

Commonwealth of Kentucky

Andy Beshear
Governor

FINANCE AND ADMINISTRATION CABINET
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Holly M. Johnson
Secretary
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Executive Director

March 31, 2020
The Honorable Senator Rick Girdler, Co-Chair
The Honorable Representative Walker Thomas, Co-Chair
Capital Projects and Bond Oversight Committee
Legislative Research Commission
Capitol Annex Building
Frankfort, Kentucky 40601
Dear Senator Girdler and Representative Thomas:
Listed below is information regarding various projects and reports that will be presented to the Capital Projects and Bond Oversight Committee ("CPBOC") at the April 14, 2020, meeting. Also, included pursuant to KRS 56.863(11) is the ALCo Semi-Annual Report as of December 31, 2019.

The Kentucky Infrastructure Authority ("KIA") will present the following loans for the Committee's approval:

| Fund A Loans |  |
| :--- | ---: |
| City of Smithland (P\&D) | $\$ 246,000$ |
| Paducah McCracken County Joint Sewer Agency | $\$ 5,170,000$ |
|  |  |
| Fund B Loans | $\$ 77,405$ |
| City of Flemingsburg |  |
| Fund F Loans | $\$ 5,238,230$ |

The Office of Financial Management will present five (5) new bond issue reports for the Committee's approval:

Kentucky Economic Development Finance Authority Healthcare Facilities Revenue Bonds, Series 2020A, and Taxable Series 2020B (Christian Care Communities, Inc. Obligated Group)
\$62,000,000+

[^0]State Property and Buildings Commission Revenue Bonds, Project No. 123 Federally Taxable Series A $\$ 35,000,000+$

Eastern Kentucky University General Receipts Bonds, Series 2021 \$12,720,000*

Murray State University General Receipts Bonds, Series 2021 A \& C
\$10,770,000*
Kentucky Asset/Liability Commission General Fund Refunding Project Notes, 2020 Series A \$140,000,000+

+ Not to Exceed
*Estimated
The Office of Financial Management will present one (1) informational item for the Committee's review:

Kentucky Housing Corporation Tax-Exempt Conduit Multifamily Housing Revenue Bonds (Chapel House
$\$ 13,500,000$ Apartments Project)), Series 2020, Dated March 13, 2020

The School Facilities Construction Commission is submitting the following additional information for the Committee's approval:
Daviess County
\$61,340,000*
Madison County
\$26,940,000*
*Estimated

An OFM staff member will attend the CPBO meeting to answer any questions regarding this information. Please contact me if there are any questions or should your staff require additional information.

Sincerely,


Ryan Barrow,
Executive Director

## Kentucky Infrastructure Authority <br> Projects for <br> April 2020 Capital Projects Meeting

- Fund A Loan

Loan \# Borrower
A20-024
A20-032

- Fund B Loan Loan \# Borrower
B20-001
- Fund F Loan

Loan \#
F20-002
Borrower

City of Smithland (P\&D)
Paducah McCracken County Joint Sewer Agency

City of Flemingsburg

City of Lebanon F/B/O Lebanon Water Works Company Inc.

| Amount Requested | Loan Total | County |
| :---: | :---: | :---: |
| \$ 246,000 | \$ 246,000 | Livingston |
| \$ 5,170,000 | \$ 5,170,000 | McCracken |
| Amount Requested | Loan Total | County |
| \$ 77,405 | \$ 77,405 | Fleming |
| Amount Requested | Loan Total | County |
| \$ 5,238,230 | \$ 5,238,230 | Marion |



Reviewer: Meili Sun
Date: November 7, 2019
Loan Number: A20-024 P\&D

## KENTUCKY INFRASTRUCTURE AUTHORITY WASTEWATER REVOLVING LOAN FUND (FUND A) CITY OF SMITHLAND, LIVINGSTON COUNTY PROJECT REVIEW <br> SX21139010

## I. PROJECT DESCRIPTION

The City of Smithland ("City") is seeking a KIA Fund A loan to fund the planning and design portion of the Sewer Rehabilitation project. The purpose of the planning and design work is to identify the major sources of I\&I that cause sanitary sewer overflows and eventually achieve compliance with an agreed order issued by the Division of Water. This project will consist of a Phase III SSES including flow monitoring, CCTV inspections, and field surveys to locate the sources of I\&I. It will also include evaluation of the City's influent/effluent lift station and force main networks to identify capacity related issues. Following the field studies, design will be performed to outline the scope of work for procurement and the construction portion required to address system deficiencies determined during the Phase III SSES and lift station evaluations.

The City is the county seat of Livingston County. It purchases 100\% of its water supply from Crittenden-Livingston County Water District ("CCWD") to serve approximately 180 customers within the service area. The CCWD's wholesale water rate is regulated by the Kentucky Public Service Commission.

## II. PROJECT BUDGET

Administrative Expenses
Planning

| Total |  |
| :--- | ---: |
| $\$$ | 5,000 |
|  | 145,000 |
|  | 96,000 |
| $\$$ | 246,000 |

## III. PROJECT FUNDING

KIA Fund A Loan (P\&D)

|  | Amount |
| :---: | :---: |
| $\$ 246,000$ | $100 \%$ |

## IV. KIA DEBT SERVICE

| Planning \& Design Loan |  | $\$ 246,000$ |
| :--- | ---: | ---: |
| Principal Forgiveness |  | 0 |
| Amortized Loan Amount | $\$ 246,000$ |  |
| Interest Rate |  | $2.50 \%$ |
| Loan Term (Year) | 5 |  |
| Estimated Annual Debt Service | $\$ 52,646$ |  |
| Administrative Fee (0.20\%) | 492 |  |
| Annual Debt Service | $\$$ | 53,138 |

## V. PROJECT SCHEDULE

P\&D Start
P\&D Completion
Estimated Bid Opening
Estimated Construction Start
Estimated Construction Completion

March 2020
September 2020
December 2020
January 2021
July 2021

## VI. CUSTOMER COMPOSITION AND RATE STRUCTURE

## A) Customers

Current
Residential 131
Commercial 49
Industrial
Total 180
B) Rates

|  | Water Rates |  |
| :--- | ---: | ---: |
| Date of Last Rate Increase | $09 / 15 / 18$ | $06 / 15 / 13$ |
| Minimum 2,000 Gallons | $\$ 26.24$ | $\$ 23.85$ |
| Next 3,000 Gallons | 7.51 | 6.83 |
| Next 5,000 Gallons | $\$ 41.26$ | $\$ 37.51$ |
| Cost for 4,000 gallons | $10.0 \%$ |  |
| Increase \% | $1.5 \%$ |  |
| Affordability Index (Rate/MHI) |  |  |

Sewer Rates

Date of Last Rate Increase

| Current | Prior |
| :--- | :---: |
| $09 / 15 / 18$ | $06 / 15 / 13$ |


| Minimum 2,000 Gallons | $\$ 28.62$ | $\$ 23.85$ |
| :--- | ---: | ---: |
| Next 3,000 Gallons | 8.20 | 6.83 |
| Next 5,000 Gallons | 7.38 | 6.15 |
| Cost for 4,000 gallons | $\$ 45.02$ | $\$ 37.51$ |
| Increase \% | $20.0 \%$ |  |
| Affordability Index (Rate/MHI) | $1.6 \%$ |  |

## Date of Last Rate Increase

Crittenden-Livingston WD
(per 1,000 Gallons)
Increase \%

| Purchased Water |  |  |  |
| ---: | ---: | ---: | ---: |
| Phase III | Phase II | Current | Prior |
| $05 / 23 / 21$ | $05 / 23 / 20$ | $05 / 23 / 19$ | $05 / 01 / 15$ |
|  |  |  |  |
| 3.34 | 3.08 | 2.83 | 2.58 |
| $8.44 \%$ | $8.83 \%$ | $9.69 \%$ |  |

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 335 with a Median Household Income (MHI) of $\$ 33,125$. The median household income for the Commonwealth is $\$ 46,535$. A five year loan term at $2.5 \%$ interest rate will be applied to this loan as planning and design loans are not eligible for the non-standard rate. Should the City return with the same disadvantaged community status for a construction loan after completion of the planning and design phase, the project will qualify for the nonstandard rate and term and possibly up to 50\% principal forgiveness.

| Year | Population |  | County | \% Change | County Unemployment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City | \% Change |  |  | Date | Rate |
| 1980 | 512 |  | 9,219 |  | June 2005 | 5.9\% |
| 1990 | 384 | -25.0\% | 9,062 | -1.7\% | June 2010 | 11.8\% |
| 2000 | 401 | 4.4\% | 9,804 | 8.2\% | June 2015 | 7.0\% |
| 2010 | 301 | -24.9\% | 9,519 | -2.9\% | June 2019 | 5.7\% |
| Current | 278 | -7.6\% | 9,288 | -2.4\% |  |  |
| Cumulative \% |  | -45.7\% |  | 0.7\% |  |  |

As part of the City's plan to retain population and encourage future growth, the City has started a talk with Livingston County to move the county middle school from Burna to Smithland. This project will not only assure the capacity and quality of the sewer system to facilitate potential commercial and institutional customers but also improve services for the existing customers.

## VIII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

Additional Subsidization - This project does not qualify for additional subsidization.

## IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2016 through June 30, 2018. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions is not applicable as the City does not participate in the County Employees Retirement System (CERS).

## HISTORY

Combined water and sewer revenues decreased 4.2\% from \$ 183,073 in 2016 to $\$ 175,264$ in 2018 due to declined population while operating expenses decreased $11.9 \%$ from $\$ 191,596$ in 2016 to $\$ 168,674$ in 2018 attributable to personnel cuts. Nonrecurring repair and contracted service expenses/revenues had been removed from the 2016 Statement of Revenues, Expenses, and Change in Net Position. In 2016, the state highway department contracted out the water line relocation portion of the highway 453 project to the City. The City brought in $\$ 75,000$ contracted service revenues while incurring $\$ 60,000$ expenses associated with the contract. Another reason for the higher expenses in 2016 was due to additional repair costs caused by flood damage. The debt coverage ratio was (1.8), 0.5, and 1.4 for 2016, 2017, and 2018 respectively.

The balance sheet reflects a current ratio of 0.5 , debt to equity ratio of $0.5,38.0$ days sales in accounts receivable, and 3.2 months of operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

1) Total revenues will go up 14\% in FY2020 from the previously approved rate increases.
2) Expenses will increase $2 \%$ each year for inflation.
3) After a special condition of additional $28 \%$ rate increase is met, debt service coverage is 1.2 in FY2022 when full year principal and interest repayments for the planning and design loan begin.
4) The City will be able to support a total loan amount of approximately $\$ 0.7$ million without further rate increases should the City return to pursue a construction loan from KIA after the planning and design work is completed.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

Replacement reserve is not required for a planning and design loan.

## X. DEBT OBLIGATIONS

USDA Bonds 92-03 Series

| Outstanding | Maturity |
| :---: | ---: | :---: |
| $\$ \quad 64,900$ | 2040 |

## XI. CONTACTS

| Legal Applicant |  |
| :--- | :--- |
| Name | City of Smithland |
| Address | 310 Wilson Ave, PO Box 287 |
|  | Smithland, KY 42081 |
| County | Livingston |
| Authorized Official | William Hesser, Mayor |
| Phone | $(270) 928-2446$ |
| Email | smithland@vci.net |


| Project Contact - Applicant |  |
| :--- | :--- |
| Name | Mary Wheatley, City Clerk |
| Organization | City of Smithland |
| Address | 310 Wilson Ave, PO Box 287 |
|  | Smithland, KY 42081 |
| Phone | $(270) 928-2446$ |
| Email | smithland@vci.net |


| Project Administrator |  |
| :--- | :--- |
| Name | Kyle Cunningham |
| Organization | Pennyrile ADD |
| Address | 300 Hammond Dr |
|  | Hopkinsville, KY 42240 |
| Phone | $(270) 886-9484$ |
| Email | kyle.cunningham@ky.gov |


| Consulting Engineer |  |
| :--- | :--- |
| Name | Rory Brian Flynn |
| Firm | Rivercrest Engineering Inc |
| Address | 3519 State Route 440 |
|  | Hickory, KY 42051 |
| Phone | $(270) 519-7675$ |
| Email | bflynn@rivercresteng.com |

## XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions and one special condition:

1. The City shall pass an ordinance to raise both water and sewer rates by $28 \%$ equivalent to $\$ 55,000$ on or before July 1, 2021.

## CITY OF SMITHLAND

FINANCIAL SUMMARY (JUNE YEAR END)

|  | Audited $\underline{2016}$ | Audited $\underline{2017}$ | Audited $\underline{2018}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2019} \end{aligned}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2020} \end{aligned}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2021} \end{aligned}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2022} \end{aligned}$ | $\begin{gathered} \text { Projected } \\ \underline{2023} \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance Sheet |  |  |  |  |  |  |  |  |
| Assets |  |  |  |  |  |  |  |  |
| Current Assets | 62,142 | 57,221 | 71,025 | 86,715 | 100,871 | 113,580 | 126,096 | 132,731 |
| Other Assets | 701,439 | 686,986 | 657,126 | 622,233 | 587,340 | 798,447 | 763,554 | 728,661 |
| Total | 763,581 | 744,207 | 728,151 | 708,948 | 688,211 | 912,027 | 889,650 | 861,392 |
| Liabilities \& Equity |  |  |  |  |  |  |  |  |
| Current Liabilities | 115,466 | 133,672 | 150,558 | 150,910 | 151,203 | 200,701 | 201,003 | 201,309 |
| Long Term Liabilities | 87,480 | 85,565 | 83,990 | 82,033 | 82,033 | 276,685 | 225,236 | 173,679 |
| Total Liabilities | 202,946 | 219,237 | 234,548 | 232,943 | 233,236 | 477,386 | 426,238 | 374,989 |
| Net Assets | 560,635 | 524,970 | 493,603 | 476,005 | 454,975 | 434,641 | 463,412 | 486,403 |


| Cash Flow |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues | 183,073 | 178,883 | 175,264 | 193,215 | 199,198 | 228,496 | 257,696 | 257,696 |
| Operating Expenses | 191,596 | 176,604 | 168,674 | 174,540 | 180,748 | 187,324 | 190,148 | 193,029 |
| Other Income | 60 | 53 | 57 | 57 | 57 | 57 | 57 | 57 |
| Cash Flow Before Debt Service | $(8,463)$ | 2,332 | 6,647 | 18,732 | 18,507 | 41,229 | 67,605 | 64,724 |
| Debt Service |  |  |  |  |  |  |  |  |
| Existing Debt Service | 4,806 | 4,835 | 4,759 | 4,883 | 4,951 | 4,951 | 4,951 | 4,951 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 0 | 26,569 | 53,138 | 53,138 |
| Total Debt Service | 4,806 | 4,835 | 4,759 | 4,883 | 4,951 | 31,520 | 58,089 | 58,089 |
| Cash Flow After Debt Service | $(13,269)$ | $(2,503)$ | 1,888 | 13,849 | 13,556 | 9,709 | 9,516 | 6,635 |

## Ratios

|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Current Ratio | 0.5 | 0.4 | 0.5 | 0.6 | 0.7 | 0.6 | 0.6 |
| Debt to Equity | 0.4 | 0.4 | 0.5 | 0.5 | 0.5 | 1.1 | 0.9 |
| Days Sales in Accounts Receivable | 38.0 | 41.0 | 38.0 | 38.0 | 37.9 | 37.9 | 37.8 |
| Months Operating Expenses in Unrestricted Cash | 2.7 | 2.5 | 3.2 | 4.0 | 4.8 | 5.3 | 5.8 |
|  |  |  |  | 37.8 |  |  |  |
| Debt Coverage Ratio | $(1.8)$ | 0.5 | 1.4 | 3.8 | 3.7 | 1.3 | 1.2 |



Reviewer: Ashley Adams
Date: March 5, 2020
Loan Number: A20-032

# KENTUCKY INFRASTRUCTURE AUTHORITY WASTEWATER REVOLVING LOAN FUND (FUND A) PADUCAH-MCCRACKEN COUNTY JOINT SEWER AGENCY MCCRACKEN COUNTY <br> PROJECT REVIEW <br> SX21145034 

## I. PROJECT DESCRIPTION

The Paducah-McCracken County Joint Sewer Agency is requesting a Fund A loan in the amount of $\$ 5,170,000$ for the LTCP Project \#3 - Outfall 003 Fine Screening Phase One project. The project is phase one of Project \#3 of the approved Long Term Control Plan (LTCP) for the Paducah JSA, associated with the outfall (EPA Outfall 003) located adjacent to the Paducah Wastewater Treatment Plant. The project will be constructed next to the recently completed 15 MG combined sewer wet weather tank (SX21145023), and will allow for the tank to be placed in service. The full scope of Project \#3 is the pumping and fine screening capability of 77 MGD at Outfall 003. This phase will construct the shell of the pump station, two of the four 20 MGD pumps, screening prior to the pump station, a new structure over the existing 102 inch combined sewer with modulating valve, along with various electrical and piping components.

Project \#3 is required by the approved Long Term Control Plan for the Paducah JSA. By performing this project in phases, JSA can realize increased capture volumes related to their LTCP at Outfall 003 with the expedited use of the Harrison Street Phase One 15 MG Storage Tank. Increased capture volumes promote public health by reducing Combined Sewer Overflow volumes and pollutants to the Ohio River.

The next phase of Project \#3 will include installing the final two pumps for the pump station, increasing its ultimate capacity to 80 MGD, additional fine screening, and discharge piping to the Ohio River. The final component related to Outfall 003 is listed as Project \#5 and includes the disinfection component.

