
Gladstone, MO	3	3.60%	3	3.23%	3	3.00%	3	2.78%	3	3.39%
North Kansas City, MO	4	2.10%	4	2.28%	4	2.00%	4	1.87%	4	2.27%
Ford Motor Company	5	1.40%	6	0.96%	6	1.00%	7	0.59%	6	1.23%
Raytown, MO	6	1.00%	5	0.99%	5	1.00%	5	0.94%	7	1.10%
Trigen - Kansas City	7	0.80%	7	0.93%	7	1.00%				
Riverside, MO	8	0.60%	9	0.60%	9	0.70%	8	0.58%	5	1.34%
Pleasant Valley, MO	9	0.50%	10	0.44%	10	0.50%	9	0.40%	9	0.46%
Independence, MO	10	0.40%	8	0.65%	8	0.70%	10	0.34%		
Honeywell									10	0.34%
Roberts Dairy										
Veolia - Kansas City							6	0.65%	8	1.02%
Cook Family Foods										

User	FYE 2013		FYE 2014		FYE 2015		FYE 2016		FYE 2017	
	Rank	% of Total Revenue	Rank	% of Total Revenue	Rank	% of Total Revenue	Rank	% of Total Revenue	Rank	% of Total Revenue
Johnson County, KS	1	8.62%	1	8.93%	1	10.01%	1	9.94%	1	8.61%
Liberty, MO	3	2.31%	2	2.55%	2	3.00%	2	3.15%	2	3.36%
Gladstone, MO	2	2.69%	3	2.70%	3	2.71%	4	2.30%	3	2.32%
North Kansas City, MO	4	1.92%	4	1.94%	5	1.93%	5	1.65%	4	1.37%
Ford Motor Company	6	0.94%	6	0.91%	6	1.24%	3	2.54%	5	1.20%
Raytown, MO	7	0.75%	7	0.75%	8	0.70%	9	0.63%	7	0.74%
Trigen - Kansas City										
Riverside, MO										
Pleasant Valley, MO	8	0.42%								
Independence, MO	9	0.37%	9	0.48%	9	0.57%	10	0.45%	9	0.43%
Honeywell			8	0.70%	7	0.85%	8	0.66%	10	0.39%
Roberts Dairy					10	0.56%				
Veolia - Kansas City	5	1.17%	5	1.33%	4	2.10%	6	1.17%	6	1.04%
Cook Family Foods	10	0.36%	10	0.46%			7	0.77%	8	0.67%

Source: Personnel Management Division records within KC Water.

# Debt Capacity

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Revenue Bond Coverage Ratios**  
**Last Ten Fiscal Years**  
*(In Thousands)*

A.

Fiscal Year	Gross Revenues (1)	Direct Operating Expenses (2)	Water Fund Available for Debt Service (3)	Debt Service requirements (3)			Coverage
				Principal	Interest	Total	
2008	\$ 87,201	\$ 61,358	\$ 25,843	\$ 11,986	\$ 7,920	\$ 19,906	1.30
2009	88,191	63,534	24,657	12,771	8,418	21,189	1.16

- (1) Generally, gross revenues include water sales, other water revenues, interest on investments, income from jobbing and contract work and miscellaneous revenues derived from the water system. Beginning in fiscal year 2003, the principal portion of contract payments received from other governmental units were included in gross revenues.
- (2) Generally, direct operating expenses include power and pumping, general and electrical maintenance, purification, laboratory services, transmission and distribution, customer service, mechanical maintenance, customer accounting and collection, and administrative and general expenditures. Excluded from operating expenses are depreciation and amortization expenditures.
- (3) The numbers reflect the total annual fiscal year's debt service requirements on all the outstanding water revenue parity bonds and lease purchases

B.

In March 2009, the City created a new master bond ordinance that updated key definitions, descriptions, covenants and provisions, including the calculation of new annual debt coverage ratios. The new ordinance requires a calculation based on (i) debt service on all senior bonds; (ii) debt service requirements on all water bonds and (iii) debt services requirements on all water bond issues and other system obligations.

B1.

