

**REPORT OF THE AUDIT OF THE  
KENTUCKY RIVER AUTHORITY**

**For The Fiscal Year Ended  
June 30, 2020**



**MIKE HARMON  
AUDITOR OF PUBLIC ACCOUNTS  
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MIKE HARMON  
AUDITOR OF PUBLIC ACCOUNTS

David Hamilton, Executive Director  
Kentucky River Authority  
Board of Directors

Independent Auditor's Report

***Report on the Financial Statements***

We have audited the accompanying financial statements of the Kentucky River Authority (Authority), a discretely presented component unit of the Commonwealth of Kentucky, as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise the Authority's financial statements as listed in the table of contents.

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

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

***Auditor's Responsibility***

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

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatements 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.



David Hamilton, Executive Director  
Kentucky River Authority  
Board of Directors  
(Continued)

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

***Opinion***

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

***Emphasis-of-Matter***

***Reporting Entity***

As discussed in Note 1, the financial statements present only the Authority, and are not intended to present fairly the financial position of the Commonwealth of Kentucky, or the results of its operations and cash flows of its proprietary fund types in conformity with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

***Other Matter***

***Required Supplementary Information***

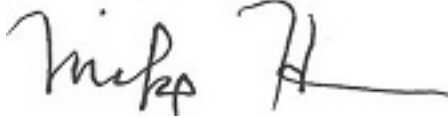
Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis on pages 7 through 13, the Schedule of Proportionate Share of the Net Pension Liability, the Schedule of Proportionate Share of the Net OPEB Liability and the related Schedule of Contributions for both Pensions and OPEB on pages 45 through 48 be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of the financial reporting for placing the financial statements in an appropriate operational, economical, 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 inquires of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquires, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures did not provide us with sufficient evidence to express an opinion or provide any assurance.

David Hamilton, Executive Director  
Kentucky River Authority  
Board of Directors  
(Continued)

***Other Reporting Required by Government Auditing Standards***

In accordance with *Government Auditing Standards*, we have also issued our report dated, October 22, 2020, on our consideration of the Authority's internal control over financial reporting and on our test of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Authority's internal control over financial reporting and compliance.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mike Harmon", with a long horizontal line extending to the right.

Mike Harmon  
Auditor of Public Accounts

October 22, 2020





## **MANAGEMENT'S DISCUSSION AND ANALYSIS**



**KENTUCKY RIVER AUTHORITY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2020**

The following narrative and analysis is provided as an overview of the financial activities of the Kentucky River Authority (Authority), a discretely presented component unit of the Commonwealth of Kentucky, for the fiscal years ended June 30, 2020 and June 30, 2019, and to assist the reader in an assessment of the financial condition of the Authority in comparison with the prior year. Please assess this narrative and analysis in conjunction with the Authority's financial statements and the accompanying notes.

**FINANCIAL HIGHLIGHTS**

- The assets of the Authority exceeded its liabilities at the close of the most recent fiscal year and, accordingly, the Authority reported an ending net position totaling \$44,109,465, of which \$22,106,186 is classified as restricted.
- Current year operating expenses totaled \$3,335,014, a decrease of \$90,390 from FY 2019.
- Current year fee income totaled \$6,775,071, an increase of \$367,204 from FY 2019.
- Current year state appropriations totaled \$283,500, an increase of \$800 from FY 2019.
- At June 30, 2020, balances remaining on commitments total approximately \$12,360,460 (see Note 9).

**OVERVIEW OF THE FINANCIAL STATEMENTS**

The Statement of Net Position presents information on all of the Authority's assets and liabilities, with the difference between the two reported as total net position. Over time, increases and decreases in net position may serve as a useful indicator of whether the financial position of the Authority is improving or deteriorating. The Authority's total liabilities equaled \$50,913,350 and include the net pension liability and net OPEB liability. The net pension liability represents the Authority's proportionate share of the Kentucky Employees Retirement System Non-Hazardous Plan's collective pension liability. The net pension liability and net OPEB liability represents the actuarial present value of projected payments for employee services rendered through June 30, 2020. This is a long term liability which will be paid over the life of the retiree.

The Statement of Revenues, Expenses, and Changes in Net Position presents information showing how the Authority's net position changed during the fiscal 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. Thus, revenues and expenses are reported in the statement for some items that will only result in cash flows in future fiscal periods.

The Statement of Cash Flows presents the receipts and usage of cash and cash equivalents. Only transactions that affect the Authority's cash account typically are reported in the Statement of Cash Flows.

The notes to the financial statements provide additional information that is essential to a full understanding of the data provided in the financial statements.

**KENTUCKY RIVER AUTHORITY**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2020**  
**(Continued)**

**FINANCIAL ANALYSIS OF THE AUTHORITY**

As noted earlier, net position may serve over time as a useful indicator of a government's financial position. In the case of the Authority, assets exceeded liabilities by \$44,109,465 at the close of the most recent fiscal year. The table below presents the Authority's condensed Statement of Net Position as of June 30, 2020 and June 30, 2019, derived from the Statement of Net Position.

**Condensed Financial Information (in thousands)**  
**Statement of Net Position**  
**June 30**

	<u>2020</u>	<u>2019</u>	<b>Percentage Change</b>
Current Assets	\$ 12,977	\$ 10,572	22.75%
Capital Assets, Net	70,502	65,660	7.37%
Other Non-current assets	11,241	18,032	-37.66%
Total Assets	<u>94,720</u>	<u>94,264</u>	0.48%
Deferred outflows of resources	509	521	-2.22%
Current Liabilities	3,029	2,756	9.90%
Non-Current Liabilities	47,885	50,121	-4.46%
Total Liabilities	<u>50,914</u>	<u>52,877</u>	-3.71%
Deferred inflows of resources	207	155	33.39%
Investment in cap assets, net of related debt	24,026	17,058	40.85%
Restricted for cap proj	22,106	26,343	-16.08%
Unrestricted	(2,023)	(1,648)	-22.75%
Net Position	<u>\$ 44,109</u>	<u>\$ 41,753</u>	5.64%

**KENTUCKY RIVER AUTHORITY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2020  
(Continued)**

**FINANCIAL ANALYSIS OF THE AUTHORITY (CONTINUED)**

Current assets consist primarily of unrestricted cash and cash equivalents (deposits of Tier I fees), cash and cash equivalents restricted for capital projects (deposits of Tier II fees), and accounts receivable from charges for services and state appropriations.

During FY 2020, the Authority completed \$6,761,859 of construction in progress and disposed of a vehicle totaling \$21,983. A new truck was purchased in FY 2020 for \$35,106. Depreciation expense for FY 2020 totaled \$1,954,755.

Current liabilities consist primarily of general accounts payable and the current portion of leases payable. The current liabilities in the most recent fiscal year increased as a result of increased accounts payable due to the construction project at Lock and Dam 10 and the increased current portion of leases payable.

Non-current liabilities represent the non-current portion of compensated absences, leases payable, and the net pension liability. The non-current portion of the Authority's compensated absences liability at year-end is based on an allocation of the annual and compensated leave hours used to the total hours remaining as of year-end. The net pension liability represents the Authority's portion of the total pension liability based on the employer allocation percentage.

As of June 30, 2020, the Authority's net position is primarily invested in capital assets, net of related debt in the amount of \$24,026,217 and restricted for capital projects in the amount of \$22,106,186. The remaining portion is unrestricted in the amount of (\$2,022,938). The unrestricted is shown as negative due to the net pension liability and net OPEB liability shown as a non-current liability to the Authority.