## II. PROJECT BUDGET

Legal Expenses
Planning

| Total |  |
| ---: | ---: |
| $\$$ | 2,000 |
|  | 40,000 |
|  | 260,000 |
|  | 50,000 |
|  | 90,000 |
|  | 28,000 |
|  | $4,090,000$ |
|  | 610,000 |
| $\mathbf{\$}$ | $\mathbf{5 , 1 7 0 , 0 0 0}$ |

III. PROJECT FUNDING

Fund A Loan
Total

|  | Amount | $\%$ |
| :---: | ---: | :---: |
| $\$$ | $5,170,000$ | $100 \%$ |
| $\$$ | $\mathbf{5 , 1 7 0 , 0 0 0}$ | $\mathbf{1 0 0 \%}$ |

## IV. KIA DEBT SERVICE

| Construction Loan | $\$$ | $5,170,000$ |
| :--- | ---: | ---: |
| Less: Principal Forgiveness |  | 0 |
| Amortized Loan Amount | $\$$ | $5,170,000$ |
| Interest Rate |  | $0.50 \%$ |
| Loan Term (Years) | $\$$ | 271,963 |
| Estimated Annual Debt Service |  | 10,340 |
| Administrative Fee (0.20\%) | $\mathbf{\$}$ |  |
| Total Estimated Annual Debt Service | $\$$ | $\mathbf{2 8 2 , 3 0 3}$ |

## V. PROJECT SCHEDULE

Bid Opening June 2020
Construction Start August 2020
Construction Stop October 2021
VI. CUSTOMER COMPOSITION AND RATE STRUCTURE
A) Customers

|  | Current |
| :--- | ---: |
| Residential/ Commercial/ Industrial | 19,024 |
|  | $\mathbf{1 9 , 0 2 4}$ |

## B) Rates

|  | Current | Prior |
| :--- | ---: | ---: |
| Date of Last Rate Increase | $07 / 01 / 19$ | $07 / 01 / 17$ |
| Minimum (3,000 gallons) | $\$ 17.82$ | $\$ 17.49$ |
| Each Additional (1,000 gallons) | 5.94 | 5.83 |


| Cost for 4,000 gallons | $\mathbf{\$ 2 3 . 7 6}$ | $\mathbf{\$ 2 3 . 3 2}$ |
| :--- | ---: | ---: |
| Increase \% | $1.9 \%$ |  |
| Affordability Index (Rate/MHI) | $0.8 \%$ |  |

The Board may elect to adjust rates according to CPI-U annually.

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 34,452 with a Median Household Income (MHI) of $\$ 37,195$. The median household income for the Commonwealth is $\$ 46,535$. The project will qualify for a $0.50 \%$ interest rate based on MHI.

County
Population

| Year | City | \% Change | County | \% Change | Date | Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1980 | 29,315 |  | 61,310 |  | June 2005 | 6.3\% |
| 1990 | 27,256 | -7.0\% | 62,879 | 2.6\% | June 2010 | 9.0\% |
| 2000 | 26,307 | -3.5\% | 65,514 | 4.2\% | June 2015 | 5.8\% |
| 2010 | 25,024 | -4.9\% | 65,565 | 0.1\% | June 2019 | 5.4\% |
| Current | 25,046 | 0.1\% | 65,285 | -0.4\% |  |  |
| Cumulative \% |  | -14.6\% |  | 6.5\% |  |  |

## VIII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

1) Green Project Reserve - This project does not qualify for Green Project Reserve (GPR) funding.
2) Additional Subsidization - This project does not qualify for additional subsidization.

## IX. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2017 through June 30, 2019. The non-cash impact of GASB 68, Accounting and Financial Reporting for Pensions, has been removed from fiscal 20172019 operating expenses and GASB 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions, has been removed from 2018 and

2019 operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Revenues have increased 15.6\% from $\$ 7.9$ million in 2017 to $\$ 9.1$ million in 2019 mostly due to rate increases. Expenses have declined 1\% from $\$ 4.56$ million in 2017 to $\$ 4.51$ million in 2019. Debt coverage was 2.2 in 2017, 3.0 in 2018, and 2.9 in 2019. Cash flow before debt service averaged $\$ 4.3$ million for the observed time period.

The balance sheet reflects a current ratio of 4.3, a debt to equity ratio of $0.6,49.8$ days sales in accounts receivable, and 18.3 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

1) Revenues will remain flat throughout the forecast. The JSA Board has the ability to raise rates according to the CPI-U but does not do so automatically therefore this assumption was not made in the forecast.
2) Expenses will increase $2 \%$ based on inflation.
3) Debt service coverage is 1.4 in 2023 when full principal and interest repayments begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund A loan.

## REPLACEMENT RESERVE

The Agency currently has designated reserves of $\$ 3,000,000$. The reserves are specifically for high dollar capital equipment purchases, for emergencies, or for rate stabilization in the event of a loss of a substantial revenue stream. No additional reserves will be required.

## X. DEBT OBLIGATIONS

|  | Outstanding | Maturity |
| :--- | ---: | :---: |
| Sewer Revenue Bonds (Series 2012) | $\$ 3,938,500$ | 2051 |
| Sewer Revenue Bonds (Series 2014) | $3,290,000$ | 2031 |
| KIA Loan A03-01 | 335,514 | 2023 |
| KIA Loan A03-08 | 458,456 | 2026 |
| KIA Loan A04-03 | 291,789 | 2025 |
| KIA Loan A08-01 | 839,989 | 2029 |
| KIA Loan A09-02 | $4,524,331$ | 2033 |
| KIA Loan A12-08 | $6,119,644$ | 2035 |
| KIA Loan A16-072 | $2,142,109$ | 2038 |


|  | Outstanding | Maturity <br> KIA Loan A19-044 i/a/o \$2,314,500 <br> KIA Loan A19-039 i/a/o \$5,193,000 <br> Total |
| :--- | :--- | :---: |
|  |  | TBD |

## XI. CONTACTS

| Legal Applicant |  |
| :--- | :--- |
| Entity Name | Paducah McCracken County Joint Sewer Agency |
| Authorized Official | Justin Hancock (Board Chairman) |
| County | McCracken |
| Email | justin@hancocks-paducah.com |
| Phone | 270-575-0056 |
| Address | 621 Northview St |
|  | Paducah, KY 42001 |


| Project Administrator |  |
| :--- | :--- |
| Name | John Hodges |
| Organization | Paducah McCracken County Joint Sewer Agency |
| Email | jhodges@jointsewer.com |
| Phone | 270-575-0056 |
| Address | 621 Northview St |
|  | Paducah, KY 42001 |


| Consulting Engineer |  |
| :--- | :--- |
| PE Name | J. Gregory Davenport |
| Firm Name | J.R. Wauford \& Company |
| Email | gregd@jrwauford.com |
| Phone | $615-883-3242$ |
| Address | PO Box 140350 |
|  | Nashville, TN 37214 |

## XII. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard.

## PADUCAH MCCRACKEN COUNTY JOINT SEWER AGENCY

 FINANCIAL SUMMARY (JUNE YEAR END)|  | Audited | Audited | Audited | Projected | Projected <br> Projected | Projected | Projected <br> (2017 | $\underline{\mathbf{2 0 1 8}}$ | $\underline{\mathbf{2 0 1 9}}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| Cash Flow |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues | 7,948,802 | 9,142,934 | 9,192,706 | 9,367,367 | 9,367,367 | 9,367,367 | 9,367,367 | 9,367,367 |
| Operating Expenses | 4,569,420 | 4,454,330 | 4,519,970 | 4,610,369 | 4,702,576 | 4,796,628 | 4,892,561 | 4,990,412 |
| Other Income | 16,101 | 85,832 | 230,677 | 230,677 | 230,677 | 230,677 | 230,677 | 230,677 |
| Cash Flow Before Debt Service | 3,395,483 | 4,774,436 | 4,903,413 | 4,987,675 | 4,895,468 | 4,801,416 | 4,705,483 | 4,607,632 |
| Debt Service |  |  |  |  |  |  |  |  |
| Existing Debt Service | 1,556,594 | 1,604,158 | 1,681,385 | 1,804,002 | 2,556,018 | 3,039,191 | 3,104,030 | 2,999,698 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 0 | 141,152 | 282,303 | 282,303 |
| Total Debt Service | 1,556,594 | 1,604,158 | 1,681,385 | 1,804,002 | 2,556,018 | 3,180,343 | 3,386,333 | 3,282,001 |
| Cash Flow After Debt Service | 1,838,889 | 3,170,278 | 3,222,028 | 3,183,673 | 2,339,450 | 1,621,074 | 1,319,150 | 1,325,631 |


|  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Ratios |  |  |  |  |  |  |  |
| Current Ratio | 5.4 | 7.1 | 4.3 | 6.0 | 5.3 | 3.8 | 3.8 |
| Debt to Equity | 0.5 | 0.5 | 0.6 | 0.5 | 0.6 | 0.6 | 0.6 |
| Days Sales in Accounts Receivable | 49.3 | 51.7 | 49.8 | 49.8 | 49.8 | 49.8 | 49.8 |
| Months Operating Expenses in Unrestricted Cash | 17.2 | 13.1 | 18.3 | 18.7 | 19.0 | 19.0 | 18.9 |
|  |  |  |  | 18.8 |  |  |  |
| Debt Coverage Ratio | 2.2 | 3.0 | 2.9 | 2.8 | 1.9 | 1.5 | 1.4 |



Date: March 5, 2020
Loan Number: B20-001

## KENTUCKY INFRASTRUCTURE AUTHORITY INFRASTRUCTURE REVOLVING LOAN FUND (FUND B) <br> ENTITY, FLEMING COUNTY <br> PROJECT REVIEW <br> WX21069039

## I. PROJECT DESCRIPTION

The City of Flemingsburg ("City") is requesting a Fund B loan in the amount of \$77,405 for the E Water St, E Main St, and Mills Ave Waterline Replacement project. This project involves replacement of approximately 1,650 linear feet of asbestos cement distribution mains along East Water Street with 6-inch PVC waterline, and 600 linear feet of cast iron distribution mains along East Main Street and Mills Avenue with 2inch PVC waterline. The project will also replace and reconnect 32 customer meters.

The City purchases over 80\% of its water supply from the Greater Fleming Regional Water Commission and the City of Maysville to serve approximately 1,900 existing customers.

## II. PROJECT BUDGET

Administrative Expenses
Engineering Fees - Design
Engineering Fees - Construction
Engineering Fees - Inspection
Construction
Contingency
Total

## III. PROJECT FUNDING

KIA Fund B Loan
ARC Grant
Total

|  | Amount | $\%$ |
| ---: | ---: | :---: |
| $\$$ | 77,405 | $30 \%$ |
|  | 180,610 | $70 \%$ |

\$ 258,015 100\%

## IV. KIA DEBT SERVICE

| Construction Loan | $\$$ | 77,405 |
| :--- | ---: | ---: |
| Principal Forgiveness |  | 0 |
| Amortized Loan Amount | $\$$ | 77,405 |
| Interest Rate |  | $0.50 \%$ |
| Loan Term (Year) | $\$$ | 4,072 |
| Estimated Annual Debt Service |  | 200 |
| Administrative Fee (0.20\%) | $\mathbf{4 , 4 7 2}$ |  |

## V. PROJECT SCHEDULE

Bid Opening June 2020
Construction Start August 2020
Construction Stop November 2020

## VI. RATE STRUCTURE

## A. Customers

| Customers | Current |
| :--- | ---: |
| Residential | 1,626 |
| Commercial | 240 |
| Industrial | 2 |
| Total | 1,872 |

B. Rates

|  | Water Inside City |  | Water Outside City |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Current | Prior | Current | Prior |
| Date of Last Rate Increase | $04 / 01 / 19$ | $04 / 01 / 18$ | $04 / 01 / 19$ | $04 / 01 / 18$ |
|  |  |  |  |  |
| First 2,000 Gallons | $\$ 19.32$ | $\$ 18.96$ | $\$ 24.87$ | $\$ 24.41$ |
| Next 3,000 Gallons | 9.07 | 8.90 | 12.16 | 11.93 |
| Cost for 4,000 gallons | $\$ 37.46$ | $\$ 36.76$ | $\$ 49.19$ | $\$ 48.27$ |
| Increase \% | $1.9 \%$ |  | $1.9 \%$ |  |
| Affordability Index (Rate/MHI) | $1.3 \%$ | $1.3 \%$ | $1.8 \%$ | $1.7 \%$ |


|  | Sewer Inside City |  | Sewer Outside City |  |
| :--- | ---: | ---: | ---: | ---: |
|  | Current | Prior | Current | Prior |
| Date of Last Rate Increase | $04 / 01 / 19$ | $04 / 01 / 18$ | $04 / 01 / 19$ | $04 / 01 / 18$ |
|  |  |  |  |  |
| First 2,000 Gallons | $\$ 23.25$ | $\$ 22.82$ | $\$ 25.82$ | $\$ 25.34$ |
| Next 2,000 Gallons | 9.00 | 8.83 | 10.12 | 9.93 |
| Cost for 4,000 gallons | $\$ 41.25$ | $\$ 40.48$ | $\$ 46.06$ | $\$ 45.20$ |
| Increase \% | $1.9 \%$ |  | $1.9 \%$ |  |
| Affordability Index (Rate/MHI) | $1.5 \%$ | $1.5 \%$ | $1.7 \%$ | $1.6 \%$ |

The City has adopted a CPI clause since 2003 to automatically adjust rates each year based on the Consumer Price Index.

## VII. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 3,014 with a Median Household Income (MHI) of $\$ 33,304$. The median household income for the Commonwealth is $\$ 46,535$. The project will qualify for a $0.50 \%$ interest rate with its Median Household Income below $80 \%$ of the State median.

| Year | Population |  | County | \% Change | County Unemployment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City | \% Change |  |  | Date | Rate |
| 1980 | 2,835 |  | 12,323 |  | June 2005 | 6.2\% |
| 1990 | 3,071 | 8.3\% | 12,292 | -0.3\% | June 2010 | 11.2\% |
| 2000 | 3,010 | -2.0\% | 13,792 | 12.2\% | June 2015 | 6.5\% |
| 2010 | 2,658 | -11.7\% | 14,348 | 4.0\% | June 2019 | 6.0\% |
| Current | 2,869 | 7.9\% | 14,515 | 1.2\% |  |  |
| Cumulative \% |  | 1.2\% |  | 17.8\% |  |  |

## VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2017 through June 30, 2019. The non-cash impacts of GASB 68 Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit had been removed from operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented. The City of Flemingsburg's Proprietary Fund is comprised of water, sewer, and gas operations, the financial statements are consolidated in this analysis.

## HISTORY

Total combined revenues (water, sewer, gas) increased $7.8 \%$ from $\$ 2.55$ million in 2017 to $\$ 2.75$ million in 2019 due to annual CPI rate increases and higher volume of gas services. Operating expenses went up $9.2 \%$ from $\$ 1.88$ million to $\$ 2.05$ million during the same period attributable to higher gas purchase costs to meet the demand. Gas operation contributed an average of $\$ 240,000$ cash flow per year to the proprietary fund during the 3 years. The debt coverage ratio was $0.9,1.6$, and 1.5 for 2017, 2018, and 2019 respectively.

The consolidated Balance sheet reflects a current ratio of 4.4, a debt to equity ratio of $0.8,34.5$ days of sales in accounts receivable, and 14.2 months of operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

1) Revenues will go up approximately $2 \%$ annually due to rate adjustments based on the Consumer Price Index.
2) Operating expenses will increase each year by $2 \%$ for inflation.
3) The City will receive a grant in the amount of $\$ 180,610$ from ARC to co-fund the project.
4) Debt coverage ratio is 1.6 in 2021 when full year principal and interest repayments are expected to begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund B loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5\% (\$4,000 total) of the final amount borrowed (prior to principal forgiveness, if any) to be funded annually (\$200 yearly) each December 1 for 20 years and maintained for the life of the loan.

## IX. DEBT OBLIGATIONS

General Obligation Bonds
KIA Loan A11-01
KIA Loan A12-19
KIA Loan B18-005 i.a.o. \$132,046
Total

|  | Outstanding | Maturity |
| ---: | ---: | :---: |
| $\$$ | $1,867,050$ | 2054 |
|  | $6,097,176$ | 2035 |
|  | 131,337 | 2035 |
|  |  | TBD |
| $\mathbf{\$}$ | $\mathbf{8 , 0 9 5 , 5 6 3}$ |  |

## X. CONTACTS

| Legal Applicant |  |
| :--- | :--- |
| Name | City of Flemingsburg |
| Address | 140 W Electric Ave, PO Box 406 |
|  | Flemingsburg, KY 41056 |
| County | Fleming |
| Authorized Official | Robert Money |
| Phone | (606)845-5951 |
| Email | mayor@flemingsburgky.org |


| Project Contact - Applicant |  |
| :--- | :--- |
| Name | Cindy Ring |
| Organization | Buffalo Trace Area Development District |
| Address | PO Box 460 |
|  | Maysville, KY 41056 |
| Phone | (606) 564-6894 |
| Email | cring@btadd.com |

## Project Administrator

| Name | Kristie Dodge |
| :--- | :--- |
| Organization | Buffalo Trace Area Development District |
| Address | PO Box 460 |
|  | Maysville, KY 41056 |
| Phone | $(606) 564-6894$ |
| Email | kdodge@btadd.com |


| Consulting Engineer |  |
| :--- | :--- |
| Name | Matthew Curtis |
| Firm | Bluegrass Engineering, PLLC |
| Address | PO Box 1657, 222 E Main St, Suite 1 |
|  | Georgetown, KY 40324 |
| Phone | (502) 370-6551 |
| Email | mcurtis@bluegrassengineering.net |

## XI. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions.

## CITY OF FLEMINGSBURG <br> FINANCIAL SUMMARY (JUNE YEAR END)

|  | Audited $\underline{2017}$ | Audited $\underline{2018}$ | Audited $\underline{2019}$ | $\begin{gathered} \text { Projected } \\ \underline{2020} \end{gathered}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2021} \end{aligned}$ | $\begin{gathered} \text { Projected } \\ \underline{2022} \end{gathered}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2023} \end{aligned}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2024} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance Sheet |  |  |  |  |  |  |  |  |
| Assets |  |  |  |  |  |  |  |  |
| Current Assets | 2,760,638 | 2,602,431 | 2,771,941 | 2,804,900 | 2,838,922 | 2,874,785 | 2,912,793 | 2,952,936 |
| Other Assets | 20,892,494 | 20,818,571 | 20,304,750 | 19,990,692 | 20,093,029 | 20,052,235 | 19,771,821 | 19,510,831 |
| Total | 23,653,132 | 23,421,002 | 23,076,691 | 22,795,592 | 22,931,951 | 22,927,020 | 22,684,614 | 22,463,766 |
| Liabilities \& Equity |  |  |  |  |  |  |  |  |
| Current Liabilities | 695,567 | 621,393 | 631,278 | 637,536 | 654,842 | 661,213 | 668,218 | 673,259 |
| Long Term Liabilities | 9,324,624 | 9,578,560 | 9,336,825 | 8,945,816 | 8,671,847 | 8,339,167 | 7,924,476 | 7,507,145 |
| Total Liabilities | 10,020,191 | 10,199,953 | 9,968,103 | 9,583,352 | 9,326,689 | 9,000,379 | 8,592,694 | 8,180,403 |
| Net Assets | 13,632,941 | 13,221,049 | 13,108,588 | 13,212,240 | 13,605,262 | 13,926,641 | 14,091,920 | 14,283,363 |