Fiscal Year	Gross Revenues (1)	Direct Operating Expenses (2)	Water Fund Senior Bonds Only Available for Debt Service (3)	Debt Service Requirements (4)			Coverage
				Principal	Interest	Total	
2010	\$ 91,794	\$ 56,790	\$ 35,004	\$ 9,405	\$ 6,190	\$ 15,595	2.24
2011	117,399	59,398	58,001	12,045	8,415	20,460	2.83
2012	127,216	68,588	58,628	12,740	7,933	20,673	2.84
2013	151,305	74,979	76,326	13,265	8,828	22,093	3.45
2014 <sup>(7)</sup>	145,478	80,718	64,760	13,200	10,306	23,506	2.76
2015	152,727	75,953	76,774	13,810	11,347	25,157	3.05
2016	157,183	72,187	84,996	13,380	13,238	26,618	3.19
2017	165,725	69,973	95,752	14,850	13,688	28,538	3.36

B2.

Fiscal Year	Gross Revenues (1)	Direct Operating Expenses (2)	Water Fund All Water Revenue Bonds Available for Debt Service (3)	Debt Service Requirements (5)			Coverage
				Principal	Interest	Total	
2010	\$ 91,794	\$ 56,790	\$ 35,004	\$ 10,505	\$ 7,821	\$ 18,326	1.91
2011	117,399	59,398	58,001	13,290	9,995	23,285	2.49
2012	127,216	68,588	58,628	14,040	9,455	23,495	2.50
2013	151,305	74,979	76,326	14,625	10,289	24,914	3.06
2014 <sup>(7)</sup>	145,478	80,718	64,760	14,625	11,704	26,329	2.46
2015	152,727	75,953	76,774	15,300	12,678	27,978	2.74
2016	157,183	72,187	84,996	14,940	14,500	29,440	2.89
2017	165,725	69,973	95,752	16,485	14,877	31,362	3.05

(Continued)

B3.

Water Fund							
All Water Revenue Bonds and Other Water System Obligations							
Fiscal Year	Gross Revenues (1)	Direct Operating Expenses (2)	Available for Debt Service (3)	Debt Service Requirements (6)			
				Principal	Interest	Total	Coverage
2010	\$ 91,794	\$ 56,790	\$ 35,004	\$ 12,059	\$ 8,532	\$ 20,591	1.70
2011	117,399	59,398	58,001	16,539	11,257	27,796	2.09
2012	127,216	68,588	58,628	17,385	10,590	27,975	2.10
2013	151,305	74,979	76,326	18,100	11,294	29,394	2.60
2014 <sup>(7)</sup>	145,478	80,718	64,760	18,236	12,573	30,809	2.10
2015	152,727	75,953	76,774	19,053	13,406	32,459	2.37
2016 <sup>(8)</sup>	157,183	72,187	84,996	16,872	14,808	31,680	2.68
2017	165,725	69,973	95,752	16,485	14,877	31,362	3.05

- (1) Operating revenues includes all income and revenues derived and accrued by the City from the operation of the water system, including capital repayments and interest on investments.
- (2) Operating expenses means all reasonable and necessary expenses of operating and maintaining the water system but, excluding administrative services fees, capital lease payments, depreciation and amortization charges, interest paid on water revenue bonds, any non-cash OPEB obligations and any other items listed in Section 4.3 (a)(2)-(11) of the master bond ordinance.
- (3) Net operating revenues are adjusted to exclude revenues or expenses resulting from gain or loss, or mark-to-market change to any hedge agreements.
- (4) Debt service includes senior bonds only.
- (5) Debt service includes all water revenue bonds.
- (6) Debt service includes all water revenue bonds and other water system obligations.
- (7) Restated.
- (8) Debt Service on all Water Obligations includes AMR obligations. On October 25, 2015, \$14,612,688 in remaining principal on AMR obligations were paid off. Debt Service-All Water Obligations does not reflect this final un-scheduled payment. This year has been restated to reflect only the scheduled AMR obligation payments for 2016.

C.