**KENTUCKY RIVER AUTHORITY**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2020**  
**(Continued)**

**FINANCIAL ANALYSIS OF THE AUTHORITY (CONTINUED)**

**Condensed Financial Information (in thousands)**  
**Statement of Revenues, Expenses, And Changes In Net Position**  
**For the Fiscal Years Ended June 30**

	<u>2020</u>	<u>2019</u>	<u>Percent Change</u>
Operating Revenues:			
Fee Income	\$6,775	\$6,408	5.73%
Other Income	10	10	-1.25%
State Appropriations	284	283	0.18%
Total Operating Revenues	<u>7,068</u>	<u>6,701</u>	5.48%
Operating Expenses:			
Compensation and Benefits	474	431	9.87%
Pension Expense	297	352	-15.52%
OPEB expense	33	48	-32.21%
Rentals	7	6	20.35%
Professional Fees	78	125	-37.57%
Intergovernmental Grants	117	123	-5.21%
Other Grants	144	155	-7.00%
Repairs and Engineering Services	155	166	0.00%
Administrative and other expenses	76	67	12.85%
Depreciation Expense	1,955	1,953	0.09%
Total Operating Expenses	<u>3,335</u>	<u>3,426</u>	-2.66%
Gain from operations	<u>3,733</u>	<u>3,275</u>	14.00%
Non operating revenues:			
Income from investments	<u>536</u>	<u>875</u>	-38.75%
Total non operating revenues	<u>536</u>	<u>875</u>	-38.75%
Non operating expenses:			
Interest Expense	<u>(1,913)</u>	<u>(2,091)</u>	-8.53%
Total non operating expense	<u>(1,913)</u>	<u>(2,091)</u>	-8.53%
Change in net position	<u>\$2,357</u>	<u>\$2,059</u>	14.46%

**KENTUCKY RIVER AUTHORITY**  
**MANAGEMENT'S DISCUSSION AND ANALYSIS**  
**June 30, 2020**  
**(Continued)**

**FINANCIAL ANALYSIS OF THE AUTHORITY (CONTINUED)**

The Authority's net position increased \$2,356,704 during the current fiscal year. During FY 2019, the Authority's net position increased \$2,059,048.

State appropriations increased \$800 during the current fiscal year from FY 2019.

**Condensed Financial Information (in thousands)**  
**Statement of Cash Flows**  
**For the Fiscal Years Ended June 30**

	<u>2020</u>	<u>2019</u>	<u>Percentage Change</u>
Net cash provided by (used in)			
Operating Activities	5,657	4,887	15.76%
Capital and related financing activities	(10,616)	(12,285)	13.59%
Investing Activities	<u>7,328</u>	<u>7,235</u>	1.29%
Net change in cash and cash equivalents	<u>2,369</u>	<u>(163)</u>	1553.37%
Cash and cash equivalents, beginning of year	<u>8,930</u>	<u>9,093</u>	-1.79%
Cash and cash equivalents, end of year	<u>11,299</u>	<u>8,930</u>	26.52%

**KENTUCKY RIVER AUTHORITY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2020  
(Continued)**

**CAPITAL ASSETS ADMINISTRATION**

The following table summarizes the changes in capital assets between FY 2020 and 2019.

	<u>2020</u>	<u>2019</u>	<u>Percentage Change</u>
<b>Capital Assets not being depreciated</b>			
Land	\$ 546,493	\$ 546,493	0.00%
Construction in Progress			
Dam 10	17,695,680	10,933,821	61.84%
<b>Capital Assets being depreciated</b>			
Locks and Dams	71,397,016	71,397,016	0.00%
Lock and Dam Buildings	370,600	370,600	0.00%
Equipment	212,315	212,315	0.00%
Office Equipment	21,644	21,644	0.00%
Vehicles	127,176	114,053	11.51%
Accumulated Depreciation	<u>(19,868,982)</u>	<u>(17,936,210)</u>	10.78%
Capital Assets, net	<u>\$ 70,501,942</u>	<u>\$ 65,659,732</u>	7.37%

Additional information on the Authority's capital assets can be found in Note 3.

During FY 2020 Tier I and Tier II rate of fees charged on water use were at 2.2 cents per 1,000 gallons and 22 cents per 1,000 gallons of water withdrawn, respectively. There are some variations in water use due to weather conditions and general business trends. Tier I water use was 1.5% higher in FY 20 compared to the prior year. Tier II water use was 6.2% higher in FY 20 compared the prior year.

There are 14 lock and dam structures on the Kentucky River, for which the Authority is responsible for maintenance. The Authority has title to the lock and dam structures and adjoining real estate at Dams 5 through 14. Dams 1 through 4 are owned by the U.S. Army Corps of Engineers (Corps). It is anticipated that title to these facilities will be transferred to the Authority within the next four fiscal years. All these structures will require substantial renovations.



**KENTUCKY RIVER AUTHORITY  
MANAGEMENT'S DISCUSSION AND ANALYSIS  
June 30, 2020  
(Continued)**

**CURRENTLY KNOWN FACTS, DECISIONS, OR CONDITIONS**

Current and future activities of the Authority include:

The Authority is in their sixth season of operating Kentucky River Locks 1 through 4 since rehabbing all four lock structures. Boaters utilize these locks to travel the 82-mile stretch of the Kentucky River from the Ohio River as far as Lock and Dam 5 and vice-versa. Since their reopening 33,540 people on 9,410 boats have used the Kentucky River Locks.

The Authority completed the second year of the capital project to replace/renovate Lock and Dam 10 near Fort Boonesborough State Park. This project includes constructing a new water retaining structure immediately upstream of the existing Lock and Dam. The navigation lock will not be renovated as part of this project and will remain closed. Dam 10 holds the water supply for the city of Winchester. The project has an anticipated completion date of July 2021.

**CONTACTING THE AUTHORITY'S FINANCIAL MANAGEMENT**

This financial report is designed to provide a general overview of the Authority's finances for all of those with an interest. If you have any questions concerning the information provided in this report or need additional financial information, contact the Kentucky River Authority, 403 Wapping Street, Suite 105, Frankfort, Kentucky, 40601.

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## **FINANCIAL STATEMENTS**



**KENTUCKY RIVER AUTHORITY**  
**STATEMENT OF NET POSITION**  
**June 30, 2020**

Assets	
Current Assets:	
Cash and Cash Equivalents	
Unrestricted	\$ 431,084
Restricted	10,867,554
Accounts Receivable	1,678,799
Total Current Assets	<u>12,977,437</u>
Non Current Assets:	
Capital Assets, Net	70,501,942
Investments	
Unrestricted	2,121
Restricted	11,238,632
Total Non Current Assets	<u>81,742,695</u>
Total Assets	<u>94,720,132</u>
Deferred outflows of resources	509,430
Liabilities	
Current Liabilities:	
Accounts Payable	684,428
Accrued Payroll	69,722
Compensated Absences	63,317
Lease Payable	2,211,250
Total Current Liabilities	<u>3,028,717</u>
Non Current Liabilities:	
Net Pension Liability	3,098,445
Net OPEB Liability	487,681
Lease Payable	44,264,475
Compensated Absences	34,032
Total Non Current Liabilities	<u>47,884,633</u>
Total Liabilities	<u>50,913,350</u>
Deferred inflows of resources	206,747
Net Position	
Net Invested in Capital Assets	24,026,217
Restricted for Capital Projects	22,106,186
Unrestricted	(2,022,938)
Total Net Position	<u>\$ 44,109,465</u>

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

**KENTUCKY RIVER AUTHORITY**  
**STATEMENT OF REVENUES, EXPENSES,**  
**AND CHANGES IN NET POSITION**  
**For The Year Ended June 30, 2020**