## Cash Flow

Revenues
Operating Expenses

Other Income
Cash Flow Before Debt Service

## Debt Service

Existing Debt Service
Proposed KIA Loan
Total Debt Service
Cash Flow After Debt Service

| $2,548,744$ | $2,745,816$ | $2,750,077$ | $2,804,126$ | $2,859,256$ | $2,915,488$ | $2,972,845$ | $3,031,349$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| $1,878,455$ | $2,036,078$ | $2,051,897$ | $2,086,585$ | $2,122,497$ | $2,158,586$ | $2,195,397$ | $2,232,944$ |
| 5,444 | 7,167 | 28,187 | 28,187 | 28,187 | 28,187 | 28,187 | 28,187 |
| 675,733 | 716,905 | 726,367 | 745,728 | 764,946 | 785,089 | 805,635 | 826,592 |
|  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
| 752,277 | 499,377 | 498,460 | 467,285 | 474,615 | 475,229 | 475,336 | 475,935 |
| 0 | 0 | 0 | 0 | 2,114 | 4,227 | 4,227 | 4,227 |
| 752,277 | 499,377 | 498,460 | 467,285 | 476,729 | 479,456 | 479,563 | 480,162 |
| $(76,544)$ | 217,528 | 227,907 | 278,443 | 288,217 | 305,633 | 326,072 | 346,430 |

## Ratios

|  |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| Current Ratio | 4.0 | 4.2 | 4.4 | 4.4 | 4.3 | 4.3 | 4.4 | 4.4 |
| Debt to Equity | 0.7 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 | 0.6 | 0.6 |
| Days Sales in Accounts Receivable | 32.2 | 35.6 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 | 34.5 |
| Months Operating Expenses in Unrestricted Cash | 16.2 | 13.8 | 14.2 | 14.2 | 14.1 | 14.0 | 14.0 | 13.9 |
|  |  |  |  |  |  | 1.6 |  |  |
| Debt Coverage Ratio | 0.9 | 1.4 | 1.5 | 1.6 | 1.6 | 1.6 | 1.7 |  |



## KENTUCKY INFRASTRUCTURE AUTHORITY DRINKING WATER STATE REVOLVING FUND (FUND F) CITY OF LEBANON F/BIO LEBANON WATER WORKS COMPANY INC MARION COUNTY PROJECT REVIEW <br> WX21155044

## I. PROJECT DESCRIPTION

The City of Lebanon ("City") is requesting a Fund F loan in the amount of \$5,238,230 for the Water Main Replacement project. This project will replace old water mains located along Old Calvary Road and other main feed lines through downtown and central supply areas. The scope of work involves 80,000 linear feet of old cast iron lines, galvanized water mains of various sizes, and adjacent old service lines. Many of the older service lines may still have lead gooseneck connections that will be removed. The purpose of this project is to improve water quality and increase flow in areas where pipes are prone to frequent breaks and leaks. The removal of potential lead connections will also ensure safe water distribution to the customers.

The City produces $86 \%$ of its water supply and purchases the remainder from the City of Campbellsville ("Campbellsville") to serve approximately 2,600 retail customers and supplies wholesale water to the Marion County Water District (MCWD) which is a PSC regulated utility.

## PROJECT BUDGET

Administrative Expenses
Legal Expenses
Planning
Engineering Fees - Design
Engineering Fees - Construction
Engineering Fees - Inspection
Engineering Fees - Other
Construction
Contingency
Total

| Total |  |
| :---: | ---: |
| $\$ \quad 12,500$ |  |

6,150
45,000
205,541
88,089
156,000
15,000
4,281,750
428,200
\$ 5,238,230

## II. PROJECT FUNDING

KIA Fund F Loan
III. KIA DEBT SERVICE

Construction Loan
Principal Forgiveness
Amortized Loan Amount
Interest Rate
Loan Term (Year)
Estimated Annual Debt Service
Administrative Fee (0.25\%)
Total Estimated Annual Debt Service

| $\$$ | $5,238,230$ |
| ---: | ---: |
|  | $1,300,000$ |
| $\$$ | $3,938,230$ |
|  | $0.50 \%$ |
|  | 30 |
| $\$$ | 141,530 |
|  | 9,846 |
| $\$$ | 151,375 |

## IV. PROJECT SCHEDULE

Bid Opening July 2020
Construction Start November 2020
Construction Stop March 2022
V. CUSTOMER COMPOSITION AND RATE STRUCTURE
A) Customers

| Customers | Current |
| :--- | ---: |
| Residential | 2,538 |
| Commercial | 47 |
| Industrial | 41 |
|  | 2,626 |

B) Rates

Date of Last Rate Increase

| Inside City Water |  | Outside City Water |  |
| :---: | :---: | :---: | :---: |
| Current | Prior | Current | Prior |
| $07 / 08 / 19$ | $11 / 15 / 17$ | $07 / 08 / 19$ | $11 / 15 / 17$ |


| Meter Charge | $\$ 7.35$ | $\$ 7.35$ | $\$ 8.09$ | $\$ 8.09$ |
| :--- | ---: | ---: | ---: | ---: |
| Per 100 Cubic Feet | 3.50 | 3.35 | 3.85 | 3.69 |
| Cost for 4,000 gallons | $\$ 26.19$ | $\$ 25.38$ | $\$ 28.82$ | $\$ 27.96$ |
| Increase \% | $3.2 \%$ |  | $3.1 \%$ |  |
| Affordability Index (Rate/MHI) | $1.0 \%$ | $1.0 \%$ | $1.2 \%$ | $1.1 \%$ |


|  | Wholesale Water to MCWD |  |  |
| :--- | ---: | ---: | ---: |
|  | Proposed | Current | Prior |
| Date of Last Rate Increase | $09 / 15 / 20$ | $11 / 15 / 19$ | $04 / 16 / 18$ |
|  |  |  |  |
| Rate Case Expense Surcharge* | $\$ 2,000.00$ | $\$ 2,000.00$ | $\$ 2,000.00$ |
| Meter Charge | 7.84 | 7.84 | 7.84 |
| Per 100 Cubic Feet | 3.25 | 3.07 | 2.90 |
| Cost for 4,000 gallons | $\$ 25.22$ | $\$ 24.26$ | $\$ 23.45$ |
| Increase $\%$ | $4.0 \%$ | $3.4 \%$ |  |

* Marion County Water District was ordered by the PSC to pay the City a $\$ 2,000$ monthly surcharge from July 2018 to June 2020 to reimburse the legal fees incurred by the City for the 2017 rate case.


## VI. DEMOGRAPHICS

Based on current Census data from the American Community Survey 5-Year Estimate 2013-2017, the Utility's service area population was 6,144 with a Median Household Income (MHI) of $\$ 30,025$. The median household income for the Commonwealth is $\$ 46,535$. The project will qualify for a $0.5 \%$ interest rate and $\$ 1,300,000$ in principal forgiveness.

| Year | Population |  |  | \% Change | County Unemployment |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | City | \% Change | County |  | Date | Rate |
| 1980 | 6,590 |  | 17,910 |  | June 2005 | 6.2\% |
| 1990 | 5,695 | -13.6\% | 16,499 | -7.9\% | June 2010 | 11.9\% |
| 2000 | 5,718 | 0.4\% | 18,212 | 10.4\% | June 2015 | 5.2\% |
| 2010 | 5,539 | -3.1\% | 19,820 | 8.8\% | June 2019 | 4.4\% |
| Current | 5,584 | 0.8\% | 19,335 | -2.4\% |  |  |
| Cumulative \% |  | -15.3\% |  | 8.0\% |  |  |

## VII. 2019 CAPITALIZATION GRANT EQUIVALENCIES

Additional Subsidization - This project qualifies for additional subsidization. Principal forgiveness of $50 \%$ of the assistance amount, not to exceed $\$ 1,300,000$ will be credited to the loan balance upon release of liens on all contracts and disbursement of the final draw request by KIA to the borrower.

## VIII. FINANCIAL ANALYSIS

Financial information was obtained from the audited financial statements for the years ended June 30, 2017 through June 30, 2019. The non-cash impacts of GASB 68 Accounting and Financial Reporting for Pensions and GASB 75 - Other Postemployment Benefit have been removed from the operating expenses. Percentage references in the History section below are based on whole dollar amounts and not the rounded amounts presented.

## HISTORY

Revenues increased 19.1\% from $\$ 2.71$ million in 2017 to $\$ 3.23$ million in 2019 due to volume and rate increases. Operating expenses increased $42.2 \%$ from $\$ 1.79$ million to $\$ 2.55$ million during the same period. The water purchase costs went up from $\$ 0$ in 2017 to $\$ 390,000$ in 2019 after the City began to purchase water from Campbellsville in 2018. The Maintenance and Repairs costs were also higher in 2019 due to clear well cleaning, purchase of safety equipment, and repairs or replacements of aged meters. The debt coverage ratio was $2.2,1.4$, and 1.4 in 2017, 2018, and 2019 respectively.

The balance sheet reflects a current ratio of 0.8, a debt to equity ratio of 1.2, 47.5 days of sales in accounts receivable, and 1.4 months operating expenses in unrestricted cash.

## PROJECTIONS

Projections are based on the following assumptions:

1) Total revenues will go up approximately $5 \%$ by 2021 due to previously approved retail and wholesale rate increases.
2) A new industrial customer, Diageo Distillery, will initiate operations in FY 2021 and contribute at least \$700,000 additional revenues each year to the City.
3) Water purchase costs will increase $4 \%$ by 2023 to meet the quantity requirement of the Campbellsville service agreement.
4) Water treatment costs will increase 3\% in 2021 for the additional volume used by Diageo Distillery.
5) Operating expenses other than water purchase and treatment costs will increase $2 \%$ annually for inflation.
6) Debt service coverage is 1.3 in 2023 when full year principal and interest repayments are expected to begin.

Based on the pro forma assumptions, the utility shows adequate cash flow to repay the KIA Fund F loan.

## REPLACEMENT RESERVE

The replacement reserve will be 5\% (\$262,000 total) of the final amount borrowed prior to principal forgiveness to be funded annually (\$13,100 yearly) each December 1 for 20 years and maintained for the life of the loan.

## IX. DEBT OBLIGATIONS

KIA Loan B08-09
KIA Loan F15-057
KIA Loan F14-036
KIA Loan F18-006 i.a.o. \$4,497,137
CNB Note, 2012

| Outstanding | Maturity |  |
| ---: | ---: | :---: |
| $\$ 350,263$ | 2030 |  |
|  | 635,784 | 2036 |
|  | $2,048,266$ | TBD |
| 623,727 | TBD |  |
|  | $2,758,144$ | 2030 |
|  | 51,546 | 2020 |
| $\$ \mathbf{6 , 4 6 7 , 7 3 0}$ |  |  |

## X. CONTACTS

## Legal Applicant

| Name | City of Lebanon |
| :--- | :--- |
| Address | PO Box 840 |
|  | Lebanon, KY 40033 |
| County | Marion |
| Authorized Official | Gary D. Crenshaw, Mayor |
| Phone | $(270) 692-6272$ <br> Email |


| Project Contact - Applicant |  |
| :--- | :--- |
| Name | Daren Thompson |
| Organization | Lebanon Water Works Company |
| Address | 120 S Proctor Knott Ave |
|  | Lebanon, KY 40033 |
| Phone | $(270) 692-2491$ <br> Email |

## Project Administrator

| Name | Holly Nicholas |
| :--- | :--- |
| Organization | Kentucky Engineering Group, PLLC |
| Address | PO Box 1034 |
|  | Versailles, KY 40383 |
| Phone | $(859) 333-9742$ |
| Email | hnicholas@kyengr.com |


| Consulting Engineer |  |
| :--- | :--- |
| Name | James C. Thompson |
| Firm | Kentucky Engineering Group, PLLC |
| Address | 161 North Locust Street |
|  | Versailles, KY 40383 |
| Phone | (859) 251-4127 <br> Email |
|  | jthompson@kyengr.com |

## XI. RECOMMENDATIONS

KIA staff recommends approval of the loan with the standard conditions.

CITY OF LEBANON FIBIO LEBANON WATER WORKS COMPANY INC FINANCIAL SUMMARY (JUNE YEAR END)

|  | Audited $\underline{2017}$ | Audited $\underline{2018}$ | Audited $\underline{2019}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2020} \end{aligned}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2021} \end{aligned}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2022} \end{aligned}$ | $\begin{gathered} \text { Projected } \\ \underline{2023} \end{gathered}$ | $\begin{aligned} & \text { Projected } \\ & \underline{2024} \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance Sheet |  |  |  |  |  |  |  |  |
| Assets |  |  |  |  |  |  |  |  |
| Current Assets | 1,315,012 | 1,106,450 | 852,765 | 912,155 | 963,900 | 1,157,898 | 1,209,575 | 1,223,542 |
| Other Assets | 14,134,160 | 14,371,184 | 16,137,911 | 15,496,240 | 19,216,676 | 23,901,761 | 23,091,734 | 22,131,570 |
| Total | 15,449,172 | 15,477,634 | 16,990,676 | 16,408,395 | 20,180,576 | 25,059,658 | 24,301,309 | 23,355,112 |
| Liabilities \& Equity |  |  |  |  |  |  |  |  |
| Current Liabilities | 625,652 | 797,732 | 1,122,160 | 1,092,273 | 1,210,258 | 1,364,332 | 1,387,637 | 1,417,180 |
| Long Term Liabilities | 6,918,807 | 7,569,849 | 8,303,231 | 7,897,883 | 10,884,587 | 14,171,510 | 13,510,298 | 12,833,244 |
| Total Liabilities | 7,544,459 | 8,367,581 | 9,425,391 | 8,990,156 | 12,094,845 | 15,535,842 | 14,897,935 | 14,250,423 |
| Net Assets | 7,904,713 | 7,110,053 | 7,565,285 | 7,418,239 | 8,085,731 | 9,523,816 | 9,403,374 | 9,104,688 |


| Cash Flow |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Revenues | 2,708,423 | 3,039,614 | 3,227,184 | 3,356,708 | 3,519,401 | 4,118,771 | 4,118,771 | 4,118,771 |
| Operating Expenses | 1,794,032 | 2,444,908 | 2,551,826 | 2,614,226 | 2,781,633 | 2,954,242 | 3,123,966 | 3,312,518 |
| Other Income | 8,723 | 19,562 | 64,137 | 39,337 | 39,337 | 39,337 | 39,337 | 39,337 |
| Cash Flow Before Debt Service | 923,114 | 614,268 | 739,495 | 781,819 | 777,105 | 1,203,866 | 1,034,142 | 845,590 |
| Debt Service |  |  |  |  |  |  |  |  |
| Existing Debt Service | 423,100 | 449,894 | 541,297 | 569,248 | 624,381 | 624,379 | 624,380 | 624,381 |
| Proposed KIA Loan | 0 | 0 | 0 | 0 | 0 | 0 | 151,375 | 151,375 |
| Total Debt Service | 423,100 | 449,894 | 541,297 | 569,248 | 624,381 | 624,379 | 775,755 | 775,756 |
| Cash Flow After Debt Service | 500,014 | 164,374 | 198,198 | 212,571 | 152,724 | 579,487 | 258,387 | 69,834 |


| Ratios |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current Ratio | 2.1 | 1.4 | 0.8 | 0.8 | 0.8 | 0.8 | 0.9 | 0.9 |
| Debt to Equity | 1.0 | 1.2 | 1.2 | 1.2 | 1.5 | 1.6 | 1.6 | 1.6 |
| Days Sales in Accounts Receivable | 48.1 | 57.7 | 47.5 | 47.5 | 47.5 | 47.5 | 47.5 | 47.5 |
| Months Operating Expenses in Unrestricted Cash | 4.8 | 1.9 | 1.4 | 1.6 | 1.6 | 2.0 | 2.1 | 2.0 |
| Debt Coverage Ratio | 2.2 | 1.4 | 1.4 | 1.4 | 1.2 | 1.9 | 1.3 | 1.1 |

## KEDFA Bond Information Form

Name of Issue:<br>Name of project(s) covered by Issue:

Kentucky Economic Development Finance Authority Healthcare Facilities Revenue Bonds, Series 2020A and Taxable Series 2020B (Christian Care Communities, Inc. Obligated Group) (the "Bonds"). The 2020A Bonds will be federally tax-exempt and issued in an aggregate principal amount not expected to exceed $\$ 55,000,000$. The 2020B Bonds will be federally taxable and issued in an aggregate principal amount not expected to exceed $\$ 7,000,000$.