Sewer Fund (1)									
Fiscal Year	Gross Revenues (2)	Direct Operating Expenses (3)	Available for Debt Service	Debt Service requirements (4)				Gross Coverage	Net Coverage (5)
				Principal	Interest	Total	SRF subsidy		
2008	\$ 71,241	\$ 46,565	\$ 24,676	\$ 9,480	\$ 8,412	\$ 17,892	\$ 3,381	1.38	1.70
2009	76,022	52,232	23,790	10,805	8,471	19,276	3,242	1.23	1.48
2010	82,492	54,221	28,271	11,155	10,257	21,412	2,612	1.32	1.50
2011	100,486	50,803	49,683	13,679	10,609	24,288	2,612	2.05	2.29
2012	107,541	54,253	53,288	14,635	10,413	25,048	2,352	2.13	2.35
2013	123,522	60,414	63,108	16,045	13,166	29,211	2,245	2.16	2.34
2014 <sup>(6)</sup>	139,231	62,525	76,706	18,425	14,954	33,379	1,947	2.30	2.44
2015	158,252	71,588	86,664	18,726	14,194	32,920	1,585	2.63	2.77
2016	181,742	82,623	99,119	17,886	13,351	31,237	1,240	3.17	3.30
2017	197,861	79,248	118,613	21,090	17,040	38,130	963	3.11	3.19

- (1) The gross revenues and direct operating expenses only reflect that of the sewer fund and do not include the stormwater fund.
- (2) Generally, the gross revenues include retail sewer charges, intermunicipal sewer charges, other operating revenues and interest income on investments derived from the sewer system.
- (3) Generally, direct operating expenses include sewage treatment and pumping, sewer maintenance, administrative and general, and industrial waste control. Excluded from direct operating expenses are depreciation and amortization.
- (4) The numbers reflect the total annual fiscal year's debt service requirements on all the outstanding senior and junior sewer revenue bonds.
- (5) The Sewer Parity Bond ordinance allows the interest earnings subsidy received under the Revolving Fund Agreement to reduce debt service requirements for the purpose of calculating annual debt service coverage.
- (6) Restated.

(Continued)

D.

**Storm Water Fund**

<b>Fiscal Year</b>	<b>Gross Revenues (1)</b>	<b>Direct Operating Expenses (2)</b>	<b>Available for Debt Service</b>	<b>Debt Service Requirements (3)</b>			
				<b>Principal</b>	<b>Interest</b>	<b>Total</b>	<b>Coverage</b>
2010	\$ 12,548	\$ 9,097	\$ 3,451	\$ 366	\$ 85	\$ 451	7.65
2011	11,288	8,524	2,764	371	79	450	6.14
2012	11,707	9,581	2,126	378	73	451	4.71
2013	13,263	9,955	3,308	463	66	529	6.25
2014	13,093	10,750	2,343	383	60	443	5.29
2015	13,854	11,703	2,151	390	53	443	4.86
2016	13,918	11,812	2,106	397	47	444	4.74
2017	13,571	10,867	2,704	403	41	444	6.09

- (1) Generally, the gross revenues include storm water fees and other operating revenues.  
 (2) Generally, direct operating expenses include sewage treatment and pumping, sewer maintenance and administrative and general expenses.  
 (3) Excluded from direct expenses are depreciation and amortization.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Historical Revenue Bonds and Capital Leases - Water Fund**  
**Last Ten Fiscal Years**