Operating Revenues:	
Fee Income	\$ 6,775,071
Other Income	9,875
State Appropriation	283,500
Total Operating Revenue:	<u>7,068,446</u>
Operating Expenses:	
Compensation and benefits	473,557
Pension expense	297,365
OPEB expense	32,537
Rentals	7,221
Professional fees	78,035
Intergovernmental grants	116,586
Other grants	144,150
Repairs and engineering services	155,198
Administrative and other expenses	75,610
Depreciation expense	1,954,755
Total Operating Expenses:	<u>3,335,014</u>
Income from Operations:	<u>3,733,432</u>
Non-Operating Revenues (Expenses):	
Investment income	535,906
Interest expense	<u>(1,912,634)</u>
Total Non-Operating Revenues (Expenses):	<u>(1,376,728)</u>
Change in net position	<u>2,356,704</u>
Net Position at July 1, 2019	<u>41,752,761</u>
Net Position at June 30, 2020	<u>\$ 44,109,465</u>

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

**KENTUCKY RIVER AUTHORITY**  
**STATEMENT OF CASH FLOWS**  
**For The Year Ended June 30, 2020**

Cash flows from operating activities:	
Cash received from customers	\$ 6,748,503
Cash payments for personnel expenses	(875,743)
Cash payments for goods and services	(387,548)
Cash received from other sources	283,500
Cash payments to other sources	(111,622)
Net cash used by operating activities:	<u>5,657,090</u>
Cash flows from capital and related financing activities:	
Construction related to capital assets	(6,576,771)
Principal paid on debt service	(2,126,250)
Interest paid on debt service	(1,912,634)
Net cash used for financing activities:	<u>(10,615,655)</u>
Cash flows from investing activities:	
Sale of Investments	6,791,688
Income from investments	535,906
Net cash provided by investing activities	<u>7,327,594</u>
Net change in cash and cash equivalents	<u>2,369,029</u>
Cash and cash equivalents at July 1, 2019	8,929,609
Cash and cash equivalents at June 30, 2020	<u>\$ 11,298,638</u>
Reconciliation of income from operations to net cash flows from operating activities:	
Gain from operations	\$ 3,733,432
Depreciation	1,954,755
(Increase) decrease in assets and deferred outflows of resources:	
Accounts Receivable	(36,444)
Deferred outflows of resources	11,141
Increase (decrease) in liabilities and deferred inflows of resources:	
Accounts payable not capital	(1,274)
Accounts payable payroll	1
Compensated absences	(594)
Pension liabilities	(3,080)
OPEB liabilities	(52,389)
Deferred inflows of resources	51,542
Net cash used by operating activities:	<u>\$ 5,657,090</u>

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

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## **NOTES TO THE FINANCIAL STATEMENTS**



**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**June 30, 2020**

**Note 1 - Summary of Significant Accounting Policies**

This summary of significant accounting policies of the Kentucky River Authority (Authority) is presented to assist in understanding the Authority's financial statements. The financial statements and notes are representations of the Authority's management, which is responsible for their integrity and objectivity. These accounting policies conform to generally accepted accounting principles and have been consistently applied in the preparation of the financial statements.

Nature of Activities

The Authority was created by an Act of the 1986 General Assembly of the Commonwealth of Kentucky (Commonwealth). That Act, together with subsequent amendments, is codified as KRS 151.700 through 151.730. These statutes empower the Authority, among other things, to collect water use fees on water withdrawn and used within the geographic boundaries of the Kentucky River Basin. Additional definitions, exemptions, and collection methods of these fees are contained in Kentucky Administrative Regulations, 420 KAR 1:010 through 1:050. The regulations separate water use fees into Tier I and Tier II fees. Tier I fees are collected on water use from all sources within the Kentucky River Basin and are applied to the operating expenses of the Authority, and such purposes as directed by the Authority Board. Tier II fees, which are collected in addition to Tier I fees on the water withdrawn and used from the main stem of the Kentucky River, are to be applied to capital projects enhancing the water supply of the main stem of the Kentucky River, as well as other capital improvements to the Kentucky River lock and dam system. The rate of water use fees may be adjusted each year of the biennium, as necessary, to carry out the functions, projects, and expenses authorized by the General Assembly in the Authority's biennial budget.

Reporting Entity

The Authority is a component unit of the Commonwealth and its financial statements are included in the Commonwealth's Comprehensive Annual Financial Report as a discretely presented component unit. The Governor appoints the Authority's Board members. The Authority is attached for administrative purposes to the Commonwealth's Finance and Administration Cabinet.

Basis of Presentation

The accompanying financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America. The Authority applies all Governmental Accounting Standards Board (GASB) pronouncements as well as the Financial Accounting Standards Board (FASB) pronouncements and Accounting Principles Board (APB) opinions issued on or before November 30, 1989, unless those pronouncements conflict with or contradict GASB pronouncements, in which case, GASB pronouncements prevail. The Authority has further elected not to apply FASB pronouncements issued after November 30, 1989, in accordance with GASB Statement No. 62

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
**(CONTINUED)**

**Note 1 - Summary of Significant Accounting Policies (Continued)**

As required by GASB Statement No. 34, “*Basic Financial Statements-and Management’s Discussion and Analysis-for State and Local Governments,*” the financial statements include a Management’s Discussion and Analysis (MD&A) section providing an analysis of the Authority's overall financial position and results of operations.

Measurement Focus and Basis of Accounting

The financial statements of the Authority have been presented using the economic resources measurement focus and the accrual basis of accounting in accordance with accounting principles generally accepted in the United States. Accordingly, revenues are recognized when they are earned and become measurable, and expenses are recognized at the time liabilities are incurred.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect certain reported amounts and disclosures. Accordingly, actual results could differ from those estimates.

Cash and Cash Equivalents

For financial statement purposes, the Authority considers all highly liquid investments with maturity of three months or less to be cash equivalents.

Accounts Receivable

Accounts receivable consist of revenues earned as of year-end, but not yet received. The direct write-off method is used for uncollectible fee accounts. This method is not in accordance with generally accepted accounting principles, but the departure does not have a material effect on the financial statements.

Capital Assets

All capital assets are valued at historical cost. Donated capital assets are recorded at their estimated fair value at the date of donation. Lock and dam structures acquired through donation are valued at estimated fair value at the date of donation. Engineering expenses on major renovations that extend the life of the facility are recorded as capital improvements.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
**(CONTINUED)**

**Note 1 - Summary of Significant Accounting Policies (Continued)**

Depreciation of all exhaustible capital assets is recorded as an allocated expense. The Authority's capitalization threshold is \$500. Depreciation is provided over the assets' estimated useful lives using the straight-line method of depreciation. The range of estimated useful lives by type of capital asset is as follows:

Major Renovations of the Locks and Dams	50 years
Lock and Dams	20 years
Vehicles	5 years
Equipment	3 - 10 years

**Compensated Absences**

Compensated absences represent the liability to employees for unused annual and compensatory leave. The liability is recorded at the employees' current rate of pay. The liability also includes employer payroll taxes (FICA) and employee benefits such as retirement. No liability is recorded for non-vesting accumulating rights to receive sick pay benefits. See Note 4 for additional information on compensated absences.

**Financial Statements**

The Statement of Net Position presents the Authority's non-fiduciary assets and liabilities with the difference between the two shown as total net position. Net position is reported in three categories:

- a. **Invested in capital assets, net of related debt** - Consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes, or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- b. **Restricted for capital projects** - Consists of net assets with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or (2) law through constitutional provisions or enabling legislation.
- c. **Unrestricted** - All other net assets that do not meet the definition of "invested in capital assets, net of related debt" or "restricted."

It is the Authority's policy to first use restricted assets when an expense is incurred for purpose for which both restricted and unrestricted assets are available.

**Revenues**

Fee income represents the amounts due from users who withdraw water from within the geographic boundaries of the Kentucky River Basin.

State appropriations represent the amounts allocated to the Authority by the Commonwealth from its general fund. These appropriations lapse at year-end as the unobligated amounts revert back to the Commonwealth.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
**(CONTINUED)**

**Note 1 - Summary of Significant Accounting Policies (Continued)**

Expenses

The Authority reports expenses relating to the use of economic resources. Expenses are classified by natural or object classification in the statement of revenues, expenses, and changes in net position.