The following locations of the Christian Care Communities, Inc. Obligated Group:

- Christian Care Communities, Inc./Christian Health Center (Louisville)
- The Broadhurst Group, Inc./Corporate Office s for all facilities (Louisville)
- Christian Care Communities, Inc./Christian Health Center (Bowling Green)
- Christian Care Communities, Inc./Village Manor (Bowling Green)
- Christian Care Assisted Living Bowling Green, Inc. (Bowling Green)
- Christian Care Communities, Inc./Christian Health Center (Corbin)
- Christian Care Communities, Inc./Village at Corbin (Corbin)
- Christian Care Communities, Inc./Christian Health Center (Hopkinsville)
- Christian Care Communities, Inc./Chambers Court (Hopkinsville)
- Christian Care Communities, Inc./Cornell Memory Center (Hopkinsville)
- Christian Care Communities, Inc./Cox Mill Court (Hopkinsville)
- Christian Care Communities, Inc./Village Manor (Hopkinsville)
- Christian Care Communities, Inc./Friendship House of Hopkinsville (Hopkinsville)
- Christian Care Communities,

Inc./Central Adult Day Center (Lexington)

- Christian Care Communities, Inc./Maplebrook Village (Owensboro)
- Christian Care Communities, Inc./Garden Grace (Owensboro)
- Christian Care Services, Inc./Bridgepointe at Ashgrove Woods (Nicholasville)


## Purpose of Issue:

Size:
Proposed date of Sale:
Proposed date of Issue: Maturity:

The purpose of the Bonds is to (i) refinance the 2016 Bonds issued by KEDFA for the benefit of the Obligated Group and certain other taxable indebtedness (bank loans) of the members of the Obligated Group (collectively, the "Prior Debt"), the proceeds of which Prior Debt were used to finance and refinance health care and health related facilities, including long-term care facilities and housing for the aged or infirm, located in the Commonwealth and owned and/or operated by the members of the Obligated Group (collectively, the "Prior Project"), (ii) finance and refinance the costs of the acquisition, construction and equipping of health care and health related facilities, including long-term care facilities and housing for the aged or infirm, located in the Commonwealth and owned and/or operated by the members of the Obligated Group (collectively, the "New Project" and, together with the Prior Project, the "Project"), (iii) fund capitalized interest on all or a portion of the Bonds, (iv) fund a debt service reserve for the Bonds and (v) pay costs of issuance of the Bonds. The "Obligated Group" will include Christian Care Communities, Inc. ("CCC") and the following affiliates: The Broadhurst Group, Inc., Christian Care Services, Inc., Christian Care Properties, Inc., Christian Care Communities Foundation, Inc. and Christian Care Assisted Living - Bowling Green, Inc. The members of the Obligated Group will be jointly and severally liable for certain indebtedness incurred by one or more members of the Obligated Group.

Not to exceed $\$ 62,000,000$
May $13,2020^{*}$
May 27, 2020*
January 1, 2055

[^1]Ratings: Unrated
Security:Joint and several obligation of members of ObligatedGroup pursuant to a master trust indenture; gross revenuespledge of members of Obligated Group; mortgage on keyoperating facilities.
Date authorizations(s): February 27, 2020 (Inducement); and March 26, 2020 (anticipated)(Final)
Net Proceeds for Financing/Refinancing: ..... \$51,370,591*
Plus: Issuance Cost ..... \$1,282,545*
Plus: Debt Service Reserve Fund ..... \$3,524,700*
Plus: Capitalized Interest ..... $\$ 0^{*}$
GROSS PROCEEDS (Series 2020AB): ..... $\$ 56,177,836^{*}$
Terms of issue: 35 Years* Net interest rate: 4.70\%
Length of term: Final maturity 35 years
Gross debt service amount: ..... \$113,850,800
Average annual debt service: ..... \$3,292,071
First call date: TBD depending on Premium at first call: TBD structure and market conditions
Method of sale: Negotiated
Purchasers: Institutional and Accredited Investors

## Professional Services

Pursuant to the provisions of KRS Chapter 47, the
Agency:
Issue:
is providing information on all costs associated, either directly or indirectly, with the issuance of revenue bonds or notes.
Payee Name/Address*
Kentucky Eco
Development
Finance Authority
Old Capitol Annex
300 West Broadway
Frankfort, KY 40601

| Cain Brothers | Underwriter's Discount | 650,000 |
| :--- | :--- | :--- |
| Ice Miller LLP | Bond Counsel Fee and Expenses | 140,000 |
| Seiller Waterman LLC | Borrower Counsel Fee and <br> Expenses | 75,000 |
| Harris Beach PLLC | Underwriter's Counsel Fee and <br> Expenses | 75,000 |
| Dixon Hughes Goodman <br> LLP | Feasibility Study Consultant | 95,000 |
| Stites \& Harbison, PLLC | Issuer's Counsel Fee and Expenses | 15,000 |
| Trustee TBD |  |  |

* Payees listed shall include issuers, underwriters, placement agents and advisors, financial advisors, remarketing agents, credit enhancers, trustees, accountants, and the counsel of all such persons, bond counsel, special tax counsel, and any other persons receiving financing benefit from the issuance of revenue bonds or notes.

All costs of issuance paid from Bond proceeds.

Note: Changes or additions in amounts or names of payees or recipients shall be furnished to the Capital Projects and Bond Oversight Committee and the Interim Joint Committee on Appropriations and Revenue, and shall be made available to the public, within three (3) days following such change or addition.

SOURCES AND USES (see attachment)

| Sources: | Bond Proceeds | \$52,585,000 |
| :---: | :---: | :---: |
|  | Premium | 3,592,836 |
|  | Total Sources | \$56,177,836 |
| Debt Service: | (See Attachment) |  |
| Uses: | Refunding Series 2016 Bonds | \$32,458,588 |
|  | Refinancing taxable loans | 5,119,491 |
|  | Swap termination fee | 488,000 |
|  | Acquisition of Ashgrove Woods Facility | 13,300,000* |
|  | Debt Service Reserve Fund | 3,524,700 |
|  | Legal, Accounting, Printing, UW's Discount and Incidental Expenses | 1,287,057 |
|  | Total Uses | \$56,177,836 |

FOR REFUNDING ONLY
Bond issue being
refinanced:
Kentucky Economic Development Finance Healthcare Facilities Revenue Bonds, Series 2016A and Series 2016B (Christian Care Communities, Inc. Obligated Group)

Amount of principal: $\$ 37,578,080 \quad$ Amount to be refunded: $\$ 37,578,080$

## Terms of existing

bond issue: Existing bonds are held by two commercial banks in a "bank direct purchase" transaction.

Net interest rate: Variable interest rate Length of term: Final maturity
based on monthly reset 12/01/2045 of 1 Month LIBOR rate

First call date: Currently callable Call at par Currently callable at par
Average annual debt service $\$ 2,831,253$

## REFUNDING ACTIVITY

> | Funds to apply to refunding: | $\$ 37,578,080^{*}$ |
| ---: | ---: |
| Proceeds from New Bonds | $\$ 37,578,080^{\circ}$ |
| Released Debt Service Reserve | $-0-$ |
| Total Available to Pay Old Bond Issue | $\$ 37,578,080^{*}$ |

## SAVINGS RESULTING FROM REFINANCING

-The refinancing is not expected to generate debt service savings over the remaining term the existing bonds will be held by the current bank purchasers. The refinancing is intended to take advantage of historically low fixed rates, eliminate burdensome bank covenants and eliminate "renewal risk" given short-term commitment period of banks.

Average annual debt service savings: N/A
Number of years savings will accrue: N/A
Total present value savings: N/A
*Preliminary, subject to change

Pursuant to KRS Chapter 45, the Issuer is providing information on all costs associated, either directly or indirectly, with this bond issuance. Costs are estimated as of the date of the cashflows and are subject to change.

## PROFESSIONAL SERVICES:

| Firm | Service | Series A Fee (\$) |
| :---: | :---: | :---: |
| KEDFA | Issuance Fee | Up to \$10,000 |
| Cain Brothers | Underwriter's Discount | 650,000.00 |
| Ice Miller LLP | Bond Counsel | 140,000.00 |
| Seiller Waterman LLC | Borrower Counsel | 75,000.00 |
| Harris Beach PLLC | Underwriter's Counsel | 75,000.00 |
| Dixon Hughes Goodman LLP | Feasibility Study Consultant | 95,000.00 |
| Stites \& Harbison, PLLC | Issuer's Counsel | 15,000.00 |

Misc./Contingency
TOTAL
$42,545.00$
$442,545.00$

## NET DEBT SERVICE

## Christian Care Communities, Inc. Obligated Group <br> Proposed Series 2020 Plan of Finance

All Public Fixed Rate Deal with \$13.3MM Ashgrove Woods Purchase
No Ashgrove Woods Equity Contribution
Net Level Debt Service, Taxable Debt Amortizes First
Extended 35 Year Final Maturity
DSRF Gross Funded at 30 Treasury ( $1.99 \%$ as of $1 / 31 / 20$ )
Indicative Pricing Scale as of 2/5/2020
Sizing as of $2 / 5 / 20$

| Period <br> Ending | Principal | Coupon | Interest | Total Debt Service | Debt Service Reserve Fund | Net <br> Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 12/31/2020 |  |  | 223,800 | 223,800 | 5,845.12 | 217,954.88 |
| 12/31/2021 | 480,000 | 6.000\% | 2,671,200 | 3,151,200 | 70,141.54 | 3,081,058.46 |
| 12/31/2022 | 510,000 | 6.000\% | 2,641,500 | 3,151,500 | 70,141.54 | 3,081,358.46 |
| 12/31/2023 | 545,000 | 6.000\% | 2,609,850 | 3,154,850 | 70,141.54 | 3,084,708.46 |
| 12/31/2024 | 575,000 | 6.000\% | 2,576,250 | 3,151,250 | 70,141.54 | 3,081,108.46 |
| 12/31/2025 | 610,000 | 6.000\% | 2,540,700 | 3,150,700 | 70,141.54 | 3,080,558.46 |
| 12/31/2026 | 650,000 | 6.000\% | 2,502,900 | 3,152,900 | 70,141.54 | 3,082,758.46 |
| 12/31/2027 | 690,000 | 6.000\% | 2,462,700 | 3,152,700 | 70,141.54 | 3,082,558.46 |
| 12/31/2028 | 735,000 | 6.000\% | 2,419,950 | 3,154,950 | 70,141.54 | 3,084,808.46 |
| 12/31/2029 | 1,160,000 | ** \% | 2,364,700 | 3,524,700 | 444,089.64 | 3,080,610.36 |
| 12/31/2030 | 835,000 | 5.000\% | 2,310,625 | 3,145,625 | 62,625.18 | 3,082,999.82 |
| 12/31/2031 | 875,000 | 5.000\% | 2,267,875 | 3,142,875 | 62,625.18 | 3,080,249.82 |
| 12/31/2032 | 920,000 | 5.000\% | 2,223,000 | 3,143,000 | 62,625.18 | 3,080,374.82 |
| 12/31/2033 | 970,000 | 5.000\% | 2,175,750 | 3,145,750 | 62,625.18 | 3,083,124.82 |
| 12/31/2034 | 1,020,000 | 5.000\% | 2,126,000 | 3,146,000 | 62,625.18 | 3,083,374.82 |
| 12/31/2035 | 1,070,000 | 5.000\% | 2,073,750 | 3,143,750 | 62,625.18 | 3,081,124.82 |
| 12/31/2036 | 1,125,000 | 5.000\% | 2,018,875 | 3,143,875 | 62,625.18 | 3,081,249.82 |
| 12/31/2037 | 1,185,000 | 5.000\% | 1,961,125 | 3,146,125 | 62,625.18 | 3,083,499.82 |
| 12/31/2038 | 1,245,000 | 5.000\% | 1,900,375 | 3,145,375 | 62,625.18 | 3,082,749.82 |
| 12/31/2039 | 1,310,000 | 5.000\% | 1,836,500 | 3,146,500 | 62,625.18 | 3,083,874.82 |
| 12/31/2040 | 1,375,000 | 5.000\% | 1,769,375 | 3,144,375 | 62,625.18 | 3,081,749.82 |
| 12/31/204\| | 1,445,000 | 5.000\% | 1,698,875 | 3,143,875 | 62,625.18 | 3,081,249.82 |
| 12/31/2042 | 1,520,000 | 5.000\% | 1,624,750 | 3,144,750 | 62,625.18 | 3,082,124.82 |
| 12/31/2043 | 1,600,000 | 5.000\% | 1,546,750 | 3,146,750 | 62,625.18 | 3,084,124.82 |
| 12/31/2044 | 1,680,000 | 5.000\% | 1,464,750 | 3,144,750 | 62,625.18 | 3,082,124.82 |
| 12/31/2045 | 1,765,000 | 5.000\% | 1,378,625 | 3,143,625 | 62,625.18 | 3,080,999.82 |
| 12/31/2046 | 1,855,000 | 5.000\% | 1,288,125 | 3,143,125 | 62,625.18 | 3,080,499.82 |
| 12/31/2047 | 1,950,000 | 5.000\% | 1,193,000 | 3,143,000 | 62,625.18 | 3,080,374.82 |
| 12/31/2048 | 2,050,000 | 5.000\% | 1,093,000 | 3,143,000 | 62,625.18 | 3,080,374.82 |
| 12/31/2049 | 2,160,000 | 5.000\% | 987,750 | 3,147,750 | 62,625.18 | 3,085,124.82 |
| 12/31/2050 | 2,270,000 | 5.000\% | 877,000 | 3,147,000 | 62,625.18 | 3,084,374.82 |
| 12/31/2051 | 2,385,000 | 5.000\% | 760,625 | 3,145,625 | 62,625.18 | 3,082,999.82 |
| 12/31/2052 | 2,505,000 | 5.000\% | 638,375 | 3,143,375 | 62,625.18 | 3,080,749.82 |
| 12/31/2053 | 2,635,000 | 5.000\% | 509,875 | 3,144,875 | 62,625.18 | 3,082,249.82 |
| 12/31/2054 | 2,770,000 | 5.000\% | 374,750 | 3,144,750 | 62,625.18 | 3,082,124.82 |
| 12/31/2055 | 6,110,000 | 5.000\% | 152,750 | 6,262,750 | 3,178,306.31 | 3,084,443.69 |
|  | 52,585,000 |  | 61,265,800 | 113,850,800 | 5,755,002.89 | 108,095,797.11 |


| Issue: | State Property \& Buildings Commission Revenue Bon estimated principal amount not to exceed $\$ 35,000,000$ |
| :---: | :---: |
| Purpose of Issue: | To 1.) provide permanent financing for a $\$ 35$ million General Assembly of the Commonwealth of Kentucky of issuance. |
| Proposed Date of Sale: | April 20, 2020 |
| Proposed Date of Delivery: | May 4, 2020 |
| Ratings: |  |
| Moody's | TBD |
| Fitch | TBD |
| Sources: |  |
| Par amount of bonds: | \$35,410,000 |
| Total Sources: | \$35,410,000 |
| Uses: |  |
| Project Fund Deposit: | \$35,000,000 |
| Cost of Issuance: | 252,532 |
| Underwriter Discount: | 157,468 |
| Total Uses: | \$35,410,000 |
| All-in True Interest Cost: | 3.943\% |
| Final Maturity Date: | 11/1/2040 |
| Average Annual Debt Service: | \$2,510,550.53 |
| Total Debt Service: | \$51,445,364.68 |
| Average Life (years): | 11.760 |
| Method of Sale: | Negotiated |
| Bond Counsel: | Kutak Rock LLP |
| Underwriter: | Citigroup |
| Underwriters' Counsel: | Frost Brown Todd |
| Trustee: | TBA |
|  | Office of Financial |
| Financial Advisor: | Management |

## BOND DEBT SERVICE

Kentucky State Property and Buildings Commission Revenue Bonds, Project No. 123 Federally Taxable Series A

Rates as of March 26, 2020
***Preliminary, Subject to Change***

| Period <br> Ending | Principal | Coupon | Interest | Debt Service | Debt Service |
| :---: | :---: | :---: | ---: | ---: | ---: |
| $12 / 30 / 2020$ | $1,210,000$ | $2.750 \%$ | $623,693.18$ | $1,833,693.18$ |  |
| $06 / 30 / 2021$ |  |  | $617,626.75$ | $617,626.75$ | $2,451,319.93$ |
| $12 / 30 / 2021$ | $1,230,000$ | $2.800 \%$ | $617,626.75$ | $1,847,626.75$ |  |
| $06 / 30 / 2022$ |  |  | $600,406.75$ | $600,406.75$ | $2,448,033.50$ |
| $12 / 30 / 2022$ | $1,270,000$ | $2.850 \%$ | $600,406.75$ | $1,870,406.75$ |  |
| $06 / 30 / 2023$ |  |  | $582,309.25$ | $582,309.25$ | $2,452,716.00$ |
| $12 / 30 / 2023$ | $1,305,000$ | $2.860 \%$ | $582,309.25$ | $1,887,309.25$ |  |
| $06 / 30 / 2024$ |  |  | $563,647.75$ | $563,647.75$ | $2,450,957.00$ |
| $12 / 30 / 2024$ | $1,340,000$ | $2.910 \%$ | $563,647.75$ | $1,903,647.75$ |  |
| $06 / 30 / 2025$ |  |  | $544,150.75$ | $544,150.75$ | $2,447,798.50$ |
| $12 / 30 / 2025$ | $1,380,000$ | $2.960 \%$ | $544,150.75$ | $1,924,150.75$ |  |
| $06 / 30 / 2026$ |  |  | $523,726.75$ | $523,726.75$ | $2,447,877.50$ |
| $12 / 30 / 2026$ | $1,425,000$ | $3.070 \%$ | $523,726.75$ | $1,948,726.75$ |  |
| $06 / 30 / 2027$ |  |  | $501,853.00$ | $501,853.00$ | $2,450,579.75$ |
| $12 / 30 / 2027$ | $1,470,000$ | $3.170 \%$ | $501,853.00$ | $1,971,853.00$ |  |
| $06 / 30 / 2028$ |  |  | $478,553.50$ | $478,553.50$ | $2,450,406.50$ |
| $12 / 30 / 2028$ | $1,520,000$ | $3.230 \%$ | $478,553.50$ | $1,998,553.50$ |  |
| $06 / 30 / 2029$ |  |  | $454,005.50$ | $454,005.50$ | $2,452,559.00$ |
| $12 / 30 / 2029$ | $1,570,000$ | $3.280 \%$ | $454,005.50$ | $2,024,005.50$ |  |
| $06 / 30 / 2030$ |  |  | $428,257.50$ | $428,257.50$ | $2,452,263.00$ |
| $12 / 30 / 2030$ | $1,620,000$ | $3.330 \%$ | $428,257.50$ | $2,048,257.50$ |  |
| $06 / 30 / 2031$ |  |  | $401,284.50$ | $401,284.50$ | $2,449,542.00$ |
| $12 / 30 / 2031$ | $1,675,000$ | $3.480 \%$ | $401,284.50$ | $2,076,284.50$ |  |
| $06 / 30 / 2032$ |  |  | $372,139.50$ | $372,139.50$ | $2,448,424.00$ |
| $12 / 30 / 2032$ | $1,735,000$ | $3.630 \%$ | $372,139.50$ | $2,107,139.50$ |  |
| $06 / 30 / 2033$ |  |  | $340,649.25$ | $340,649.25$ | $2,447,788.75$ |
| $12 / 30 / 2033$ | $1,800,000$ | $3.730 \%$ | $340,649.25$ | $2,140,649.25$ |  |
| $06 / 30 / 2034$ |  |  | $307,079.25$ | $307,079.25$ | $2,447,728.50$ |
| $12 / 30 / 2034$ | $1,870,000$ | $3.830 \%$ | $307,079.25$ | $2,177,079.25$ | $271,268.75$ |
| $06 / 30 / 2035$ |  |  | $271,268.75$ | $2,448,348.00$ |  |
| $12 / 30 / 2035$ | $1,945,000$ | $3.930 \%$ | $271,268.75$ | $2,216,268.75$ |  |
| $06 / 30 / 2036$ |  |  | $233,049.50$ | $233,049.50$ | $2,449,318.25$ |
| $12 / 30 / 2036$ | $2,025,000$ | $4.220 \%$ | $233,049.50$ | $2,258,049.50$ |  |
| $06 / 30 / 2037$ |  |  | $190,322.00$ | $190,322.00$ | $2,448,371.50$ |
| $12 / 30 / 2037$ | $2,115,000$ | $4.220 \%$ | $190,322.00$ | $2,305,322.00$ |  |
| $06 / 30 / 2038$ |  |  | $145,695.50$ | $145,695.50$ | $2,451,017.50$ |
| $12 / 30 / 2038$ | $2,205,000$ | $4.220 \%$ | $145,695.50$ | $2,350,695.50$ |  |
| $06 / 30 / 2039$ |  |  | $99,170.00$ | $99,170.00$ | $2,449,865.50$ |
| $12 / 30 / 2039$ | $2,300,000$ | $4.220 \%$ | $99,170.00$ | $2,399,170.00$ |  |
| $06 / 30 / 2040$ |  |  | $50,640.00$ | $50,640.00$ | $2,449,810.00$ |
| $12 / 30 / 2040$ | $2,400,000$ | $4.220 \%$ | $50,640.00$ | $2,450,640.00$ |  |
| $06 / 30 / 2041$ |  |  |  |  | $2,450,640.00$ |
|  | $35,410,000$ |  |  |  |  |
|  |  |  |  |  |  |

Issue:
Eastern Kentucky University General Receipts Bonds, Series 2021 in an estimated principal amount of $\$ 12,720,000$

Purpose of Issue:

Date of Sale:
Date of Delivery:
To (i) refund certain outstanding EKU Bonds for present value savings, and (ii) pay costs of issuance.