Issue	Maturity Through	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017
1996 Series A	December 2009	\$ 8,135,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
1996 Series B	December 2016	16,080,000	-	-	-	-	-	-	-	-	-
1998 Series A	December 2014	25,005,000	-	-	-	-	-	-	-	-	-
1998 Series B	December 2018	9,580,000	-	-	-	-	-	-	-	-	-
2000 Series A	December 2020	18,515,000	-	-	-	-	-	-	-	-	-
2002 Series C	December 2022	14,045,000	-	-	-	-	-	-	-	-	-
2004 Series D	December 2023	24,750,000	-	-	-	-	-	-	-	-	-
2005 Series F	December 2025	30,000,000	-	-	-	-	-	-	-	-	-
2008 Series A	December 2027	35,000,000	35,000,000	33,900,000	32,655,000	31,355,000	29,995,000	28,570,000	27,080,000	25,520,000	23,885,000
2009 Series A	December 2032	-	198,915,000	189,510,000	177,465,000	164,725,000	153,125,000	141,205,000	128,715,000	118,525,000	107,905,000
2012 Series A	December 2036	-	-	-	-	47,725,000	46,060,000	44,780,000	43,460,000	42,100,000	40,700,000
2013 Series A	December 2037	-	-	-	-	-	54,000,000	54,000,000	54,000,000	53,350,000	52,655,000
2014 Series A	December 2038	-	-	-	-	-	-	-	54,365,000	53,185,000	51,975,000
2015 Series A	December 2039	-	-	-	-	-	-	-	59,790,000	59,790,000	58,865,000
2017 Series A	December 2041	-	-	-	-	-	-	-	-	-	78,130,000
AMR Capital Lease - 2008	December 2017	10,808,000	10,684,261	9,817,761	8,652,080	7,477,139	6,261,137	5,002,639	3,700,159	-	-
AMR Capital Lease - 2009	December 2019	-	-	24,158,808	22,075,391	19,905,795	17,646,456	15,293,661	12,843,545	-	-
		191,918,000	244,599,261	257,386,569	240,847,471	271,187,934	307,087,593	288,851,300	383,953,704	352,470,000	414,115,000
Add premium:		888,934	9,321,756	8,926,486	8,531,217	12,841,428	17,013,854	16,232,815	23,716,521	22,596,586	28,765,488
Less:											
Current portion		(12,728,329)	(11,290,104)	(16,539,098)	(17,384,537)	(18,100,341)	(18,236,293)	(19,052,596)	(18,839,461)	(16,485,000)	(19,610,000)
Discount		(45,132)	-	-	-	-	(143,702)	(137,725)	(380,431)	(364,233)	(508,869)
Noncurrent revenue bonds and capital leases payable		\$ 180,033,473	\$ 242,630,913	\$ 249,773,957	\$ 231,994,151	\$ 265,929,021	\$ 305,721,452	\$ 285,893,794	\$ 388,450,333	\$ 358,217,353	\$ 422,761,619

Source: Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Historical Revenue Bonds and Notes Payable - Sewer Fund**  
**Last Ten Fiscal Years**