Engineering Services

Engineering service expenses for minor repairs or inspections are shown as operating expenses. Engineering expenses on major renovations that extend the life of the facility are recorded as capital improvements. The level of design may vary from year to year and may contribute to a net loss for operational activities.

Pensions

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

Post-employment Benefits Other than Pensions (OPEB)

For purposes of measuring the net OPEB liability, deferred outflows of resources and inflows of resources related to OPEB, and OPEB expense, information about the fiduciary positions of the KRS and additions to/deductions from the KRS' fiduciary net positions have been determined on the same basis as they are reported by KRS. For this purpose, benefit payments are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**Note 2 - Cash and Cash Equivalents**

The Authority participates in the Commonwealth's cash and investment pool, which is available for use by all funds and component units under the auspices of the State Investment Commission as authorized under KRS 42.500 et al. Therefore, it follows the Commonwealth's policies for all pooled cash and investments. The risk disclosures related to deposits and investments are reported in the Commonwealth of Kentucky's Comprehensive Annual Financial Report. As of June 30, 2020, the carrying value of the Authority's pooled cash and cash equivalents totaled \$10,664,171, and the fair value of the Authority's investments was \$11,240,753. Please refer to the Commonwealth's CAFR for information and disclosure.

Additionally, the Authority maintains a debt Stabilization Fund, held by the Trustee on behalf of the Authority, as provided in the Series 2008 Resolution. Any funds on deposit in the Stabilization Fund may be withdrawn by the Authority for any lawful purpose. At June 30, 2020, the Stabilization Fund had a balance of \$634,467, which is reported as restricted cash and cash equivalents on the face of the financial statements.

**KENTUCKY RIVER AUTHORITY**  
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**Note 3 - Capital Assets**

Capital asset activity for the year ended June 30, 2020, is as follows:

	<b>Balance</b>			<b>Balance</b>
	<b>June 30, 2019</b>	<b>Additions</b>	<b>Reductions</b>	<b>June 30, 2020</b>
Capital Assets not being depreciated:				
Land	\$ 546,493			\$ 546,493
Dam 10	10,933,821	6,761,859		17,695,680
Total capital assets not being depreciated:	<u>11,480,314</u>	<u>6,761,859</u>		<u>18,242,173</u>
Capital Assets being depreciated:				
Lock and Dams 5, 7-9, 11-14	12,000,000			12,000,000
Dam 3	16,134,038			16,134,038
Locks 3 & 4	4,379,055			4,379,055
Lock and dam 6	1,500,000			1,500,000
Dam 9	16,423,312			16,423,312
Lock and Dam 10	1,500,000			1,500,000
Lock and Dam buildings	370,600			370,600
Locks 1 & 2	4,408,732			4,408,732
Dam 8	15,051,879			15,051,879
Vehicles	114,053	35,106	21,983	127,176
Equipment	233,959			233,959
Total capital assets being depreciated	<u>72,115,628</u>	<u>35,106</u>	<u>21,983</u>	<u>72,128,751</u>
Total Capital Assets	<u>83,595,942</u>	<u>6,796,965</u>	<u>21,983</u>	<u>90,370,924</u>
Accumulated Depreciation	(17,936,210)	(1,954,755)	21,983	(19,868,982)
Capital Assets, net	<u>65,659,732</u>	<u>4,842,210</u>		<u>70,501,942</u>

Locks and Dams 1 through 4 are not the property of the Authority but instead are leased per an agreement between the Secretary of the Army and the Commonwealth for the use and benefit of the Authority for a term of 25 years, beginning March 1, 2002, and ending February 28, 2027. The consideration for this lease is the operation and maintenance of the premises by the Authority for the benefit of the United States and the general public. Per the agreement, the Authority has the right to erect such structures and to provide such equipment upon the premises as may be necessary to furnish the facilities and services authorized. Those structures and equipment shall be and remain the property of the Authority.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**(CONTINUED)**

**Note 4 - Compensated Absences**

It is the Authority's policy to permit employees to accumulate earned but unused annual leave, compensatory leave, and sick pay benefits. The policy of the Commonwealth is to only record the cost of annual and compensatory leave.

Annual and Compensatory Leave

Annual leave is accumulated at amounts ranging from 7.50 to 16.00 hours per month, determined by length of service, with maximum accumulations ranging from 30 to 60 days. The calendar year is the period used for determining accumulated leave. Compensatory leave is granted to authorized employees. At June 30, 2020, the Authority's estimated liability for accrued annual and compensatory leave was \$97,349.

The estimated liability and change in the estimated liability for compensated absences for the Authority as of June 30, 2020, was as follows:

	<b>Beginning</b>			<b>Ending</b>	<b>Due</b>	<b>Due</b>
<b>Compensated Absences:</b>	<b>Balance</b>	<b>Additions</b>	<b>Reductions</b>	<b>Balance</b>	<b>Within</b>	<b>Thereafter</b>
	<u>Balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>Balance</u>	<u>One</u>	<u>Year</u>
	<u>\$ 97,943</u>	<u>\$ 55,433</u>	<u>\$ 56,027</u>	<u>\$ 97,349</u>	<u>\$63,317</u>	<u>\$ 34,032</u>

Sick Leave

It is the policy of the Authority to record the cost of sick leave when paid. Generally, sick leave (earned one day per month with unlimited accumulation) is paid only when an employee is absent due to illness, injury, or related family death. No liability is recorded for non-vesting accumulating rights to receive sick pay benefits as of year-end.

**Note 5 - Intergovernmental Activity**

The Authority leased office space on a quarterly basis from the Commonwealth's Finance and Administration Cabinet. Expenses during fiscal year 2020 under this rental agreement totaled \$18,513.

**Note 6 - Retirement Plans**

Plan Description

All full time employees of the Authority who work more than 100 hours per month participate in a multiple-employer cost-sharing defined benefit pension plan. The Kentucky Employees Retirement System (KERS) Non-Hazardous Plan is administered by the Board of Trustees of the Kentucky Retirement Systems (KRS). The plan provides retirement, health, disability, and death benefits to plan participants. Cost-of-living adjustments are provided at the discretion of the State Legislature. Employees contribute 5% of creditable compensation. The Board of Trustees determines employer contribution rates necessary for the actuarial soundness of the retirement system as required by Kentucky Revised Statutes 61.565 and 61.702. The employer contribution is subject to approval by the Kentucky General Assembly through the adoption of the Biennial Executive Branch Budget.



**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
**(CONTINUED)**

**Note 6 - Retirement Plans (Continued)**

During FY 2020, the actuarially determined contribution was 71.03% of covered payroll. The Commonwealth's actual contribution was 71.03% of the actuarially required employer covered payroll. At June 30, 2020, the Authority reported a liability of \$3,098,445 for its proportionate share of the collective net pension liability. The collective net pension liability was measured as of June 30, 2018, (and was carried forward to the current measurement date June 30, 2019 using standard roll forward procedures). The total pension liability was determined by an actuarial valuation as of the same date. The Authority's proportionate share is .021939% at June 30, 2019. This percentage is based on the long-term share of contributions of the Authority to the total of all contributions from employers of qualifying participants.

Kentucky Revised Statutes 61.510 through 61.705 establishes and governs the plan. KERS issues a publicly available financial report that can be obtained at [kyret.ky.gov](http://kyret.ky.gov).