April 27, 2020
July 6, 2021
Ratings:

| Moody's | TBD |
| :--- | :--- |
| S\&P | TBD |
| Fitch | TBD |

Series 2021 (\$)

## Sources:

Par amount of bonds:
Total Sources:
$12,720,000.00$
$12,720,000.00$

## Uses:

Refunding Escrow Deposit:
12,639,162.50
Issuance Cost:
Total Uses:

All-in True Interest Cost:
Final Maturity Date:
Average Annual Debt Service:
Total Debt Service:
Average Life (years):

## Refunding Summary:

Bond Issue Being Refinanced:
Par Amount of Refunded Bonds:
Net PV Savings:
Percentage Savings of Refunded Bonds:
See Summary of Bonds Refunded (attached)
\$ $12,405,000.00$
\$ 1,092,890.06
8.8101\%

Method of Sale:
Bond Counsel:
Underwriter:
Underwriters' Counsel:
Trustee:
Financial Advisor:
Commonwealth:

Competitive
Dinsmore \& Shoh1, LLP
TBD
TBD
US Bank
Baird
Office of Financial Management

Based off cashflows as of $3 / 27 / 2020$ and rates as of $3 / 27 / 2020$
Preliminary Subject to Change

Pursuant to KRS Chapter 45, the Issuer is providing information on all costs associated, either directly or indirectly, with this bond issuance. Costs are estimated as of the date of the cashflows and are subject to change.

## PROFESSIONAL SERVICES:

| Firm | Service | Series A <br> Fee (\$) |
| :---: | :---: | :---: |
| Dinsmore \& Shohl | Bond Counsel | 20,000.00 |
| Baird | Financial Advisor | 20,000.00 |
| TBD | Underwriter's Discount / Underwriter's Counsel | 35,000.00 |
| US Bank | Paying Agent | 1,000.00 |
| OFM | Financial Advisor | 3,180.00 |
| Misc./Contingency |  | 1,657.50 |
| TOTAL |  | 80,837.50 |

## BOND DEBT SERVICE

Eastern Kentucky University Refunding of Series 2011 Bonds Tax-Exempt Current Refunding Forward Delivery Scenario (2.05\% Assumed Rate)

| Period <br> Ending | Principal | Coupon | Interest | Debt Service | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 10/01/2021 | 170,000 | 2.050\% | 61,568.33 | 231,568.33 |  |
| 04/01/2022 |  |  | 128,637.50 | 128,637.50 |  |
| 06/30/2022 |  |  |  |  | 360,205.83 |
| 10/01/2022 | 1,145,000 | 2.050\% | 128,637.50 | 1,273,637.50 |  |
| 04/01/2023 |  |  | 116,901.25 | 116,901.25 |  |
| 06/30/2023 |  |  |  |  | 1,390,538.75 |
| 10/01/2023 | 1,165,000 | 2.050\% | 116,901.25 | 1,281,901.25 |  |
| 04/01/2024 |  |  | 104,960.00 | 104,960.00 |  |
| 06/30/2024 |  |  |  |  | 1,386,861.25 |
| 10/01/2024 | 1,190,000 | 2.050\% | 104,960.00 | 1,294,960.00 |  |
| 04/01/2025 |  |  | 92,762.50 | 92,762.50 |  |
| 06/30/2025 |  |  |  |  | 1,387,722.50 |
| 10/01/2025 | 1,210,000 | 2.050\% | 92,762.50 | 1,302,762.50 |  |
| 04/01/2026 |  |  | 80,360.00 | 80,360.00 |  |
| 06/30/2026 |  |  |  |  | 1,383,122.50 |
| 10/01/2026 | 1,240,000 | 2.050\% | 80,360.00 | 1,320,360.00 |  |
| 04/01/2027 |  |  | 67,650.00 | 67,650.00 |  |
| 06/30/2027 |  |  |  |  | 1,388,010.00 |
| 10/01/2027 | 1,270,000 | 2.050\% | 67,650.00 | 1,337,650.00 |  |
| 04/01/2028 |  |  | 54,632.50 | 54,632.50 |  |
| 06/30/2028 |  |  |  |  | 1,392,282.50 |
| 10/01/2028 | 1,295,000 | 2.050\% | 54,632.50 | 1,349,632.50 |  |
| 04/01/2029 |  |  | 41,358.75 | 41,358.75 |  |
| 06/30/2029 |  |  |  |  | 1,390,991.25 |
| 10/01/2029 | 1,315,000 | 2.050\% | 41,358.75 | 1,356,358.75 |  |
| 04/01/2030 |  |  | 27,880.00 | 27,880.00 |  |
| 06/30/2030 |  |  |  |  | 1,384,238.75 |
| 10/01/2030 | 1,345,000 | 2.050\% | 27,880.00 | 1,372,880.00 |  |
| 04/01/2031 |  |  | 14,093.75 | 14,093.75 |  |
| 06/30/2031 |  |  |  |  | 1,386,973.75 |
| 10/01/2031 | 1,375,000 | 2.050\% | 14,093.75 | 1,389,093.75 |  |
| 06/30/2032 |  |  |  |  | 1,389,093.75 |
|  | 12,720,000 |  | 1,520,040.83 | 14,240,040.83 | 14,240,040.83 |

## SAVINGS

Eastern Kentucky University Refunding of Series 2011 Bonds Tax-Exempt Current Refunding Forward Delivery Scenario (2.05\% Assumed Rate)

| Date | Prior <br> Debt Service | Refunding <br> Debt Service | Present Value <br> to 07/06/2021 |  |
| :---: | ---: | ---: | ---: | ---: |
| $06 / 30 / 2022$ | $468,325.00$ | $360,205.83$ | $108,119.17$ | $106,534.06$ |
| $06 / 30 / 2023$ | $1,501,525.00$ | $1,390,538.75$ | $110,986.25$ | $107,228.79$ |
| $06 / 30 / 2024$ | $1,497,175.00$ | $1,386,861.25$ | $110,313.75$ | $104,475.55$ |
| $06 / 30 / 2025$ | $1,500,025.00$ | $1,387,722.50$ | $112,302.50$ | $104,298.07$ |
| $06 / 30 / 2026$ | $1,495,212.50$ | $1,383,122.50$ | $112,090.00$ | $102,069.92$ |
| $06 / 30 / 2027$ | $1,500,900.00$ | $1,388,010.00$ | $112,890.00$ | $100,831.82$ |
| $06 / 30 / 2028$ | $1,501,700.00$ | $1,392,282.50$ | $109,417.50$ | $95,846.12$ |
| $06 / 30 / 2029$ | $1,500,500.00$ | $1,390,991.25$ | $109,508.75$ | $94,101.87$ |
| $06 / 30 / 2030$ | $1,497,300.00$ | $1,384,238.75$ | $113,061.25$ | $95,321.78$ |
| $06 / 30 / 2031$ | $1,497,000.00$ | $1,386,973.75$ | $110,026.25$ | $91,004.40$ |
| $06 / 30 / 2032$ | $1,499,400.00$ | $1,389,093.75$ | $110,306.25$ | $89,520.18$ |

## Savings Summary

| PV of savings from cash flow | $1,091,232.56$ |
| :--- | ---: |
| Plus: Refunding funds on hand | $1,657.50$ |
| Net PV Savings | $1,092,890.06$ |

SUMMARY OF BONDS REFUNDED

Eastern Kentucky University
Refunding of Series 2011 Bonds
Tax-Exempt Current Refunding Forward Delivery Scenario (2.05\% Assumed Rate)


Issue:

Purpose of Issue:

Date of Sale:
Date of Delivery:
Ratings:
Moody's
S\&P
Fitch

Murray State University General Obligation Bonds, Series 2021 A \& C

To (i) refund certain outstanding Murray State University Bonds for present value savings; (ii) pay costs of issuance.

April 27, 2020
June 8, 2021

TBD
TBD
TBD
Series 2021 A (\$)
Series 2021 C (\$)
Total (\$)

## Sources:

Par amount of bonds:
Total Sources:
Uses:
Refunding Escrow Deposit:
Issuance Cost:
Total Uses:

All-in True Interest Cost:
Final Maturity Date:
Average Annual Debt Service:
Total Debt Service:
Average Life (years):
Refunding Summary:
Bond Issue Being Refinanced:
Par Amount of Refunded Bonds:
Net PV Savings:
Percentage Savings of Refunded Bonds:
Method of Sale:
Bond Counsel:
Underwriter:
Underwriters' Counsel:
Trustee:
Financial Advisor:

Negotiated
Dinsmore \& Shohl, LLP
TBD
See Summary of Bonds Refunded (attached)
\$ 4,490,000.00 \$ 5,985,000.00
\$ 477,099.31 \$ 312,771.69
$10.6258 \% \quad 5.2259 \%$

TBD
US Bank
Baird

Based off cashflows as of $3 / 27 / 2020$ and rates as of $3 / 27 / 2020$
Preliminary Subject to Change

Pursuant to KRS Chapter 45, the Issuer is providing information on all costs associated, either directly or indirectly, with this bond issuance. Costs are estimated as of the date of the cashflows and are subject to change.

## PROFESSIONAL SERVICES:

| Firm | Service | Series A Fee (\$) | Series C <br> Fee (\$) |
| :---: | :---: | :---: | :---: |
| Dinsmore \& Shohl | Bond Counsel | 8,579.39 | 11,420.61 |
| Baird | Financial Advisor | 8,579.39 | 11,420.61 |
| OFM | Financial Advisor | 1,155.00 | 1,537.50 |
| TBD | Underwriter's Discount / <br> Underwriter's Counsel | 15,013.93 | 19,986.07 |
| US Bank | Trustee | 428.97 | 571.03 |
| Misc./Contingency |  | 2,561.44 | 364.18 |
| TOTAL |  | 36,318.12 | 45,300.00 |

## BOND DEBT SERVICE

Murray State University General Receipts Bonds
Refunding of 2011 Series A Bonds

| Period Ending | Principal | Coupon | Interest | Debt Service | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09/01/2021 | 70,000 | 2.050\% | 21,835.92 | 91,835.92 |  |
| 03/01/2022 |  |  | 46,637.50 | 46,637.50 |  |
| 06/30/2022 |  |  |  |  | 138,473.42 |
| 09/01/2022 | 415,000 | 2.050\% | 46,637.50 | 461,637.50 |  |
| 03/01/2023 |  |  | 42,383.75 | 42,383.75 |  |
| 06/30/2023 |  |  |  |  | 504,021.25 |
| 09/01/2023 | 420,000 | 2.050\% | 42,383.75 | 462,383.75 |  |
| 03/01/2024 |  |  | 38,078.75 | 38,078.75 |  |
| 06/30/2024 |  |  |  |  | 500,462.50 |
| 09/01/2024 | 430,000 | 2.050\% | 38,078.75 | 468,078.75 |  |
| 03/01/2025 |  |  | 33,671.25 | 33,671.25 |  |
| 06/30/2025 |  |  |  |  | 501,750.00 |
| 09/01/2025 | 440,000 | 2.050\% | 33,671.25 | 473,671.25 |  |
| 03/01/2026 |  |  | 29,161.25 | 29,161.25 |  |
| 06/30/2026 |  |  |  |  | 502,832.50 |
| 09/01/2026 | 450,000 | 2.050\% | 29,161.25 | 479,161.25 |  |
| 03/01/2027 |  |  | 24,548.75 | 24,548.75 |  |
| 06/30/2027 |  |  |  |  | 503,710.00 |
| 09/01/2027 | 460,000 | 2.050\% | 24,548.75 | 484,548.75 |  |
| 03/01/2028 |  |  | 19,833.75 | 19,833.75 |  |
| 06/30/2028 |  |  |  |  | 504,382.50 |
| 09/01/2028 | 470,000 | 2.050\% | 19,833.75 | 489,833.75 |  |
| 03/01/2029 |  |  | 15,016.25 | 15,016.25 |  |
| 06/30/2029 |  |  |  |  | 504,850.00 |
| 09/01/2029 | 480,000 | 2.050\% | 15,016.25 | 495,016.25 |  |
| 03/01/2030 |  |  | 10,096.25 | 10,096.25 |  |
| 06/30/2030 |  |  |  |  | 505,112.50 |
| 09/01/2030 | 485,000 | 2.050\% | 10,096.25 | 495,096.25 |  |
| 03/01/2031 |  |  | 5,125.00 | 5,125.00 |  |
| 06/30/2031 |  |  |  |  | 500,221.25 |
| 09/01/2031 | 500,000 | 2.050\% | 5,125.00 | 505,125.00 |  |
| 06/30/2032 |  |  |  |  | 505,125.00 |
|  | 4,620,000 |  | 550,940.92 | 5,170,940.92 | 5,170,940.92 |

BOND DEBT SERVICE
Murray State University General Receipts Bonds
Refunding of 2011 Series C Bonds

| Period Ending | Principal | Coupon | Interest | Debt Service | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 09/01/2021 | 100,000 | 2.050\% | 29,067.29 | 129,067.29 |  |
| 03/01/2022 |  |  | 62,012.50 | 62,012.50 |  |
| 06/30/2022 |  |  |  |  | 191,079.79 |
| 09/01/2022 | 1,080,000 | 2.050\% | 62,012.50 | 1,142,012.50 |  |
| 03/01/2023 |  |  | 50,942.50 | 50,942.50 |  |
| 06/30/2023 |  |  |  |  | 1,192,955.00 |
| 09/01/2023 | 1,095,000 | 2.050\% | 50,942.50 | 1,145,942.50 |  |
| 03/01/2024 |  |  | 39,718.75 | 39,718.75 |  |
| 06/30/2024 |  |  |  |  | 1,185,661.25 |
| 09/01/2024 | 945,000 | 2.050\% | 39,718.75 | 984,718.75 |  |
| 03/01/2025 |  |  | 30,032.50 | 30,032.50 |  |
| 06/30/2025 |  |  |  |  | 1,014,751.25 |
| 09/01/2025 | 955,000 | 2.050\% | 30,032.50 | 985,032.50 |  |
| 03/01/2026 |  |  | 20,243.75 | 20,243.75 |  |
| 06/30/2026 |  |  |  |  | 1,005,276.25 |
| 09/01/2026 | 980,000 | 2.050\% | 20,243.75 | 1,000,243.75 |  |
| 03/01/2027 |  |  | 10,198.75 | 10,198.75 |  |
| 06/30/2027 |  |  |  |  | 1,010,442.50 |
| 09/01/2027 | 995,000 | 2.050\% | 10,198.75 | 1,005,198.75 |  |
| 06/30/2028 |  |  |  |  | 1,005,198.75 |
|  | 6,150,000 |  | 455,364.79 | 6,605,364.79 | 6,605,364.79 |

SAVINGS

Murray State University General Receipts Bonds Refunding of 2011 Series A Bonds

| Date | Prior <br> Debt Service | Refunding <br> Debt Service | Present Value <br> to 06/08/2021 |  |
| :---: | ---: | ---: | ---: | ---: |
| $06 / 30 / 2022$ | $187,363.76$ | $138,473.42$ | $48,890.34$ | $48,185.81$ |
| $06 / 30 / 2023$ | $549,963.76$ | $504,021.25$ | $45,942.51$ | $44,369.22$ |
| $06 / 30 / 2024$ | $549,863.76$ | $500,462.50$ | $49,401.26$ | $46,811.13$ |
| $06 / 30 / 2025$ | $549,163.76$ | $501,750.00$ | $47,413.76$ | $44,039.31$ |
| $06 / 30 / 2026$ | $552,763.76$ | $502,832.50$ | $49,931.26$ | $45,495.63$ |
| $06 / 30 / 2027$ | $550,663.76$ | $503,710.00$ | $46,953.76$ | $41,938.09$ |
| $06 / 30 / 2028$ | $552,579.38$ | $504,382.50$ | $48,196.88$ | $42,227.76$ |
| $06 / 30 / 2029$ | $553,220.00$ | $504,850.00$ | $48,370.00$ | $41,569.63$ |
| $06 / 30 / 2030$ | $552,602.50$ | $505,112.50$ | $47,490.00$ | $40,035.36$ |
| $06 / 30 / 2031$ | $550,630.00$ | $500,221.25$ | $50,408.75$ | $41,698.23$ |
| $06 / 30 / 2032$ | $552,150.00$ | $505,125.00$ | $47,025.00$ | $38,167.71$ |