Issue	Maturity Through	FYE 2008	FYE 2009	FYE 2010	FYE 2011	FYE 2012	FYE 2013	FYE 2014	FYE 2015	FYE 2016	FYE 2017
State Series 1992B	July 2013	\$ 555,000	\$ 475,000	\$ 390,000	\$ 300,000	\$ 205,000	\$ 105,000	\$ -	\$ -	\$ -	\$ -
State Series 1995B	January 2015	9,570,000	8,290,000	6,985,000	5,650,000	4,285,000	2,890,000	1,460,000	-	-	-
State Series 1996A	January 2016	12,845,000	11,550,000	10,165,000	8,700,000	7,150,000	5,510,000	3,775,000	1,940,000	-	-
State Series 1997A	January 2017	11,210,000	10,070,000	8,905,000	7,720,000	6,505,000	5,265,000	3,995,000	2,695,000	1,365,000	-
State Series 1998A	January 2019	6,070,000	5,640,000	5,190,000	4,720,000	4,230,000	3,710,000	3,165,000	2,590,000	1,990,000	1,360,000
State Series 1999A	January 2020	4,140,000	3,880,000	3,605,000	3,320,000	3,020,000	2,705,000	2,375,000	2,025,000	1,660,000	1,275,000
State Series 2000A	July 2020	9,000,000	8,390,000	7,770,000	7,140,000	6,495,000	5,835,000	5,165,000	4,480,000	3,775,000	3,055,000
State Series 2000B	July 2020	8,110,000	7,560,000	7,000,000	6,435,000	5,855,000	5,265,000	4,660,000	4,040,000	3,405,000	2,755,000
Stormwater 2000	December 2020	875,900	815,100	753,200	690,300	626,300	561,200	495,000	427,700	359,200	289,600
Series 2001A	March 2012	2,655,000	2,030,000	1,380,000	705,000	-	-	-	-	-	-
Stormwater 2001 & 2002	December 2021	4,284,000	4,008,000	3,727,000	3,442,000	3,152,000	2,858,000	2,559,000	2,255,000	1,946,000	1,632,000
State Series 2001B	July 2022	13,405,000	12,655,000	11,890,000	11,105,000	10,305,000	9,485,000	8,645,000	7,780,000	6,895,000	5,985,000
Series 2002D-1	January 2022	8,550,000	8,325,000	8,075,000	7,825,000	-	-	-	-	-	-
Series 2002D-2	January 2012	1,095,000	830,000	565,000	275,000	-	-	-	-	-	-
State Series 2002J	July 2022	7,970,000	7,520,000	7,065,000	6,600,000	6,125,000	5,640,000	5,145,000	4,635,000	4,110,000	3,570,000
Series 2004A	January 2024	16,805,000	16,005,000	15,180,000	14,330,000	13,450,000	940,000	-	-	-	-
Series 2004H	January 2025	9,145,000	8,685,000	8,225,000	7,760,000	7,280,000	6,795,000	6,305,000	5,810,000	5,300,000	4,775,000
Series 2005B	January 2025	13,905,000	13,320,000	12,715,000	12,085,000	11,430,000	10,750,000	10,040,000	9,300,000	-	-
Stormwater 2007	June 2027	517,300	492,400	469,400	446,400	422,400	319,000	301,000	282,000	263,000	243,000
Series 2007A	January 2032	40,000,000	39,000,000	37,965,000	36,880,000	35,750,000	34,575,000	33,355,000	32,085,000	-	-
Series 2009A	January 2034	-	69,480,000	69,480,000	67,250,000	65,765,000	63,820,000	61,820,000	59,755,000	57,615,000	55,400,000
Series 2009B	July 2030	-	-	1,191,875	5,912,256	9,576,202	9,036,996	12,002,958	11,371,600	10,726,000	10,065,900
Series 2011A	January 2037	-	-	-	-	89,030,000	86,625,000	84,140,000	81,555,000	78,865,000	76,060,000
Series 2012A	January 2037	-	-	-	-	-	78,650,000	76,795,000	74,055,000	71,230,000	68,295,000
Series 2016A	January 2040	-	-	-	-	-	-	-	-	183,740,000	176,990,000
		180,707,200	239,020,500	228,691,475	219,290,956	290,656,902	341,340,196	326,197,958	307,081,300	433,244,200	411,750,500
Add premium:		2,829,120	3,320,637	3,115,315	2,909,994	11,567,068	19,342,019	18,690,589	17,567,955	34,437,602	32,819,893
Less:											
Current portion		(11,166,700)	(11,520,900)	(13,745,331)	(14,489,290)	(16,255,673)	(18,621,354)	(19,116,658)	(18,282,100)	(21,493,700)	(19,961,818)
Discount		(20,418)	(407,156)	(385,318)	(363,478)	(412,475)	(634,829)	(607,837)	(566,990)	(804,562)	(764,785)
Noncurrent revenue bonds and capital leases payable		<u>\$ 172,349,202</u>	<u>\$ 230,413,081</u>	<u>\$ 217,676,141</u>	<u>\$ 207,348,182</u>	<u>\$ 285,555,822</u>	<u>\$ 341,426,032</u>	<u>\$ 325,164,052</u>	<u>\$ 305,800,165</u>	<u>\$ 445,383,540</u>	<u>\$ 423,843,790</u>

Source: Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years..

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Ratios of Outstanding Debt**  
**Last Ten Fiscal Years**

<b>Year</b>	<b>Water Fund Debt<sup>2</sup></b>	<b>Sewer Fund Debt<sup>2</sup></b>	<b>Total Debt</b>	<b>Percentage of Personal Income</b>	<b>Per Capita</b>
2008	\$ 180,033,473	\$ 172,349,202	\$ 352,382,675	2.83%	\$ 772.53
2009	242,630,913	230,413,081	473,043,994	4.10%	1,032.93
2010	249,773,957	217,676,141	467,450,098	4.11%	1,016.67
2011	231,994,151	207,348,182	439,342,333	3.64%	950.77
2012	265,929,021	285,555,822	551,484,843	4.55%	1,187.24
2013	305,721,452	341,426,032	647,147,484	5.29%	1,385.01
2014	285,893,794	325,164,052	611,057,846	4.81%	1,297.69
2015	388,450,333	305,800,165	694,250,498	5.33%	1,462.00
2016	358,217,353	445,383,540	803,600,893	6.03%	1,669.23
2017	422,761,619	423,843,790	846,605,409	6.34%	1,755.39

<sup>1</sup> Population and personal income data can be found in the Demographic Schedule.

<sup>2</sup> Information comes from the Comprehensive Annual Financial Report for 2017 and historical audited financials for remaining years.