The net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, have been determined on the same basis as they are reported by the Kentucky Retirement Systems. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
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**Note 6 - Retirement Plans (Continued)**

**Plan Description (Continued)**

**Kentucky Employees' Retirement System**  
**Governance KRS 61.510 through KRS 61.705**  
**Cost Sharing Multiple Employer Defined Benefit Plan**  
**Non-Hazardous**

	<b>Tier 1</b> Participation Prior to 9/1/2008	<b>Tier 2</b> Participation 9/1/2008 through 12/31/2013	<b>Tier 3</b> Participation on or after 1/1/2014
<b>Covered Employees:</b>	Substantially all regular full-time members employed in non-hazardous duty positions of any state department, board, or any agency directed by Executive Order to participate in the system.		
<b>Benefit Formula:</b>	Final Compensation X Benefit Factor X Years of Service		Cash Balance Plan
<b>Final Compensation:</b>	Average of the highest 5 fiscal years (must contain at least 48 months). Includes lump-sum compensation payments (before and at retirement).	5 complete fiscal years immediately preceding retirement; each year must contain 12 months. Lump-sum compensation payments (before and at retirement) are not to be included in creditable compensation.	No Final Compensation
<b>Benefit Factor:</b>	1.97%, or 2.0% for those retiring with service for all months between 1/1998 and 1/1999.	10 years or less = 1.10%. Greater than 10 years, but no more than 20 years = 1.30%. Greater than 20 years, but no more than 26 years = 1.50%. Greater than 26 years, but no more than 30 years = 1.75%. Additional years above 30 = 2.00% (2.00% benefit factor only applies to service earned in excess of 30 years).	No benefit factor. A life annuity can be calculated in accordance with actuarial assumptions and methods adopted by the board based on member's accumulated account balance.
<b>Cost of Living Adjustment (COLA):</b>	No COLA unless authorized by the Legislature with specific criteria. This impacts all retirees regardless of Tier.		
<b>Unreduced Retirement Benefit:</b>	Any age with 27 years of service. Age 65 with 48 months of service. Money Purchase for age 65 with less than 48 months based on contributions and interest.	Rule of 87: Member must be at least age 57 and age plus earned service must equal 87 years at retirement to retire under this provision. Age 65 with 5 years of earned service. No Money Purchase calculations.	
<b>Reduced Retirement Benefit:</b>	Reduced by 6.5% per year for the first 5 years and 4.5% per year for the next 5 years for each year the member is younger than age 65, or has less than 27 years of service, whichever is smaller.	Reduced by 6.5% per year for the first 5 years and 4.5% per year for the next 5 years for each year the member is younger than age 65, or does not meet the rule of 87 (age plus service) and is younger than 57, whichever is smaller.	No reduced retirement benefit.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
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**Note 6 - Retirement Plans (Continued)**

Actuarial Valuation

State Contribution	71.03%
Member Contribution	5.00%
Actuarial Valuation	
Date	June 30, 2019
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level Dollar
Asset Valuation	
Method	Five-year smoothed market
Investment Rate of Return	5.25%, this rate consists of 2.3% inflationary component and a 2.95% real rate of return component
Inflation Rate	2.30%
Payroll Growth	0.00%
Project Salary Increases	3.30% to 15.30%, varies by service for KERS non-hazardous
Mortality Tables	Pre-retirement mortality; RP-2000 Combined Mortality Table projected with scale BB to 2013. Female mortality rates are set back one year. Post-retirement mortality (disabled): RP-2000 Combined Disability Mortality Table projected with scale BB to 2013. Male mortality rates are set back four years.
Experience Study	This period July 1, 2013 - June 30, 2018.

The following changes were made to the actuarially assumptions.

Investment Return - 5.25% for KERS Non Hazardous

Inflation - 2.30% for all plans

Salary Increases - 3.55% to 15.55% for KERS Non Hazardous and varies by service

Payroll Growth - 0% for KERS Non Hazardous

Mortality - RP 2000 Combined Mortality Table projected to 2013 with Scale BB (set back one year for females)

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the Kentucky Retirement Systems. The most recent analysis, performed for the period covering fiscal years 2013 through 2018, is outlined in a report dated April 18, 2019. Several factors are considered in evaluating the long-term rate of return assumption including long-term historical data, estimates inherent in current market data, and a log-normal distribution analysis in which best-estimate ranges of expected future real rates of return (expected return, net of investment expense and inflation) were developed by the investment consultant for each major asset class. These ranges were combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and then adding expected inflation. The capital market assumptions developed by the investment consultant are intended for use over a 10-year horizon and may not be useful in setting the long-term rate of return for funding pension plans which covers a longer timeframe. The assumption is intended to be a long-term assumption and is not expected to change absent a significant

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**(CONTINUED)**

**Note 6 - Retirement Plans (Continued)**

change in the asset allocation, a change in the inflation assumption, or a fundamental change in the market that alters expected returns in future years.

The target asset allocation and best estimates of arithmetic real rates of return for each major asset class are summarized in the following table:

**Kentucky Retirement Systems**

Asset Class	Target Allocation	Long-Term Nominal Rate of Return
Core Bond	20.50%	1.30%
US Equity	15.75%	4.30%
Non US Equity	15.75%	4.80%
Special Credit/High Yield	15.00%	2.60%
Real Return	15.00%	4.10%
Private Equity	7.00%	6.65%
Real Estate	5.00%	4.85%
Cash	3.00%	0.20%
Opportunistic/Absolute Return	3.00%	2.97%
Total	100%	

The projection of cash flows used to determine the discount rate assumed that local employers would contribute the actuarially determined contribution rate of projected compensation over the remaining 24 year amortization period of the unfunded actuarial accrued liability. The actuarial determined contribution rate is adjusted to reflect the phase in of anticipated gains on actuarial value of assets over the first four years of the projection period.

The actuarial valuation date is June 30, 2019 upon which the total pension liability is based. The pension liability was determined using standard roll forward techniques. The roll forward calculation adds the annual normal cost, subtracts the actual benefit payments and refunds for the plan year and then applies the expected investment rate of return for the year. The discount rate is defined as the single rate of return that when applied to all projected payments results in an actuarial value of projected benefits payments. The pension plan's fiduciary net position and future contributions were projected to be sufficient to finance all the future benefit payments of current plan members. A municipal bond rate was not used. For projected future benefits; see prior year data.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**Note 6 - Retirement Plans (Continued)**

The following presents the net pension liability of the Authority, calculated using the discount rate of 5.25%, as well as what the Authority's net pension liability would be if it were calculated using a discount rate that is one percentage point lower (4.25%) or one percentage point higher (6.25%):

	1% Decrease	Current Discount Rate	1% Increase
KRA Proportionate	<u>(4.25)</u>	<u>(5.25)</u>	<u>(6.25)</u>
Share of the NPL	\$ 3,551,957	\$ 3,098,445	\$ 2,723,660

**Deferred Inflows/Outflows of Resources**

For the year ended June 30, 2020, the Authority recognized pension expenses of \$297,365 and deferred outflows and deferred inflows related to pensions from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$ 18,326	\$
Changes in assumptions	94,341	
Net difference between projected and actual earnings on investments	8,029	14,343
Change in proportionate share		79,777
Contributions subsequent to the measurement date	269,744	
	<u>\$ 390,440</u>	<u>\$ 94,120</u>

The \$269,744 reported as deferred outflows of resources resulting from contributions subsequent to the measurement date will be recognized as a reduction of the net pension liability in the year ended June 30, 2021. Other amounts reported as deferred outflows and deferred inflows related to pensions will be recognized in pension expense as follows:

<u>Amortization of Deferred Inflows/Deferred Outflows</u>	
2021	\$ 17,869
2022	\$ 10,910
2023	\$ (2,025)
2024	\$ (178)
2025	

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**Note 6 - Retirement Plans (Continued)**

KERS Non-Hazardous Membership

	<b>2019 KERS</b>
	<b>Non-</b>
	<b>Hazardous</b>
KERS Non-Hazardous Membership	
Retirees and beneficiaries receiving benefits	42,874
Inactive plan members	46,721
Active plan members	33,432
	<u>123,027</u>

**Pension Plan Fiduciary Net Position**

The Authority's fiduciary net position has been determined on the same basis used by KRS. KRS' combining financial statements are prepared using the accrual basis of accounting. Plan member contributions are recognized in the period in which contributions are due. Employer contributions to the plan are recognized when due and the employer has made a formal commitment to provide the contributions. Benefits and refunds are recognized when due and payable in accordance with terms of the plan. Premium payments are recognized when due and payable in accordance with terms of the plan. Administrative and investment expenses are recognized when incurred.