Savings Summary

| PV of savings from cash flow | $474,537.87$ |
| :--- | ---: |
| Plus: Refunding funds on hand | $2,561.44$ |
| Net PV Savings | $477,099.31$ |

SAVINGS

| Date | Murray State University General Receipts Bonds <br> Refunding of 2011 Series C Bonds |  |  |  |
| :---: | ---: | ---: | ---: | ---: |
|  | Prior | Refunding <br> Debt Service | Savings | Present Value <br> to 06/08/2021 <br> @ |
| 2.0503028\% |  |  |  |  |

Savings Summary

| PV of savings from cash flow | $312,407.51$ |
| :--- | ---: |
| Plus: Refunding funds on hand | 364.18 |
| Net PV Savings | $312,771.69$ |

## SUMMARY OF BONDS REFUNDED

Murray State University General Receipts Bonds Refunding of Series 2011A \& 2011C (Direct Purchase, Forward Delivery)

|  Maturity <br> Bond Date | Interest <br> Rate | Par <br> Amount | Call <br> Date | Call Price |
| :---: | :---: | :---: | :---: | :---: |
| Series 2011A, 2011A, BOND: |  |  |  |  |
| 09/01/2022 | 4.000\% | 370,000.00 | 09/01/2021 | 100.000 |
| 09/01/2023 | 4.000\% | 385,000.00 | 09/01/2021 | 100.000 |
| 09/01/2026 | 4.000\% | 435,000.00 | 09/01/2021 | 100.000 |
| 09/01/2027 | 4.125\% | 455,000.00 | 09/01/2021 | 100.000 |
| 09/01/2028 | 4.200\% | 475,000.00 | 09/01/2021 | 100.000 |
| 09/01/2029 | 4.300\% | 495,000.00 | 09/01/2021 | 100.000 |
| 09/01/2030 | 4.400\% | 515,000.00 | 09/01/2021 | 100.000 |
| 09/01/2031 | 4.500\% | 540,000.00 | 09/01/2021 | 100.000 |
|  |  | 3,670,000.00 |  |  |
| Series 2011A, 2011A, 2025: |  |  |  |  |
| 09/01/2025 | 4.000\% | 820,000.00 | 09/01/2021 | 100.000 |
| Series 2011C, 2011C, BOND: |  |  |  |  |
| 09/01/2022 | 4.000\% | 1,020,000.00 | 09/01/2021 | 100.000 |
| 09/01/2023 | 4.000\% | 1,055,000.00 | 09/01/2021 | 100.000 |
| 09/01/2026 | 4.000\% | 995,000.00 | 09/01/2021 | 100.000 |
| 09/01/2027 | 4.000\% | 1,035,000.00 | 09/01/2021 | 100.000 |
|  |  | 4,105,000.00 |  |  |
| Series 2011C, 2011C, 2025: |  |  |  |  |
| 09/01/2025 | 4.000\% | 1,880,000.00 | 09/01/2021 | 100.000 |
|  |  | 10,475,000.00 |  |  |

## Preliminary New Bond Issue Report

## Issue

## Purpose of Issue

Proposed Date of Sale
Expected Delivery Date

Expected Ratings:
(Underlying Ratings)

Escrow Deposit
Swap Termination Payment 07A 2027
Swap Termination Payment 07B 2021
Swap Termination Payment 07B 2025
Cost of Issuance
Gross Proceeds

All-In True Interest Cost*
Call Date
Final Maturity Date
Gross Debt Service*
Avg. Annual Debt Service*
Average Life

Refunding Summary:
Bond Issues Being Refinanced:
Par Amount of Refunded Bonds:
Average Coupon of Refunded Bonds:
Average Life of Refunded Bonds:
Net PV Savings:
PV Savings of Refunded Bonds:
Negative Arbitrage:

Method of Sale
Bond Counsel
Underwriter
Underwriter's Counsel
Trustee
Swap Advisor
Financial Advisor

## Kentucky Asset/Liability Commission

General Fund Refunding Project Notes, 2020 Series A, in a principal amount not to exceed $\$ 140,000,000$.

The 2020 Series A Notes will currently refund the outstanding \$134,850,000 of the Kentucky Asset/Liability Commission General Fund Floating Rate Project Notes 2007 Series A and Series B.

TBD
TBD
$\begin{array}{cc}\text { Moody's: } & \text { S\&P: } \\ \text { TBD } & \text { TBD }\end{array}$

## Refunding Bonds

\$ 135,290,788
\$ 4,059,167
\$ 716,376
\$ 7,543,127

| $\$$ | 658,494 |
| :--- | ---: |
| $\$$ | $148,267,953$ |

3.965\%

The notes are not subject to redemption
11/1/2027
\$153,560,250
\$20,474,700
3.403

See Summary of Bonds Refunded (attached). \$134,850,000
4.100\%
3.403
\$136,794
0.101\%

Currently Callable

Negotiated
Kutak Rock LLP
Morgan Stanley
Dinsmore \& Shohl LLP
TBD
Hilltop Securities
Office of Financial Management
*Reflects market as of February 26, 2020.
Preliminary, subject to change.

BOND DEBT SERVICE
KENTUCKY ASSET/LIABILITY COMMISSION GENERAL FUND REFUNDING PROJECT NOTES

2020 SERIES A
***Preliminary***
as of $2 / 26 / 20$

| Period Ending | Dated Date Delivery Date |  | $\begin{aligned} & 05 / 01 / 2020 \\ & 05 / 01 / 2020 \end{aligned}$ |  | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Principal | Coupon | Interest | Debt Service |  |
| 11/01/2020 | 16,525,000 | 3.000\% | 3,115,250 | 19,640,250 |  |
| 05/01/2021 |  |  | 2,867,375 | 2,867,375 |  |
| 06/30/2021 |  |  |  |  | 22,507,625 |
| 11/01/2021 | 17,275,000 | 5.000\% | 2,867,375 | 20,142,375 |  |
| 05/01/2022 |  |  | 2,435,500 | 2,435,500 |  |
| 06/30/2022 |  |  |  |  | 22,577,875 |
| 11/01/2022 | 20,205,000 | 5.000\% | 2,435,500 | 22,640,500 |  |
| 05/01/2023 |  |  | 1,930,375 | 1,930,375 |  |
| 06/30/2023 |  |  |  |  | 24,570,875 |
| 11/01/2023 | 27,235,000 | 5.000\% | 1,930,375 | 29,165,375 |  |
| 05/01/2024 |  |  | 1,249,500 | 1,249,500 |  |
| 06/30/2024 |  |  |  |  | 30,414,875 |
| 11/01/2024 | 20,120,000 | 5.000\% | 1,249,500 | 21,369,500 |  |
| 05/01/2025 |  |  | 746,500 | 746,500 |  |
| 06/30/2025 |  |  |  |  | 22,116,000 |
| 11/01/2025 | 19,725,000 | 5.000\% | 746,500 | 20,471,500 |  |
| 05/01/2026 |  |  | 253,375 | 253,375 |  |
| 06/30/2026 |  |  |  |  | 20,724,875 |
| 11/01/2026 | 4,940,000 | 5.000\% | 253,375 | 5,193,375 |  |
| 05/01/2027 |  |  | 129,875 | 129,875 |  |
| 06/30/2027 |  |  |  |  | 5,323,250 |
| 11/01/2027 | 5,195,000 | 5.000\% | 129,875 | 5,324,875 |  |
| 06/30/2028 |  |  |  |  | 5,324,875 |
|  | 131,220,000 |  | 22,340,250 | 153,560,250 | 153,560,250 |

## SUMMARY OF BONDS REFUNDED

KENTUCKY ASSET/LIABILITY COMMISSION GENERAL FUND REFUNDING PROJECT NOTES

2020 SERIES A
***Preliminary***
as of $2 / 26 / 20$

| Bond | Maturity <br> Date | Interest <br> Rate | Par <br> Amount | Call <br> Date |
| :--- | ---: | ---: | ---: | ---: |

SAVINGS
KENTUCKY ASSET/LIABILITY COMMISSION GENERAL FUND REFUNDING PROJECT NOTES 2020 SERIES A ***Preliminary***
as of $2 / 26 / 20$

| Date | Prior Debt Service | Refunding Debt Service | Savings | Annual Savings |
| :---: | :---: | :---: | :---: | :---: |
| 08/01/2020 | 1,379,565.26 |  | 1,379,565.26 |  |
| 11/01/2020 | 18,734,565.26 | 19,640,250.00 | -905,684.74 |  |
| 02/01/2021 | 1,203,956.89 |  | 1,203,956.89 |  |
| 05/01/2021 | 1,203,956.89 | 2,867,375.00 | -1,663,418.11 |  |
| 06/30/2021 |  |  |  | 14,419.30 |
| 08/01/2021 | 1,203,956.89 |  | 1,203,956.89 |  |
| 11/01/2021 | 19,348,956.89 | 20,142,375.00 | -793,418.11 |  |
| 02/01/2022 | 1,020,355.66 |  | 1,020,355.66 |  |
| 05/01/2022 | 1,020,355.66 | 2,435,500.00 | -1,415,144.34 |  |
| 06/30/2022 |  |  |  | 15,750.10 |
| 08/01/2022 | 1,020,355.66 |  | 1,020,355.66 |  |
| 11/01/2022 | 21,955,355.66 | 22,640,500.00 | -685,144.34 |  |
| 02/01/2023 | 805,093.30 |  | 805,093.30 |  |
| 05/01/2023 | 805,093.30 | 1,930,375.00 | -1,125,281.70 |  |
| 06/30/2023 |  |  |  | 15,022.92 |
| 08/01/2023 | 805,093.30 |  | 805,093.30 |  |
| 11/01/2023 | 28,585,093.30 | 29,165,375.00 | -580,281.70 |  |
| 02/01/2024 | 519,267.69 |  | 519,267.69 |  |
| 05/01/2024 | 519,267.69 | 1,249,500.00 | -730,232.31 |  |
| 06/30/2024 |  |  |  | 13,846.98 |
| 08/01/2024 | 519,267.69 |  | 519,267.69 |  |
| 11/01/2024 | 20,994,267.69 | 21,369,500.00 | -375,232.31 |  |
| 02/01/2025 | 308,802.18 |  | 308,802.18 |  |
| 05/01/2025 | 308,802.18 | 746,500.00 | -437,697.82 |  |
| 06/30/2025 |  |  |  | 15,139.74 |
| 08/01/2025 | 308,802.18 |  | 308,802.18 |  |
| 11/01/2025 | 20,218,802.18 | 20,471,500.00 | -252,697.82 |  |
| 02/01/2026 | 104,191.25 |  | 104,191.25 |  |
| 05/01/2026 | 104,191.25 | 253,375.00 | -149,183.75 |  |
| 06/30/2026 |  |  |  | 11,111.86 |
| 08/01/2026 | 104,191.25 |  | 104,191.25 |  |
| 11/01/2026 | 5,124,191.25 | 5,193,375.00 | -69,183.75 |  |
| 02/01/2027 | 53,162.95 |  | 53,162.95 |  |
| 05/01/2027 | 53,162.95 | 129,875.00 | -76,712.05 |  |
| 06/30/2027 |  |  |  | 11,458.40 |
| 08/01/2027 | 53,162.95 |  | 53,162.95 |  |
| 11/01/2027 | 5,283,162.95 | 5,324,875.00 | -41,712.05 |  |
| 06/30/2028 |  |  |  | 11,450.90 |
|  | 153,668,450.20 | 153,560,250.00 | 108,200.20 | 108,200.20 |

Savings Summary

| Savings PV date | $05 / 01 / 2020$ |
| :--- | :--- |
| Savings PV rate | $1.073622 \%$ |
| PV of savings from cash flow | $136,794.07$ |
| Net PV Savings | $136,794.07$ |

Andy Beshear
Governor

# Commonwealth of Kentucky <br> FINANCE AND ADMINISTRATION CABINET <br> Office of Financial Management <br> 702 Capital Avenue <br> Suite 76 

Frankfort, Kentucky 40601
(502) 564-2924
(502) 564-7416 Facsimile

Holly M. Johnson
Secretary
Ryan Barrow
Executive Director

March 27, 2020

William E. Summers, V<br>Chairman<br>Kentucky Housing Corporation<br>1231 Louisville Road<br>Frankfort, KY 40601-6191

Dear Chairman Summers:
This letter will advise that the Office of Financial Management ("OFM") of the Finance and Administration Cabinet has reviewed and is hereby approving the issuance of the Kentucky Housing Corporation Multifamily Housing Revenue Bonds (Chapel House Apartments Project), Series 2020 in a principal amount of $\$ 13,500,000$ (the "Bonds"). The Bonds, by their terms, provide that payment of principal and interest thereon are not an obligation of the Commonwealth of Kentucky or its departments or agencies.

Pursuant to OAG 83-453, OFM has restricted its review and approval process to reviewing certain documents incidental to the issue and to obtaining assurance that the documents include language which provides that the Bonds and interest thereon shall not be deemed to constitute a debt, liability or obligation of the Kentucky Housing Corporation (" KHC ") or the Commonwealth of Kentucky or any political subdivision thereof. OFM notes that the approval of this issue by the Capital Projects and Bond Oversight Committee ("CPBO") occurred on August 27, 2019. The attached includes a finalized listing of costs related to the issuance of the Bonds pursuant to KRS 45.816.


Attachments

## FINAL BOND ISSUE REPORT

| Name of Bond Issue: | Kentucky Housing Corporation Tax-Exempt Conduit Multifamily Housing Revenue Bonds (Chapel House Apartments Project), Series 2020 |
| :---: | :---: |
| Purpose of Issue: | The bonds will be used to finance the acquisition, rehabilitation and equipping of a multifamily residential rental facility containing 197 units located at 945 South $5^{\text {dh }}$ St, Louisville, Kentucky. The Kentucky Housing Corporation has conducted a public hearing concerning the proposed project on May 30, 2019 following the delivery of notice to the public on May 15, 2019. |
| Name of Project: | Chapel House Apartments Project |
| Date of Sale: | March 10, 2020 |
| Date of Issuance: | March 13, 2020 |
| Rating: | Moody's Investor Service - MIG-1 |
| Net Proceeds: | \$13,500,000 |
| Cost of Issuance: | See Exhibit A attached (costs of issuance paid from owner equity) |
| Bond Discount: | \$0 |
| Debt Service Reserve Fund: | None |
| Insurance Premium: | N/A |
| Total Project Cost: | \$27,730,377 |
| Term: | 30 months |
| Net Interest Rate: | 0.80\% |
| Average Debt Service: | \$107,913 |
| Gross Debt Service: | \$215,827 |
| First Call Date: | Non-callable, manadatory tender 3/1/2022, maturity 9/1/2022 |
| Premium at First Call: | No premium |
| Method of Sale: | Public Offering |
| Bond Counsel: | Ice Miller LLP |
| Underwriter: | The Sturges Company |
| Underwriter Counsel: | Squire Patton Boggs, LLP |
| Financial Advisor: | N/A |
| Trustee: | The Huntington National Bank |
| Developer: | Christian Care Communities, Inc. |

## EXHIBIT A

## Project Funding Sources:

| Equity Investment | $8,189,025$ |
| :--- | ---: |
| First Mortgage | $8,500,000$ |
| Seller Note | $6,572,852$ |
| KHC HOME | $1,000,000$ |
| HOME Match | 75,000 |
| KHC AHTF | $1,325,000$ |
| Assumed Rep. Res. Acct. | 50,445 |
| Louisville HOME | 500,000 |
| Louisville AHTF, Note A | 465,564 |
| Louisville AHTF, Forgiv. | 465,564 |
| Gap | $\mathbf{5 8 6 , 9 2 7}$ |
| TOTAL | $\$ 27,730,377$ |

## Costs of Issuance:

Bond Counsel
Issuer Counsel
Underwriter Counsel
Issuer Fee
Underwriter Fee
Trustee Fee
Rating Agency
Printing/Misc.
TOTAL
\$ 41,500
14,500
30,000
122,696
84,200
7,500
9,200
5,000
\$ 314,596

# School Facilities Construction Commission 

Finance and Administration Cabinet<br>700 Louisville Rd<br>\section*{Carriage House}<br>Frankfort, Kentucky 40601<br>(502) 564-5582<br>(888) 979-6152 Fax<br>www.sfcc.ky.gov<br>David Prater<br>Chairman<br>Chelsey Bizzle<br>Executive Director

## MEMORANDUM

TO: Ryan Barrow
Office of Financial Management

DATE: March 25, 2020
SUBJECT: Capital Projects and Bond Oversight Committee (CPBO)
The following information is submitted for consideration by CPBO at their next meeting tentatively scheduled for April 14, 2020:

Daviess County- $\$ 61,340,000$ estimated - New middle school construction and renovations at Apollo High School. State estimated annual debt service is $\$ 23,885$ and local is $\$ 4,817,885$. No tax increase is necessary to finance this project.

Madison County- $\$ 26,940,000$ estimated - Construct new Richmond ATC and new Berea ATC. State estimated annual debt service is $\$ 62,845$ and local is $\$ 1,970,602$. No tax increase is necessary to finance this project.

If you or the Committee needs any additional information please feel free to contact me.

March 25, 2020
Ms. Chelsey Bizzle
Schools Facilities Construction Commission
229 West Main Street, Ste. 102
Frankfort, Kentucky 40601
Re: Reporting of Bond Issuance Costs to the Capital Projects and Bond Oversight Committee ("Bond Oversight Committee")

Dear Ms. Bizzle:

Enclosed please find a Bond Payee Disclosure form for the following bond issue:

$$
\$ 61,340,000 \text { (est.) }
$$

Daviess County
School District Finance Corporation
School Building Revenue Bonds, Series 2020

Please be advised that the enclosed costs are estimated. Actual costs will not be known until the bonds are sold. Please be advised that no tax increases are necessary to support this financing.