# **Demographic and Economic Information**

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Demographic and Economic Statistics**  
**Last Ten Calendar Years**

<b>Year</b>	<b>City of Kansas City, MO Population<sup>1</sup></b>	<b>Personal Income<sup>5</sup> (in Thousands)</b>	<b>Per Capita Personal Income<sup>6</sup></b>	<b>School Enrollment<sup>8</sup></b>	<b>Unemployment Rate<sup>9</sup></b>	
2008	456,139	12,451,682	27,298	57,544	7.7	
2009	457,963	11,535,630	25,189	55,927	9.8	
2010	459,787 <sup>2</sup>	11,382,487	24,756	56,391	10.0	
2011	462,091 <sup>3</sup>	12,056,416	26,091	56,764	8.9	
2012	464,511 <sup>3</sup>	12,107,944	26,066	57,549	7.3	
2013	467,251 <sup>3</sup>	12,242,911	26,202	57,042	7.3	
2014	470,882 <sup>3</sup>	12,712,872	26,998 <sup>11</sup>	55,360	6.7	
2015	474,862 <sup>3</sup>	13,025,940 <sup>12</sup>	27,431	55,077	5.7	13
2016	481,420 <sup>3</sup>	13,327,631 <sup>12</sup>	27,684 <sup>7</sup>	55,039	4.9	
2017	482,288 <sup>4</sup>	13,351,661	27,684 <sup>7</sup>	56,711	4.6	10

- Sources:
- <sup>1</sup> The Calendar Year 2008-2009 population estimates were provided by the City Planning and Development Department using interpolation between censuses.
  - <sup>2</sup> The 2010 Calendar Year population numbers are from the 2010 Census.
  - <sup>3</sup> Census Bureau's 2011 to 2016 Population Estimates Program. The 2015 and 2016 numbers have been restated.
  - <sup>4</sup> The Calendar Year 2017 estimates were provided by the City Planning and Development Department using extrapolation of the change from 2010 to 2016.
  - <sup>5</sup> Derived from population and per capita income.
  - <sup>6</sup> Fiscal Year 2007-2015 American Community Survey.
  - <sup>7</sup> For 2016 and 2017 the estimates are based upon averaging two figures: (1) the 2015 American Community Survey adjusted for CPI change from 2015 to 2016 and (2) City Planning and Development Department using extrapolation of the change from 2014 to 2015.
  - <sup>8</sup> Survey of school districts within Kansas City, MO as of April 30, 2017.
  - <sup>9</sup> Kansas City, MO (city not MSA) Bureau of Labor Statistics Rpt: LAUCT293800000000003, not seasonally adjusted.
  - <sup>10</sup> Kansas City, MO (city not MSA) Bureau of Labor Statistics Rpt: LAUCT293800000000003, not seasonally adjusted average monthly rates from January 2017 through July 2017.
  - <sup>11</sup> Revised number from City Planning and Development Department from actual American Community Survey number for 2014.
  - <sup>12</sup> The 2015 and 2016 numbers have been restated due to a restatement of the population estimates.
  - <sup>13</sup> The 2015 number has been restated.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Principal Employers**  
**Current Year and Ten Years Ago**

2017			2008		
Employer <sup>1</sup>	Employees	Percentage of Total Employment	Employer	Employees	Percentage of Total Employment
Public School System <sup>5</sup>	31,358	2.87%	Federal Government	38,906	3.94%
State/County/City Government <sup>2</sup>	17,780	1.63%	Public School System	31,857	3.23%
Federal Government	15,939	1.46%	State/County/City Government	25,606	2.59%
Cerner Corp.	12,890	1.18%	Sprint Nextel Corp.	13,200	1.34%
HCA Midwest Health System	9,924	0.91%	HCA Midwest Health Systems	7,000	0.71%
The University of Kansas Hospital	9,469	0.87%	McDonald's USA LLC	6,400	0.65%
Saint Luke's Health System	8,123	0.74%	Saint Luke's Health System	5,454	0.55%
Ford Motor Co. Kansas City Assembly Plant	7,220	0.66%	Cerner Corp.	4,700	0.48%
Children's Mercy	6,969	0.64%	DST Systems Inc.	4,500	0.46%
Sprint Corp.	6,000	0.55%	UPS	4,500	0.46%
Total employment Kansas City MSA <sup>4</sup>	1,091,000	11.52%	Total employment Kansas City MSA <sup>4</sup>	987,168	14.40%

Sources: <sup>1</sup> Top Public-Sector Employers, Kansas City Business Journal, July 28, 2017 and Top 100 Area Private Sector Employers, Kansas City Business Journal, July 25, 2017.