Investments are reported at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. Short-term investments are reported at cost, which approximates fair value. See Note D of KRS' annual financial report previously referenced for further discussion of fair value measurements. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date. Gain (loss) on investments includes KRS' gains and losses on investments bought and sold as well as held during the fiscal year.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**Note 7 - Other Postemployment Benefits**

**Plan Description and Covered Employees**

The Kentucky Employees Retirement System (KERS) Non-Hazardous Plan is administered by the Board of Trustees of the Kentucky Retirement Systems (KRS). It is a cost-sharing OPEB plan. Contribution rates for employer and employees are established by Kentucky Statutes. Members participating prior to September 2008 do not contribute to the OPEB plan directly. Instead assets have been allocated between pension and retiree medical liabilities on the basis of accrued liability as of July 1, 2007. This amount has then been brought forward from that date based on actual cash flows and prorated allocation of investment returns. Members participating on or after September 2008 contribute 1% of their official salary. Employer contribution rates are actuarially determined and established in the Budget Bill. At June 30, 2020, the Authority reported a liability of \$487,681 for its proportionate share of the collective net OPEB liability. The collective net OPEB liability was measured as of June 30, 2019. The total OPEB liability was determined by an actuarial valuation as of June 30, 2018, with the total OPEB liability being rolled-forward from the valuation date to June 30, 2019 using generally accepted actuarial principles. The Authority's proportionate share is .021939% at June 30, 2019. This percentage is based on the long-term share of contributions of the Authority to the total of all contributions from employers of qualifying participants.

**Plan Administrator:** The plan is administered by Kentucky Retirement Systems.

	Participation prior to July 2003		Participation between July 2003 and August 2008		Participation on or after September 2008	
	Months of Service	Percent of premium paid	Months of Service	Percent of premium paid	Months of Service	Percent of premium paid
<b>Benefit Factor:</b>	<48	0%	Greater than or equal to 120	\$10 per month for each year of service without regard to a maximum dollar amount adjusted annually	Greater than or equal to 180	\$10 per month for each year of service without regard to a maximum dollar amount adjusted by 1.5% annually
<b>Contribution Rate:</b>	Contribution rates for the employer is actuarially determined. No member contribution.		Contribution rates for the employer is actuarially determined. No member contribution.		Contribution rates for the employers are actuarially determined. Member contribution of 1% of salary.	

**Cost of Living Adjustment (COLA):** Members participating after 2008 receive 1.5% increase annually

Publicly available financial reports for the Kentucky Retirement Systems can be accessed at <https://kyret.ky.gov>.

**KENTUCKY RIVER AUTHORITY**  
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**Note 7 - Other Postemployment Benefits (Continued)**

<b>Employer Contribution</b>	12.40%
<b>Member Contribution</b>	Participation prior to 9/1/2008 make no contribution. Participation on or after 9/1/2008 make a 1% contribution.
<b>Contributions made in thousands</b>	53
<b>Experience Study</b>	July 1, 2008-June 30, 2013
<b>Actuarial Valuation Date</b>	June 30, 2017
<b>Inflation</b>	2.30%
<b>Salary Increases</b>	3.55% to 15.55% , varies by service
<b>Payroll Growth</b>	0.00%
<b>Assumed Investment return</b>	6.25%
<b>Health cost trend rates</b>	Underlying assumptions: 1). A short run period-this is a period for which anticipated health care trend rates are manually set based on local information as well as plan-specific and carrier information. 2). Long term real GDP Growth- 1.75%. 3). Long term rate of inflation- 2.3%. 4). Long term nominal GDP growth- 4.05%. 5). Year that excess rate converges to 0-15 years from the valuation. Health Care Cost Trends are thus the manually set rates for the short run period and rates which decline to an ultimate trend rate which equals the assumed nominal long term GDP growth rate.
<b>Actuarial Cost Method</b>	Entry age normal, Level percentage of pay
<b>Asset valuation method</b>	20% of the difference between the market value of assets and the expected actuarial value of assets is recognized.
<b>Mortality Tables</b>	The mortality table used for active members is RP-2000 Combined Mortality Table projected with scale BB to 2013 (multiplied by 50% for males and 30% for females.) For non-disabled retired members the mortality table used RP-2000 Combined Mortality Table projected with Scale BB to 2013 (set back one year for females.) For disabled members the RP-2000 Combined Disabled Mortality Table projected with Scale BB to 2013 (set back four years for male)
<b>Healthcare Trend Rates:</b>	Pre 65 Initial Trend starting at 7.25% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years
	Post 65 Initial Trend starting at 5.10% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 11 years



**KENTUCKY RIVER AUTHORITY**  
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**Note 7 - Other Postemployment Benefits (Continued)**

The Board of Trustees has adopted new actuarial assumptions since June 30, 2018. These assumptions are documented in the report titled “Kentucky Retirement Systems 2018 Actuarial Experience Study for the Period Ending June 30, 2018”. The Total OPEB liability as of June 30, 2019 is determined using these updated assumptions.

The long-term expected return on plan assets is reviewed as part of the regular experience studies prepared every five years for the Systems. The most recent analysis was dated December 9, 2019. The long-term expected rate of return was determined using a building block method in which the best-estimate ranges of expected future real rate of returns are developed for each asset class. The ranges are combined by weighting the expected future real rate of return by the target asset allocation percentage. The target allocation and best estimates of arithmetic real rate of return for each major asset class are summarized in the following table:

**Kentucky Retirement Systems**

<b>Asset Class</b>	<b>Target Allocation</b>	<b>Long-Term Nominal Rate of Return</b>
US Equity	18.75%	4.30%
Non US Equity	18.75%	4.80%
Special Credit/High Yield	15.00%	2.60%
Real Return	15.00%	4.10%
Core Bond	13.50%	1.35%
Private Equity	10.00%	6.65%
Real Estate	5.00%	4.85%
Opportunistic	3.00%	2.97%
Cash	1.00%	0.20%
Total	<u>100.00%</u>	

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**Note 7 - Other Postemployment Benefits (Continued)**

The discount used to measure the total OPEB liability was 5.73%. The single discount rate is based on the expected rate of return on OPEB plan investments of 6.25% and a municipal bond rate of 3.13% as reported in Fidelity Index's "20-Year Municipal Go AA Index" as of June 28, 2019. The projection of cash flows used to determine the discount rate assumed that plan member contributions will be made at the current contribution rate. The employer contribution will be made at the actuarially determined contribution rate. Based on those assumptions, the plan's fiduciary net position was projected to be available to make all future benefit payments of the retirement system. However, the cost associated with the implicit employer subsidy is not currently being included in the calculation of the System's actuarial determined contributions, and the subsidy will not be paid out of the System's trust. The following table presents the net OPEB liability calculated using a discount as well as what the liability would be if it was using a discount rate that is 1% point lower (4.73%) or 1% point higher (6.73%) than the current rate:

	<u>1% Decrease</u>	<u>Current Rate</u>	<u>1% Increase</u>
	4.73%	5.73%	6.73%
Net OPEB Liability	\$ 580,687	\$ 487,681	\$ 411,118

The following table presents the new OPEB liability of the KRS OPEB Plan calculated using a healthcare cost trend rate that is 1% point lower or 1% point higher than the current rate:

	<u>1% Decrease</u>	<u>Current Rate</u>	<u>1% Increase</u>
Net OPEB Liability	\$ 414,318	\$ 487,681	\$ 576,426

Pre 65	Initial Trend starting at 7.25% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years
Post 65	Initial Trend starting at 5.10% at January 1, 2019 and gradually decreasing to an ultimate trend rate of 4.05% over a period of 11 years

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
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**Note 7 - Other Postemployment Benefits (Continued)**

**Deferred Inflows/Outflows of Resources**

For the year ended June 30, 2020, the Authority recognized OPEB expenses of \$32,537. Deferred outflows and deferred inflows related to OPEB are from the following sources:

	<u>Deferred Outflows of Resources</u>	<u>Deferred Inflows of Resources</u>
Differences between expected and actual experience	\$	\$ 77,788
Changes in assumptions	63,956	1,467
Net difference between projected and actual earnings on investment	2,065	5,264
Change in Proportionate share		28,108
Contributions subsequent to the measurement date	52,969	
Total	<u>\$ 118,990</u>	<u>\$ 112,627</u>

The \$52,969 reported as deferred outflows of resources related to OPEB resulting from contributions after the measurement date will be recognized as a reduction of net OPEB liability during the year ended June 30, 2021. Other amounts reported as deferred outflows and deferred inflows related to OPEB will be recognized as OPEB expense as follows (expressed in Thousands):

Year ended June 30:	
2021	\$ (8,172)
2022	\$ (8,172)
2023	\$ (22,344)
2024	\$ (7,918)
2025	\$

**Membership Information**

	<u>2019 KERS Non Hazardous</u>
Retirees and beneficiaries receiving benefits	29,940
Inactive members	5,971
Active plan members	34,973
Total	<u>70,884</u>

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
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**Note 8 - Economic Dependency**

The Authority collects fees from water users in the Kentucky River Drainage Basin. These fees are the primary funding source of the Authority's activities. For the year ended June 30, 2020, six customers accounted for approximately 82.6% of the Tier II fees earned during the year. One of these six customers accounted for approximately 37.7%.

**Note 9 – Commitments**

Prior to year-end, the Authority had an ongoing project at Lock and Dam 10. The balance remaining on this commitment as of year-end totaled approximately \$12,360,460.

**Note 10 - Risk Management**

The Authority is exposed to various risks of loss related to torts; theft of, damage to, and destruction of assets; injuries to employees; natural disaster; and errors and omissions. The Authority has purchased commercial insurance for public officials' liability coverage, which covers the litigation costs relative to errors and omissions as they pertain to the Authority's Board members. Additionally, the Authority's exposure under negligent claims filed against it is limited through the Kentucky Board of Claims. The Authority also has purchased commercial insurance for liability and collision loss on Authority owned vehicles. Loss to buildings and equipment are self-insured through the Commonwealth's Fire and Tornado Fund.

**Note 11 - Long-Term Obligations**

On March 19, 2013, the SPBC adopted a resolution authorizing the issuance of \$17,210,000 in Series 2013 Agency Fund Revenue Bonds (Project No. 105). The bonds were issued at a premium in the amount of \$1,386,657. The Series 2013 Bonds are being issued as Additional Bonds under the Series 2008 Resolution and have been authorized and issued pursuant to the Constitution and laws of the Commonwealth. The Authority approved a lease agreement with SPBC, effective April 1, 2013, to act as a mechanism for financing the principal and interest payments of the bonds. The bonds have a delivery date of May 15, 2013, with interest payable on April 1 and October 1 each year, commencing on October 1, 2013 and ending with the final maturity of the term bonds due April 1, 2033. Interest rates range from 2.0% to 4.75% at the final maturity date.

On March 10, 2016 the SPBC adopted a resolution authorizing the refunding of Series 2008 Agency Fund Revenue Bonds (Project No. 91) in the amount of \$10,555,000 and the issuance of \$10,850,000 in Series 2016 Agency Fund Revenue Bonds (Project No. 113). The bonds were issued at a premium on May 12, 2016 in the amount of \$843,293. The bonds have a delivery date of June 2, 2016 with interest payable April 1 and October 1 each year, commencing October 1, 2016 with final maturity April 1, 2029. Interest rates range from 2.0% to 5.0%.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
**(CONTINUED)**

**Note 11 - Long-Term Obligations (Continued)**

On April 12, 2018 the SPBC adopted a resolution authorizing the issuance of \$28,945,000 in Series 2018 Agency Fund Revenue Bonds (Project No. 118). The bonds were issued on May 10, 2018 at a premium in the amount of \$605,469. The bonds have a delivery date of May 24, 2018 with interest payable April 1 and October 1 each year, commencing October 1, 2018 with final maturity April 1, 2038. Interest rates range from 3.0% to 5.0%. With the issuance of the Series 2018 Bonds, Build America Mutual Insurance Company will issue its Municipal Bond Insurance Policy for the Series 2018 Bonds.

The Series 2013 Agency Fund Revenue Bonds (Project No. 105) and Series 2018 Agency Fund Revenue Bonds (Project No. 118) have a debt service reserve fund of \$4,101,775 and that cash will be used towards the principal balance in 2037 and 2038.

A rate stabilization fund of \$634,467 is maintained at the Trustee. These funds are not pledged to the payment of principal or interest on any bonds. Upon written instruction from the Authority, the Trustee may withdraw moneys and transfer to the Authority for any lawful purpose of the Authority.

Changes in long-term liabilities for the year ended June 30, 2020 are summarized as follows:

	<u>Beg Balance</u>	<u>Additions</u>	<u>Reductions</u>	<u>End Balance</u>	<u>Due in one year</u>	<u>Due thereafter</u>
Lease Payable Total	\$ 48,601,975	\$	\$2,126,250	\$ 46,475,725	\$ 2,211,250	\$44,264,475

Subject to change dependent on reinvestment of debt service fund or debt service reserve. Payments are made quarterly in equal installments.

**KENTUCKY RIVER AUTHORITY**  
**NOTES TO THE FINANCIAL STATEMENTS**  
**JUNE 30, 2020**  
**(CONTINUED)**

**Note 11 - Long-Term Obligations (Continued)**

<b>Fiscal Year</b>	<b>Principal</b>	<b>Interest</b>	<b>Total</b>
<b>Ending</b>	<b>Payment</b>	<b>Payment</b>	<b>Payments</b>
2021	\$ 2,211,250	\$ 1,889,431	\$ 4,100,681
2022	2,296,250	1,803,381	4,099,631
2023	2,385,000	1,714,819	4,099,819
2024	2,486,250	1,612,895	4,099,145
2025	2,586,250	1,512,013	4,098,263
2026	2,680,000	1,418,663	4,098,663
2027	2,795,000	1,306,586	4,101,586
2028	2,895,000	1,206,141	4,101,141
2029	2,993,750	1,107,494	4,101,244
2030	3,087,500	1,012,469	4,099,969
2031	3,188,750	910,286	4,099,036
2032	3,325,000	775,625	4,100,625
2033	3,276,250	634,094	3,910,344
2034	2,838,750	500,748	3,339,498
2035	2,935,000	404,941	3,339,941
2036	3,036,250	304,944	3,341,194
2037	1,459,475	208,417	1,667,892
2038		77,938	77,938
	<u>\$ 46,475,725</u>	<u>\$ 18,400,885</u>	<u>\$ 64,876,610</u>

**Note 12 - Net Position Restricted For Capital Projects**

The Authority has a Net Position Restricted for Capital Projects of \$22,106,186. This amount consists of restricted cash and investments. The restricted cash and investments consists of accounts restricted for the maintenance and construction of capital assets.