We hereby request that the above bond issue be considered by the Bond Oversight Committee at its next meeting.

If you need any additional information, please do not hesitate to call me at 502.588.8476.
Sincerely,
/s/ Michael Oldiges
Michael Oldiges
Vice President

## BOND PAYEE DISCLOSURE FORM

Par Amount:
Issue Name:

Purpose:
Projected Sale Date of Bonds:
First Call Date:
Method of Sale:
Place/Time of Sale:
Bond Rating:
Bond Counsel:
Fiscal Agent:
Construction Manager/General Contractor:

Architect/Engineer:

| $\$ 61,340,000$ |
| :--- |
| Daviess County School District Finance Corporation <br> School Building Revenue Bonds, Series 2020 |
| New Middle School and Renovation at Apollo High School |
| June 2020 |
| TBD |
| Competitive |
| TBD |
| Expected "A1" - Moody's |
| Rubin \& Hays |
| Baird |
| N/A |
| RBS Design |

Date Received by SFCC:
Date Scheduled for Committee Review:


To be filled in by SFCC
To be filled in by SFCC

Estimated par amount of Bonds: \% Share of total Bonds:
Estimated average annual debt service:
Estimated debt service reserve:
Estimated Costs of Issuance (1):
Fiscal Agent, Bond Counsel,
Advertisements, Printing, etc.
Special Tax Counsel
Number Verifications

Bond Rating Underwriter's Discount Paying Agent/Escrow Agent Bank Total Cost of Issuance:

## Anticipated Interest Rates:

| SFCC Portion | Local Portion | Total |
| ---: | ---: | ---: |
| $\$ 326,417$ | $\$ 61,013,583$ | $\$ 61,340,000$ |
| $0.5 \%-$ | $99.5 \%$ | $100 \%$ |
| 23,885 | $4,817,885$ | $4,841,770$ |
| $-0-$ | $-0-$ | $-0-$ |
|  |  |  |
| 1,375 | 256,985 | 258,360 |
| $-0-$ | $-0-$ | $-0-$ |
| $-0-$ | $-0-$ | $-0-$ |
| 208 | 38,792 | 39,000 |
| 6,528 | $1,220,272$ | $1,222,800$ |
| 24 | 4,476 | 4,500 |
| $\$ 8,135$ | $\$ 1,520,525$ | $\$ 1,524,660$ |


| 5 Years: | $3.200 \%$ | 10 Years: $3.750 \%$ |
| :--- | :--- | :--- |
| 15 Years: $4.000 \%$ | 20 Years: $4.250 \%$ |  |

(1) Actual costs will not be known until the bonds are sold.

## SOURCES AND USES OF FUNDS

Daviess County, KY Schools School Building Revenue Bonds, Series 2020

| Sources: | District (Middle | SFCC (Middle School) | Total |
| :---: | :---: | :---: | :---: |
| Bond Proceeds: |  |  |  |
| Par Amount | 61,013,583.00 | 326,417.00 | 61,340,000.00 |
| Other Sources of Funds: |  |  |  |
| SFCC Cash Requirement | 440,083.00 |  | 440,083.00 |
| Cash - Building Fund | 2,000,000.00 |  | 2,000,000.00 |
|  | 2,440,083.00 |  | 2,440,083.00 |
|  | 63,453,666.00 | 326,417.00 | 63,780,083.00 |
|  | District (Middle | SFCC (Middle |  |
| Uses: | School/Apollo) | School) | Total |
| Project Fund Deposits: |  |  |  |
| Total Construction Cost (Middle School) | 36,377,182.30 | 303,817.70 | 36,681,000.00 |
| Architect/Engineer Fee (Middle School) | 1,928,988.33 | 16,110.67 | 1,945,099.00 |
| Construction Contingencies (Middle School) | 1,818,859.11 | 15,190.89 | 1,834,050.00 |
| Other Costs (Middle School) | 403,926.46 | 3,373.54 | 407,300.00 |
| Total Construction Cost (Apollo) | 19,155,000.00 |  | 19,155,000.00 |
| Architect/Engineer Fee (Apollo) | 1,053,867.00 |  | 1,053,867.00 |
| Construction Contingencies (Apollo) | 957,750.00 |  | 957,750.00 |
| Other Costs (Apollo) | 217,000.00 |  | 217,000.00 |
|  | 61,912,573.20 | 338,492.80 | 62,251,066.00 |
| Delivery Date Expenses: |  |  |  |
| Cost of Issuance | 300,253.66 | 1,606.34 | 301,860.00 |
| Underwriter's Discount | 1,220,271.66 | 6,528.34 | 1,226,800.00 |
|  | 1,520,525.32 | 8,134.68 | 1,528,660.00 |
| Other Uses of Funds: |  |  |  |
| Additional Proceeds | 20,567.48 | -20,210.48 | 357.00 |
|  | 63,453,666.00 | 326,417.00 | 63,780,083.00 |

## BOND DEBT SERVICE

Daviess County, KY Schools
School Building Revenue Bonds, Series 2020

| Period <br> Ending | Principal | Coupon | Interest | Debt Service | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12/01/2020 |  |  | 1,315,021.16 | 1,315,021.16 |  |
| 06/01/2021 | 755,000 | 3.000\% | 1,207,672.50 | 1,962,672.50 |  |
| 06/30/2021 |  |  |  |  | 3,277,693.66 |
| 12/01/2021 |  |  | 1,196,347.50 | 1,196,347.50 |  |
| 06/01/2022 | 815,000 | 3.050\% | 1,196,347.50 | 2,011,347.50 |  |
| 06/30/2022 |  |  |  |  | 3,207,695.00 |
| 12/01/2022 |  |  | 1,183,918.74 | 1,183,918.74 |  |
| 06/01/2023 | 840,000 | 3.100\% | 1,183,918.74 | 2,023,918.74 |  |
| 06/30/2023 |  |  |  |  | 3,207,837.48 |
| 12/01/2023 |  |  | 1,170,898.75 | 1,170,898.75 |  |
| 06/01/2024 | 870,000 | 3.150\% | 1,170,898.75 | 2,040,898.75 |  |
| 06/30/2024 |  |  |  |  | 3,211,797.50 |
| 12/01/2024 |  |  | 1,157,196.25 | 1,157,196.25 |  |
| 06/01/2025 | 895,000 | 3.200\% | 1,157,196.25 | 2,052,196.25 |  |
| 06/30/2025 |  |  |  |  | 3,209,392.50 |
| 12/01/2025 |  |  | 1,142,876.25 | 1,142,876.25 |  |
| 06/01/2026 | 925,000 | 3.300\% | 1,142,876.25 | 2,067,876.25 |  |
| 06/30/2026 |  |  |  |  | 3,210,752.50 |
| 12/01/2026 |  |  | 1,127,613.75 | 1,127,613.75 |  |
| 06/01/2027 | 955,000 | 3.400\% | 1,127,613.75 | 2,082,613.75 |  |
| 06/30/2027 |  |  |  |  | 3,210,227.50 |
| 12/01/2027 |  |  | 1,111,378.75 | 1,111,378.75 |  |
| 06/01/2028 | 985,000 | 3.500\% | 1,111,378.75 | 2,096,378.75 |  |
| 06/30/2028 |  |  |  |  | 3,207,757.50 |
| 12/01/2028 |  |  | 1,094,141.25 | 1,094,141.25 |  |
| 06/01/2029 | 2,190,000 | 3.650\% | 1,094,141.25 | 3,284,141.25 |  |
| 06/30/2029 |  |  |  |  | 4,378,282.50 |
| 12/01/2029 |  |  | 1,054,173.75 | 1,054,173.75 |  |
| 06/01/2030 | 2,265,000 | 3.750\% | 1,054,173.75 | 3,319,173.75 |  |
| 06/30/2030 |  |  |  |  | 4,373,347.50 |
| 12/01/2030 |  |  | 1,011,705.01 | 1,011,705.01 |  |
| 06/01/2031 | 3,335,000 | 3.800\% | 1,011,705.01 | 4,346,705.01 |  |
| 06/30/2031 |  |  |  |  | 5,358,410.02 |
| 12/01/2031 |  |  | 948,340.01 | 948,340.01 |  |
| 06/01/2032 | 3,465,000 | 3.850\% | 948,340.01 | 4,413,340.01 |  |
| 06/30/2032 |  |  |  |  | 5,361,680.02 |
| 12/01/2032 |  |  | 881,638.75 | 881,638.75 |  |
| 06/01/2033 | 3,590,000 | 3.900\% | 881,638.75 | 4,471,638.75 |  |
| 06/30/2033 |  |  |  |  | 5,353,277.50 |
| 12/01/2033 |  |  | 811,633.75 | 811,633.75 |  |
| 06/01/2034 | 3,875,000 | 3.950\% | 811,633.75 | 4,686,633.75 |  |
| 06/30/2034 |  |  |  |  | 5,498,267.50 |
| 12/01/2034 |  |  | 735,102.50 | 735,102.50 |  |
| 06/01/2035 | 4,650,000 | 4.000\% | 735,102.50 | 5,385,102.50 |  |
| 06/30/2035 |  |  |  |  | 6,120,205.00 |
| 12/01/2035 |  |  | 642,102.50 | 642,102.50 |  |
| 06/01/2036 | 5,695,000 | 4.050\% | 642,102.50 | 6,337,102.50 |  |
| 06/30/2036 |  |  |  |  | 6,979,205.00 |
| 12/01/2036 |  |  | 526,778.76 | 526,778.76 |  |
| 06/01/2037 | 6,320,000 | 4.100\% | 526,778.76 | 6,846,778.76 |  |
| 06/30/2037 |  |  |  |  | 7,373,557.52 |
| 12/01/2037 |  |  | 397,218.75 | 397,218.75 |  |
| 06/01/2038 | 6,700,000 | 4.150\% | 397,218.75 | 7,097,218.75 |  |
| 06/30/2038 |  |  |  |  | 7,494,437.50 |
| 12/01/2038 |  |  | 258,193.75 | 258,193.75 |  |
| 06/01/2039 | 5,500,000 | 4.200\% | 258,193.75 | 5,758,193.75 |  |
| 06/30/2039 |  |  |  |  | 6,016,387.50 |
| 12/01/2039 |  |  | 142,693.76 | 142,693.76 |  |
| 06/01/2040 | 6,715,000 | 4.250\% | 142,693.76 | 6,857,693.76 |  |
| 06/30/2040 |  |  |  |  | 7,000,387.52 |
|  | 61,340,000 |  | 35,710,598.72 | 97,050,598.72 | 97,050,598.72 |

## BOND DEBT SERVICE

Daviess County, KY Schools District (Middle School/Apollo)

| Period <br> Ending | Principal | Coupon | Interest | Debt Service | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12/01/2020 |  |  | 1,308,354.42 | 1,308,354.42 |  |
| 06/01/2021 | 743,906 | 3.000\% | 1,201,549.98 | 1,945,455.98 |  |
| 06/30/2021 |  |  |  |  | 3,253,810.40 |
| 12/01/2021 |  |  | 1,190,391.39 | 1,190,391.39 |  |
| 06/01/2022 | 803,028 | 3.050\% | 1,190,391.39 | 1,993,419.39 |  |
| 06/30/2022 |  |  |  |  | 3,183,810.78 |
| 12/01/2022 |  |  | 1,178,145.21 | 1,178,145.21 |  |
| 06/01/2023 | 827,663 | 3.100\% | 1,178,145.21 | 2,005,808.21 |  |
| 06/30/2023 |  |  |  |  | 3,183,953.42 |
| 12/01/2023 |  |  | 1,165,316.44 | 1,165,316.44 |  |
| 06/01/2024 | 857,280 | 3.150\% | 1,165,316.44 | 2,022,596.44 |  |
| 06/30/2024 |  |  |  |  | 3,187,912.88 |
| 12/01/2024 |  |  | 1,151,814.28 | 1,151,814.28 |  |
| 06/01/2025 | 881,880 | 3.200\% | 1,151,814.28 | 2,033,694.28 |  |
| 06/30/2025 |  |  |  |  | 3,185,508.56 |
| 12/01/2025 |  |  | 1,137,704.20 | 1,137,704.20 |  |
| 06/01/2026 | 911,460 | 3.300\% | 1,137,704.20 | 2,049,164.20 |  |
| 06/30/2026 |  |  |  |  | 3,186,868.40 |
| 12/01/2026 |  |  | 1,122,665.11 | 1,122,665.11 |  |
| 06/01/2027 | 941,014 | 3.400\% | 1,122,665.11 | 2,063,679.11 |  |
| 06/30/2027 |  |  |  |  | 3,186,344.22 |
| 12/01/2027 |  |  | 1,106,667.87 | 1,106,667.87 |  |
| 06/01/2028 | 970,538 | 3.500\% | 1,106,667.87 | 2,077,205.87 |  |
| 06/30/2028 |  |  |  |  | 3,183,873.74 |
| 12/01/2028 |  |  | 1,089,683.46 | 1,089,683.46 |  |
| 06/01/2029 | 2,175,032 | 3.650\% | 1,089,683.46 | 3,264,715.46 |  |
| 06/30/2029 |  |  |  |  | 4,354,398.92 |
| 12/01/2029 |  |  | 1,049,989.12 | 1,049,989.12 |  |
| 06/01/2030 | 2,249,485 | 3.750\% | 1,049,989.12 | 3,299,474.12 |  |
| 06/30/2030 |  |  |  |  | 4,349,463.24 |
| 12/01/2030 |  |  | 1,007,811.29 | 1,007,811.29 |  |
| 06/01/2031 | 3,318,904 | 3.800\% | 1,007,811.29 | 4,326,715.29 |  |
| 06/30/2031 |  |  |  |  | 5,334,526.58 |
| 12/01/2031 |  |  | 944,752.11 | 944,752.11 |  |
| 06/01/2032 | 3,448,292 | 3.850\% | 944,752.11 | 4,393,044.11 |  |
| 06/30/2032 |  |  |  |  | 5,337,796.22 |
| 12/01/2032 |  |  | 878,372.48 | 878,372.48 |  |
| 06/01/2033 | 3,572,648 | 3.900\% | 878,372.48 | 4,451,020.48 |  |
| 06/30/2033 |  |  |  |  | 5,329,392.96 |
| 12/01/2033 |  |  | 808,705.85 | 808,705.85 |  |
| 06/01/2034 | 3,856,971 | 3.950\% | 808,705.85 | 4,665,676.85 |  |
| 06/30/2034 |  |  |  |  | 5,474,382.70 |
| 12/01/2034 |  |  | 732,530.67 | 732,530.67 |  |
| 06/01/2035 | 4,631,260 | 4.000\% | 732,530.67 | 5,363,790.67 |  |
| 06/30/2035 |  |  |  |  | 6,096,321.34 |
| 12/01/2035 |  |  | 639,905.47 | 639,905.47 |  |
| 06/01/2036 | 5,675,509 | 4.050\% | 639,905.47 | 6,315,414.47 |  |
| 06/30/2036 |  |  |  |  | 6,955,319.94 |
| 12/01/2036 |  |  | 524,976.42 | 524,976.42 |  |
| 06/01/2037 | 6,299,721 | 4.100\% | 524,976.42 | 6,824,697.42 |  |
| 06/30/2037 |  |  |  |  | 7,349,673.84 |
| 12/01/2037 |  |  | 395,832.13 | 395,832.13 |  |
| 06/01/2038 | 6,678,889 | 4.150\% | 395,832.13 | 7,074,721.13 |  |
| 06/30/2038 |  |  |  |  | 7,470,553.26 |
| 12/01/2038 |  |  | 257,245.19 | 257,245.19 |  |
| 06/01/2039 | 5,478,013 | 4.200\% | 257,245.19 | 5,735,258.19 |  |
| 06/30/2039 |  |  |  |  | 5,992,503.38 |
| 12/01/2039 |  |  | 142,206.92 | 142,206.92 |  |
| 06/01/2040 | 6,692,090 | 4.250\% | 142,206.92 | 6,834,296.92 |  |
| 06/30/2040 |  |  |  |  | 6,976,503.84 |
|  | 61,013,583 |  | 35,559,335.62 | 96,572,918.62 | 96,572,918.62 |