<sup>2</sup> The number of local employees for the State/County/City Government is made up of seven (6) employers for 2017.

<sup>3</sup> The number of local employees for the public school systems is made up of twelve (12) public school systems and school districts for 2017 and sixteen (16) for 2008.

<sup>4</sup> Bureau of Labor Statistics, <http://data.bls.gov>, Rpt: SMS2928140000000001, as of April 2017 and April 2008.

**\*\*The information presented in this table speaks only as of the date indicated in the source.**

Layoffs or developments after this date are not presented, and they can render some information in the table to be inaccurate.  
In general, job losses have occurred across most major industry sectors.

# Operating Information

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**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Operating Indicators**  
**Last Ten Fiscal Years**

<b>Function</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>
<b>Water</b>										
Water main breaks	937	821	911	1,214	1,700	1,894	1,400	857	837	750
Water Customers Served	153,000	156,881	159,000	160,000	167,051	168,603	168,000	168,000	171,500	172,000
Water Consumption (millions of gallons)	40,115	36,400	31,359	34,367	38,780	40,945	38,920	31,616	31,336	30,043
Average daily production (thousand of gallons)	109,600	99,630	95,420	103	102,180	112,000	113,000	96,270	95,200	113,000
Peak daily production (thousands of gallons)	179,690	149,140	143,000	176	176,890	197,000	240,000	146,600	141,000	159,000
Water mains (miles)	2,769	2,772	2,772	2,780	2,781	2,797	2,800	2,800	2,806	2,824
Fire Hydrants	22,619	22,732	22,732	23,103	23,181	23,662	23,000	23,801	24,252	24,348
Storage capacity (thousands of gallons)	128,230	128,230	128,230	133,400	141,000	120,000	141,000	141,000	155,000	155,000
<b>Sewer</b>										
Average daily sewage treatment (million of gallons)	101	115	117	117	103	91	72	93	111	96
Sanitary sewer (miles)	2,506	2,515	2,258	2,826	2,535	2,543	2,800	2,800	2,800	2,974
Treatment capacity (millions of gallons)	154	154	153	154	155	155	155	155	155	150
Sewer customers served	148,522	151,670	152,721	153,478	158,510	162,513	163,492	164,088	164,637	165,191

Source: Personnel Management Division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Full-Time Equivalent Employees by Division - Water Fund**  
**Last Ten Fiscal Years**

<b>Division</b>	<b>FYE 2008</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>
Directors Office	9	10	10	9	7	11	9	7	7	9
Finance & Administration	20	17	16	18	21	21	29	29	29	30
Revenue Protection	-	-	4	5	6	6	6	7	7	7
Budget and Finance	-	-	1	1	1	1	-	-	-	-
Human Resources	6	6	5	5	5	7	7	10	11	12
Communications	4	3	3	3	6	4	4	5	5	6
Consumer Services	64	55	57	60	71	76	69	72	72	75
Information Technology	12	-	-	-	-	12	12	13	13	13
Laboratory Services	29	27	28	28	28	28	28	28	29	30
Engineering - Facilities	12	6	6	7	7	7	7	8	8	9
Engineering - General Services	5	4	2	-	-	-	-	1	1	1
Safety Management	4	3	3	3	3	3	3	3	3	4
Engineering - Distribution System	29	26	26	31	32	33	33	32	32	34
Engineering - Planning	12	10	11	12	10	10	10	10	10	10
Building Operations	-	-	4	5	5	5	5	5	5	5
Line Maintenance - General Services	6	5	5	5	7	7	7	7	7	7
Line Maintenance - Pipeline	117	97	93	93	96	108	107	109	122	131
Line Maintenance - Inspections	-	-	-	1	-	-	-	-	-	-
Water Supply - General Services	6	5	5	9	8	12	12	12	12	13
Water Supply - Operations	40	39	39	39	39	39	39	39	39	39
Water Supply - Maintenance	62	54	54	55	55	55	55	55	56	56
Industrial Waste Control	1	1	-	-	-	-	-	-	-	1
Reading & Services - Water Services	78	76	78	74	74	84	85	87	75	72
Reading & Services - Meter Reading	41	23	22	12	9	9	9	9	7	7
Stormwater Services	-	1	1	-	-	-	-	-	-	-
Waterways	-	-	-	-	-	-	-	-	-	1
Training & Development	4	1	-	-	-	-	-	-	-	-
Storeroom	11	10	11	6	6	6	6	6	6	6
Security Operations	5	4	7	11	5	5	5	4	4	3
Brush Creek Improvements	11	9	8	8	8	8	8	1	1	-
	<u>588</u>	<u>492</u>	<u>499</u>	<u>500</u>	<u>509</u>	<u>557</u>	<u>555</u>	<u>559</u>	<u>561</u>	<u>581</u>