**REQUIRED SUPPLEMENTARY INFORMATION**





**KENTUCKY RIVER AUTHORITY**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2020**

**Schedule of Proportionate Share of the Net Pension Liability**

	2020-a	2019-b	2018-c	2017-d	2016-e	2015-f
Proportion of the net pension liability (asset)	0.021939%	0.022799%	0.023517%	0.023063%	.024015%	0.026914%
Proportionate share of the net pension liability	\$ 3,098,445	\$3,101,525	\$ 3,148,535	\$ 2,629,039	\$2,409,173	\$ 2,414,676
Covered-employee payroll	\$ 325,982	\$ 344,255	\$ 376,835	\$ 376,160	\$ 370,848	\$ 424,567
Proportionate share of the net pension liability as a percentage of its covered-employee payroll	950.50%	900.94%	835.52%	698.91%	649.64%	568.74%
Plan fiduciary net position as a percentage of the total pension liability	13.66%	12.84%	13.20%	14.8%	33.78%	22.32%

**Schedule of Contributions**

	2020	2019	2018	2017	2016	2015
Actuarially Required Contribution	\$ 268,938	\$ 243,083	\$ 146,702	\$ 146,540	\$ 118,237	\$ 125,106
Contribution in Relation to Actuarial Contribution	(269,744)	(227,068)	(142,970)	(144,346)	(118,332)	(125,284)
Contribution Deficiency (Excess)	(806)	16,015	3,732	2,194	(95)	(178)
Covered Payroll	\$ 378,626	\$ 342,225	\$ 352,623	\$ 364,165	\$ 376,160	\$ 370,848
Contribution as a Percentage of Covered Employee Payroll	71.03%	71.03%	41.60%	40.24%	31.43%	33.74%

This is a ten year schedule. Years will be added to this schedule in future years until ten years of information is presented.

a- This column is based on the measurement date of June 30, 2019

b- This column is based on the measurement date of June 30, 2018

c- This column is based on the measurement date of June 30, 2017

d- This column is based on the measurement date of June 30, 2016

e- This column is based on the measurement date of June 30, 2015

f- This column is based on the measurement date of June 30, 2014

**KENTUCKY RIVER AUTHORITY**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2020**  
**(Continued)**

**Notes to RSI Pension Contributions**

**Notes to the Schedule as of the Measurement Date:**

Valuation date	June 30, 2018	June 30, 2017	June 30, 2016	June 30, 2016	June 30, 2015	June 30, 2014
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**Methods and Assumptions used to determine contributions:**

Actuarial Cost Method	Entry age normal	Entry age normal	Entry age normal	Entry age normal	Entry age normal	Entry age normal
Amortization Method	Level percentage of payroll closed	Level percentage of payroll closed	Level percentage of payroll closed	Level percentage of payroll closed	Level percentage of payroll closed	Level percentage of payroll closed
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets recognized	20% of the difference between the market value of assets and the expected actuarial value of assets recognized	20% of the difference between the market value of assets and the expected actuarial value of assets recognized	20% of the difference between the market value of assets and the expected actuarial value of assets recognized	Five-year smoothed market	Five-year smoothed market
Investment Return	5.25%	7.50%	7.50%	6.75%	7.50%	7.75%
Inflation	2.30%	3.25%	3.25%	3.25%	3.25%	3.50%
Projected Salary increase	0.0%	4.0%, average	4.0%, average	4.0%, average, including inflation	4.0%, average, including inflation	4.5% per annum
Mortality for 2019	RP-2000 Combined Mortality Table, projected to 2013 with scale BB (set back one year for females)					
Mortality prior to 2019	RP-2000 Combined Mortality Table, projected to 2013 with scale BB (set back one year for females)					

**KENTUCKY RIVER AUTHORITY**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2020**  
**(Continued)**

**Schedule of Proportionate Share of the Net OPEB Liability**

	<u>2020-a</u>	<u>2019-b</u>	<u>2018-c</u>
Proportionate share of the net OPEB liability (asset)	0.021939%	0.022779%	0.023517%
Proportionate share of the collective net OPEB liability (asset)	487,681	540,070	596,382
Covered-employee payroll	\$ 332,585	\$ 358,518	\$ 374,649
Proportionate share of the Net OPEB liability (asset) as a percentage of its covered-employee payroll	146.63%	150.64%	159.20%
OPEB plan fiduciary net position as a percentage of the total OPEB liability	30.92%	27.32%	24.40%

**Schedule of Employer's Contributions OPEB**

	<u>2020</u>	<u>2019</u>	<u>2018</u>
Actuarially Required Contribution	\$ 47,090	\$ 39,791	\$ 29,283
Contribution in Relation to Actuarial Contribution	47,090	39,791	29,283
Contribution Deficiency (Excess)	\$	\$	\$
Covered Payroll	\$ 379,760	\$ 320,899	\$ 348,197
Contribution as a Percentage of Covered Employee Payroll	12.40%	12.40%	8.41%

This is a 10 year schedule. Years will be added to this schedule in future fiscal years until 10 years of information is available.

2020-a- This column is based on the measurement date of June 30, 2019.

2019-b- This column is based on the measurement date of June 30, 2018.

2018-c- This column is based on the measurement date of June 30, 2017.

**KENTUCKY RIVER AUTHORITY**  
**REQUIRED SUPPLEMENTARY INFORMATION**  
**June 30, 2020**  
**(Continued)**

**Notes to RSI OPEB Contributions**

Valuation Date	June 30, 2018	June 30, 2017	June 30, 2016
<b>Methods and Assumptions used to determine OPEB contributions:</b>			
Actuarial Cost Method	Entry age normal	Entry age normal	Entry age normal
Amortization Method	Level percent of pay	Level percent of pay	Level percent of pay
Amortization Period	26 year, closed	27 year, closed	28 year, closed
Asset Valuation Method	20% of the difference between the market value of assets and the expected actuarial value of assets recognized	20% of the difference between the market value of assets and the expected actuarial value of assets recognized	20% of the difference between the market value of assets and the expected actuarial value of assets recognized
Investment Rate of Return	6.25%	6.25%	6.25%
Inflation	2.30%	2.30%	2.30%
Salary Increase	3.55% to 15.55%, varies by service	3.05%	4.0% average
Mortality	RP-2000 Combined Mortality Table, projected to 2013 with scale BB (set back 1 year for females)		
Healthcare Trend Rates			
(Pre-65)	Initial trend starting at 7.25% at January 1, 2019, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 13 years.		
(Post-65)	Initial trend starting at 5.10%, January 1, 2019, and gradually decreasing to an ultimate trend rate of 4.05% over a period of 11 years.		

**REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON  
COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL  
STATEMENTS PERFORMED IN ACCORDANCE WITH  
*GOVERNMENT AUDITING STANDARDS***





**MIKE HARMON**  
**AUDITOR OF PUBLIC ACCOUNTS**

Report On Internal Control Over Financial Reporting And  
On Compliance And Other Matters Based On An Audit Of Financial  
Statements Performed In Accordance With *Government Auditing Standards*

Independent Auditor's Report

David Hamilton, Executive Director  
Kentucky River Authority  
Board of Directors

We have audited, in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the financial statements of the Kentucky River Authority as of and for the year ended June 30, 2020, and the related notes to the financial statements, which collectively comprise Kentucky River Authority's basic financial statements, and have issued our report thereon dated October 22, 2020.

***Internal Control Over Financial Reporting***

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

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



Report On Internal Control Over Financial Reporting And  
On Compliance And Other Matters Based On An Audit Of Financial  
Statements Performed In Accordance With *Government Auditing Standards*  
(Continued)

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

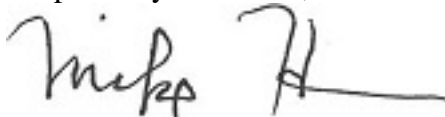
***Compliance and Other Matters***

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

***Purpose of this Report***

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

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Mike Harmon", with a long horizontal line extending to the right.

Mike Harmon  
Auditor of Public Accounts

October 22, 2020