Source: Personnel Management Division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Full-Time Equivalent Employees by Division - Sewer Fund**  
**Last Ten Fiscal Years**

<b>Division</b>	<b>FYE 2008</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>
Directors Office	8	7	6	6	6	6	7	6	6	6
Contract Administration	5	4	4	5	5	5	5	5	5	7
Laboratory Services	-	-	7	7	7	6	6	6	5	5
Engineering - Facilities	4	1	1	3	3	3	3	3	3	5
Sanitary Sewer Spcl Assmt	8	6	6	5	-	-	-	-	-	-
Engineering - General Services	-	-	-	2	2	2	1	1	1	1
Overflow Control Program	2	3	3	6	6	6	6	7	7	9
Safety Management	2	2	2	2	2	2	2	2	2	2
Engineering - Distribution System	17	12	12	15	18	19	19	19	19	25
Engineering - Planning	10	6	6	7	9	9	9	10	10	10
Building Operations	-	-	5	5	4	4	5	5	5	6
Line Maintenance - Sewer Repair	118	110	109	110	120	123	125	126	127	124
Line Maintenance - General Services	12	11	9	8	7	11	11	10	10	10
Line Maintenance - Inspections	26	20	21	27	29	29	29	29	29	29
Wastewater Treatment-Maintenance	70	67	65	65	69	69	70	69	70	72
Wastewater Treatment-Operations	44	42	43	48	49	52	52	52	52	54
Industrial Waste Control	18	12	6	8	8	8	8	13	12	14
Training & Development	1	1	-	-	-	-	-	-	-	-
Storeroom	6	6	5	4	4	4	4	4	3	3
Security Operations	-	-	14	7	-	-	-	-	-	-
Household Hazardous Waste	9	7	7	8	1	2	2	1	1	-
	<u>360</u>	<u>317</u>	<u>331</u>	<u>348</u>	<u>349</u>	<u>360</u>	<u>364</u>	<u>368</u>	<u>367</u>	<u>382</u>

Source: Personnel Management Division records within KC Water.

**KC Water**  
**A Department of the City of Kansas City, Missouri**  
**Schedule of Full-Time Equivalent Employees by Division - Stormwater Fund**  
**For the Last Ten Fiscal Years**

<b>Division</b>	<b>FYE 2008</b>	<b>FYE 2009</b>	<b>FYE 2010</b>	<b>FYE 2011</b>	<b>FYE 2012</b>	<b>FYE 2013</b>	<b>FYE 2014</b>	<b>FYE 2015</b>	<b>FYE 2016</b>	<b>FYE 2017</b>
Directors Office	-	1	1	1	1	1	1	-	-	-
Engineering - Planning	2	2	1	1	5	5	5	5	5	5
Catch Basin Cleaning & Repair	71	66	66	68	76	80	82	85	85	85
Stormwater Services	20	15	12	13	15	18	14	14	14	15
Stormwater Flood Monitoring	-	-	-	-	-	-	1	2	2	2
Engineering Stormwater Design	5	4	4	4	2	-	-	-	-	-
Waterways	-	-	-	-	-	-	-	5	5	5
Discharge Permit Programs	-	-	-	-	-	-	3	3	3	3
Household Hazardous Waste	-	-	-	-	-	-	-	1	1	1
	<u>98</u>	<u>88</u>	<u>84</u>	<u>87</u>	<u>99</u>	<u>104</u>	<u>106</u>	<u>115</u>	<u>115</u>	<u>116</u>

Source: Personnel Management Division records within KC Water.