## BOND DEBT SERVICE

## Daviess County, KY Schools <br> SFCC (Middle School)

| Period <br> Ending | Principal | Coupon | Interest | Debt Service | Annual Debt Service |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12/01/2020 |  |  | 6,666.74 | 6,666.74 |  |
| 06/01/2021 | 11,094 | 3.000\% | 6,122.52 | 17,216.52 |  |
| 06/30/2021 |  |  |  |  | 23,883.26 |
| 12/01/2021 |  |  | 5,956.11 | 5,956.11 |  |
| 06/01/2022 | 11,972 | 3.050\% | 5,956.11 | 17,928.11 |  |
| 06/30/2022 |  |  |  |  | 23,884.22 |
| 12/01/2022 |  |  | 5,773.53 | 5,773.53 |  |
| 06/01/2023 | 12,337 | 3.100\% | 5,773.53 | 18,110.53 |  |
| 06/30/2023 |  |  |  |  | 23,884.06 |
| 12/01/2023 |  |  | 5,582.31 | 5,582.31 |  |
| 06/01/2024 | 12,720 | 3.150\% | 5,582.31 | 18,302.31 |  |
| 06/30/2024 |  |  |  |  | 23,884.62 |
| 12/01/2024 |  |  | 5,381.97 | 5,381.97 |  |
| 06/01/2025 | 13,120 | 3.200\% | 5,381.97 | 18,501.97 |  |
| 06/30/2025 |  |  |  |  | 23,883.94 |
| 12/01/2025 |  |  | 5,172.05 | 5,172.05 |  |
| 06/01/2026 | 13,540 | 3.300\% | 5,172.05 | 18,712.05 |  |
| 06/30/2026 |  |  |  |  | 23,884.10 |
| 12/01/2026 |  |  | 4,948.64 | 4,948.64 |  |
| 06/01/2027 | 13,986 | 3.400\% | 4,948.64 | 18,934.64 |  |
| 06/30/2027 |  |  |  |  | 23,883.28 |
| 12/01/2027 |  |  | 4,710.88 | 4,710.88 |  |
| 06/01/2028 | 14,462 | 3.500\% | 4,710.88 | 19,172.88 |  |
| 06/30/2028 |  |  |  |  | 23,883.76 |
| 12/01/2028 |  |  | 4,457.79 | 4,457.79 |  |
| 06/01/2029 | 14,968 | 3.650\% | 4,457.79 | 19,425.79 |  |
| 06/30/2029 |  |  |  |  | 23,883.58 |
| 12/01/2029 |  |  | 4,184.63 | 4,184.63 |  |
| 06/01/2030 | 15,515 | 3.750\% | 4,184.63 | 19,699.63 |  |
| 06/30/2030 |  |  |  |  | 23,884.26 |
| 12/01/2030 |  |  | 3,893.72 | 3,893.72 |  |
| 06/01/2031 | 16,096 | 3.800\% | 3,893.72 | 19,989.72 |  |
| 06/30/2031 |  |  |  |  | 23,883.44 |
| 12/01/2031 |  |  | 3,587.90 | 3,587.90 |  |
| 06/01/2032 | 16,708 | 3.850\% | 3,587.90 | 20,295.90 |  |
| 06/30/2032 |  |  |  |  | 23,883.80 |
| 12/01/2032 |  |  | 3,266.27 | 3,266.27 |  |
| 06/01/2033 | 17,352 | 3.900\% | 3,266.27 | 20,618.27 |  |
| 06/30/2033 |  |  |  |  | 23,884.54 |
| 12/01/2033 |  |  | 2,927.90 | 2,927.90 |  |
| 06/01/2034 | 18,029 | 3.950\% | 2,927.90 | 20,956.90 |  |
| 06/30/2034 |  |  |  |  | 23,884.80 |
| 12/01/2034 |  |  | 2,571.83 | 2,571.83 |  |
| 06/01/2035 | 18,740 | 4.000\% | 2,571.83 | 21,311.83 |  |
| 06/30/2035 |  |  |  |  | 23,883.66 |
| 12/01/2035 |  |  | 2,197.03 | 2,197.03 |  |
| 06/01/2036 | 19,491 | 4.050\% | 2,197.03 | 21,688.03 |  |
| 06/30/2036 |  |  |  |  | 23,885.06 |
| 12/01/2036 |  |  | 1,802.34 | 1,802.34 |  |
| 06/01/2037 | 20,279 | 4.100\% | 1,802.34 | 22,081.34 |  |
| 06/30/2037 |  |  |  |  | 23,883.68 |
| 12/01/2037 |  |  | 1,386.62 | 1,386.62 |  |
| 06/01/2038 | 21,111 | 4.150\% | 1,386.62 | 22,497.62 |  |
| 06/30/2038 |  |  |  |  | 23,884.24 |
| 12/01/2038 |  |  | 948.56 | 948.56 |  |
| 06/01/2039 | 21,987 | 4.200\% | 948.56 | 22,935.56 |  |
| 06/30/2039 |  |  |  |  | 23,884.12 |
| 12/01/2039 |  |  | 486.84 | 486.84 |  |
| 06/01/2040 | 22,910 | 4.250\% | 486.84 | 23,396.84 |  |
| 06/30/2040 |  |  |  |  | 23,883.68 |
|  | 326,417 |  | 151,263.10 | 477,680.10 | 477,680.10 |

## BOND DEBT SERVICE

Daviess County, KY Schools
District (Middle School/Apollo)

| Period Ending | Principal | Coupon | Interest | Debt Service |
| :---: | :---: | :---: | :---: | :---: |
| 06/30/2021 | 743,906 | 3.000\% | 2,509,904.40 | 3,253,810.40 |
| 06/30/2022 | 803,028 | 3.050\% | 2,380,782.78 | 3,183,810.78 |
| 06/30/2023 | 827,663 | 3.100\% | 2,356,290.42 | 3,183,953.42 |
| 06/30/2024 | 857,280 | 3.150\% | 2,330,632.88 | 3,187,912.88 |
| 06/30/2025 | 881,880 | 3.200\% | 2,303,628.56 | 3,185,508.56 |
| 06/30/2026 | 911,460 | 3.300\% | 2,275,408.40 | 3,186,868.40 |
| 06/30/2027 | 941,014 | 3.400\% | 2,245,330.22 | 3,186,344.22 |
| 06/30/2028 | 970,538 | 3.500\% | 2,213,335.74 | 3,183,873.74 |
| 06/30/2029 | 2,175,032 | 3.650\% | 2,179,366.92 | 4,354,398.92 |
| 06/30/2030 | 2,249,485 | 3.750\% | 2,099,978.24 | 4,349,463.24 |
| 06/30/2031 | 3,318,904 | 3.800\% | 2,015,622.58 | 5,334,526.58 |
| 06/30/2032 | 3,448,292 | 3.850\% | 1,889,504.22 | 5,337,796.22 |
| 06/30/2033 | 3,572,648 | 3.900\% | 1,756,744.96 | 5,329,392.96 |
| 06/30/2034 | 3,856,971 | 3.950\% | 1,617,411.70 | 5,474,382.70 |
| 06/30/2035 | 4,631,260 | 4.000\% | 1,465,061.34 | 6,096,321.34 |
| 06/30/2036 | 5,675,509 | 4.050\% | 1,279,810.94 | 6,955,319.94 |
| 06/30/2037 | 6,299,721 | 4.100\% | 1,049,952.84 | 7,349,673.84 |
| 06/30/2038 | 6,678,889 | 4.150\% | 791,664.26 | 7,470,553.26 |
| 06/30/2039 | 5,478,013 | 4.200\% | 514,490.38 | 5,992,503.38 |
| 06/30/2040 | 6,692,090 | 4.250\% | 284,413.84 | 6,976,503.84 |
|  | 61,013,583 |  | 35,559,335.62 | 96,572,918.62 |

## BOND DEBT SERVICE

## Daviess County, KY Schools SFCC (Middle School)

| Period Ending | Principal | Coupon | Interest | Debt Service |
| :---: | :---: | :---: | :---: | :---: |
| 06/30/2021 | 11,094 | 3.000\% | 12,789.26 | 23,883.26 |
| 06/30/2022 | 11,972 | 3.050\% | 11,912.22 | 23,884.22 |
| 06/30/2023 | 12,337 | 3.100\% | 11,547.06 | 23,884.06 |
| 06/30/2024 | 12,720 | 3.150\% | 11,164.62 | 23,884.62 |
| 06/30/2025 | 13,120 | 3.200\% | 10,763.94 | 23,883.94 |
| 06/30/2026 | 13,540 | 3.300\% | 10,344.10 | 23,884.10 |
| 06/30/2027 | 13,986 | 3.400\% | 9,897.28 | 23,883.28 |
| 06/30/2028 | 14,462 | 3.500\% | 9,421.76 | 23,883.76 |
| 06/30/2029 | 14,968 | 3.650\% | 8,915.58 | 23,883.58 |
| 06/30/2030 | 15,515 | 3.750\% | 8,369.26 | 23,884.26 |
| 06/30/2031 | 16,096 | 3.800\% | 7,787.44 | 23,883.44 |
| 06/30/2032 | 16,708 | 3.850\% | 7,175.80 | 23,883.80 |
| 06/30/2033 | 17,352 | 3.900\% | 6,532.54 | 23,884.54 |
| 06/30/2034 | 18,029 | 3.950\% | 5,855.80 | 23,884.80 |
| 06/30/2035 | 18,740 | 4.000\% | 5,143.66 | 23,883.66 |
| 06/30/2036 | 19,491 | 4.050\% | 4,394.06 | 23,885.06 |
| 06/30/2037 | 20,279 | 4.100\% | 3,604.68 | 23,883.68 |
| 06/30/2038 | 21,111 | 4.150\% | 2,773.24 | 23,884.24 |
| 06/30/2039 | 21,987 | 4.200\% | 1,897.12 | 23,884.12 |
| 06/30/2040 | 22,910 | 4.250\% | 973.68 | 23,883.68 |
|  | 326,417 |  | 151,263.10 | 477,680.10 |

## BOND SUMMARY STATISTICS

## Daviess County, KY Schools School Building Revenue Bonds, Series 2020

| Dated Date | $05 / 15 / 2020$ |
| :--- | ---: |
| Delivery Date | $05 / 15 / 2020$ |
| Last Maturity | $06 / 01 / 2040$ |
|  |  |
| Arbitrage Yield | $4.021036 \%$ |
| True Interest Cost (TIC) | $4.211547 \%$ |
| Net Interest Cost (NIC) | $4.173924 \%$ |
| All-In TIC | $4.259223 \%$ |
| Average Coupon | $4.035296 \%$ |
|  |  |
| Average Life (years) | 14.427 |
| Duration of Issue (years) | 10.791 |
| Par Amount | $61,340,000.00$ |
| Bond Proceeds | $61,340,000.00$ |
| Total Interest | $35,710,598.72$ |
| Net Interest | $36,937,398.72$ |
| Total Debt Service | $97,050,598.72$ |
| Maximum Annual Debt Service | $7,494,437.50$ |
| Average Annual Debt Service | $4,841,770.45$ |
| Underwriter's Fees (per \$1000) |  |
| Average Takedown |  |
| Other Fee | 20.000000 |
| Total Underwriter's Discount | 20.000000 |
| Bid Price | 98.000000 |


| Bond Component | Par <br> Value | Price | Average <br> Coupon | Average <br> Life |
| :--- | ---: | ---: | ---: | ---: |
| Bond Component | $61,340,000.00$ | 100.000 | $4.035 \%$ | 14.427 |
|  | $61,340,000.00$ |  |  | 14.427 |


|  | TIC | All-In TIC | Arbitrage Yield |
| :---: | :---: | :---: | :---: |
| Par Value | 61,340,000.00 | 61,340,000.00 | 61,340,000.00 |
| + Accrued Interest |  |  |  |
| + Premium (Discount) |  |  |  |
| - Underwriter's Discount | -1,226,800.00 | -1,226,800.00 |  |
| - Cost of Issuance Expense <br> - Other Amounts |  | -301,860.00 |  |
| Target Value | 60,113,200.00 | 59,811,340.00 | 61,340,000.00 |
| Target Date | 05/15/2020 | 05/15/2020 | 05/15/2020 |
| Yield | 4.211547\% | 4.259223\% | 4.021036\% |

## BOND PRICING

Daviess County, KY Schools

## School Building Revenue Bonds, Series 2020

| Bond Component | Maturity <br> Date | Amount | Rate | Yield | Price |
| :--- | :---: | ---: | :---: | :---: | :---: |
| Bond Component: |  |  |  |  |  |
|  | $06 / 01 / 2021$ | 755,000 | $3.000 \%$ | $3.000 \%$ | 100.000 |
|  | $06 / 01 / 2022$ | 815,000 | $3.050 \%$ | $3.050 \%$ | 100.000 |
|  | $06 / 01 / 2023$ | 840,000 | $3.100 \%$ | $3.100 \%$ | 100.000 |
|  | $06 / 01 / 2024$ | 870,000 | $3.150 \%$ | $3.150 \%$ | 100.000 |
|  | $06 / 01 / 2025$ | 895,000 | $3.200 \%$ | $3.200 \%$ | 100.000 |
|  | $06 / 01 / 2026$ | 925,000 | $3.300 \%$ | $3.300 \%$ | 100.000 |
| $06 / 01 / 2027$ | 955,000 | $3.400 \%$ | $3.400 \%$ | 100.000 |  |
|  | $06 / 01 / 2028$ | 985,000 | $3.500 \%$ | $3.500 \%$ | 100.000 |
| $06 / 01 / 2029$ | $2,190,000$ | $3.650 \%$ | $3.650 \%$ | 100.000 |  |
|  | $06 / 01 / 2030$ | $2,265,000$ | $3.750 \%$ | $3.750 \%$ | 100.000 |
|  | $06 / 01 / 2031$ | $3,335,000$ | $3.800 \%$ | $3.800 \%$ | 100.000 |
|  | $06 / 01 / 2032$ | $3,465,000$ | $3.850 \%$ | $3.850 \%$ | 100.000 |
|  | $06 / 01 / 2033$ | $3,590,000$ | $3.900 \%$ | $3.900 \%$ | 100.000 |
| $06 / 01 / 2034$ | $3,875,000$ | $3.950 \%$ | $3.950 \%$ | 100.000 |  |
| $06 / 01 / 2035$ | $4,650,000$ | $4.000 \%$ | $4.000 \%$ | 100.000 |  |
| $06 / 01 / 2036$ | $5,695,000$ | $4.050 \%$ | $4.050 \%$ | 100.000 |  |
|  | $06 / 01 / 2037$ | $6,320,000$ | $4.100 \%$ | $4.100 \%$ | 100.000 |
|  | $06 / 01 / 2038$ | $6,700,000$ | $4.150 \%$ | $4.150 \%$ | 100.000 |
|  | $06 / 01 / 2039$ | $5,500,000$ | $4.200 \%$ | $4.200 \%$ | 100.000 |
|  | $06 / 01 / 2040$ | $6,715,000$ | $4.250 \%$ | $4.250 \%$ | 100.000 |


| Dated Date | $05 / 15 / 2020$ |  |
| :--- | ---: | ---: |
| Delivery Date | $05 / 15 / 2020$ |  |
| First Coupon | $12 / 01 / 2020$ |  |
|  |  |  |
| Par Amount | $61,340,000.00$ |  |
| Original Issue Discount | $61,340,000.00$ | $100.000000 \%$ |
| Production | $-1,226,800.00$ | $-2.000000 \%$ |
| Underwriter's Discount | $60,113,200.00$ | $98.000000 \%$ |
| Purchase Price |  |  |
| Accrued Interest | $60,113,200.00$ |  |
| Net Proceeds |  |  |

## AGGREGATE DEBT SERVICE

Daviess County, KY Schools
District (Middle School/Apollo)
District (Middle School/Apollo)

| Period <br> Ending | District <br> (Middle | Existing Debt <br> Service | Aggregate <br> Debt Service |
| :---: | ---: | ---: | ---: |
| $06 / 30 / 2021$ | $3,253,810.40$ | $7,740,652.88$ | $10,994,463.28$ |
| $06 / 30 / 2022$ | $3,183,810.78$ | $7,739,771.14$ | $10,923,581.92$ |
| $06 / 30 / 2023$ | $3,183,953.42$ | $7,735,370.98$ | $10,919,324.40$ |
| $06 / 30 / 2024$ | $3,187,912.88$ | $7,737,804.69$ | $10,925,717.57$ |
| $06 / 30 / 2025$ | $3,185,508.56$ | $6,382,643.66$ | $9,568,152.22$ |
| $06 / 30 / 2026$ | $3,186,868.40$ | $6,107,179.24$ | $9,294,047.64$ |
| $06 / 30 / 2027$ | $3,186,344.22$ | $6,094,575.56$ | $9,280,919.78$ |
| $06 / 30 / 2028$ | $3,183,873.74$ | $5,393,409.10$ | $8,577,282.84$ |
| $06 / 30 / 2029$ | $4,354,398.92$ | $4,098,821.96$ | $8,453,220.88$ |
| $06 / 30 / 2030$ | $4,349,463.24$ | $4,099,746.30$ | $8,449,209.54$ |
| $06 / 30 / 2031$ | $5,334,526.58$ | $3,115,411.98$ | $8,449,938.56$ |
| $06 / 30 / 2032$ | $5,337,796.22$ | $3,115,378.65$ | $8,453,174.87$ |
| $06 / 30 / 2033$ | $5,329,392.96$ | $3,120,604.95$ | $8,449,997.91$ |
| $06 / 30 / 2034$ | $5,474,382.70$ | $2,975,214.03$ | $8,449,596.73$ |
| $06 / 30 / 2035$ | $6,096,321.34$ | $2,355,340.81$ | $8,451,662.15$ |
| $06 / 30 / 2036$ | $6,955,319.94$ | $1,496,907.65$ | $8,452,227.59$ |
| $06 / 30 / 2037$ | $7,349,673.84$ | $1,099,654.03$ | $8,449,327.87$ |
| $06 / 30 / 2038$ | $7,470,553.26$ | $983,212.50$ | $8,453,765.76$ |
| $06 / 30 / 2039$ | $5,992,503.38$ | $984,137.50$ | $6,976,640.88$ |
| $06 / 30 / 2040$ | $6,976,503.84$ |  | $6,976,503.84$ |
|  | $96,572,918.62$ | $82,375,837.61$ | $178,948,756.23$ |

## AGGREGATE DEBT SERVICE

Daviess County, KY Schools
SFCC (Middle School)

| Period <br> Ending | SFCC (Middle <br> School) | Aggregate <br> Debt Service |
| :---: | ---: | ---: |
| $06 / 30 / 2021$ | $23,883.26$ | $23,883.26$ |
| $06 / 30 / 2022$ | $23,884.22$ | $23,884.22$ |
| $06 / 30 / 2023$ | $23,884.06$ | $23,884.06$ |
| $06 / 30 / 2024$ | $23,884.62$ | $23,884.62$ |
| $06 / 30 / 2025$ | $23,883.94$ | $23,883.94$ |
| $06 / 30 / 2026$ | $23,884.10$ | $23,884.10$ |
| $06 / 30 / 2027$ | $23,883.28$ | $23,883.28$ |
| $06 / 30 / 2028$ | $23,883.76$ | $23,883.76$ |
| $06 / 30 / 2029$ | $23,883.58$ | $23,883.58$ |
| $06 / 30 / 2030$ | $23,884.26$ | $23,884.26$ |
| $06 / 30 / 2031$ | $23,883.44$ | $23,883.44$ |
| $06 / 30 / 2032$ | $23,883.80$ | $23,883.80$ |
| $06 / 30 / 2033$ | $23,884.54$ | $23,884.54$ |
| $06 / 30 / 2034$ | $23,884.80$ | $23,884.80$ |
| $06 / 30 / 2035$ | $23,883.66$ | $23,883.66$ |
| $06 / 30 / 2036$ | $23,885.06$ | $23,885.06$ |
| $06 / 30 / 2037$ | $23,883.68$ | $23,883.68$ |
| $06 / 30 / 2038$ | $23,884.24$ | $23,884.24$ |
| $06 / 30 / 2039$ | $23,884.12$ | $23,884.12$ |
| $06 / 30 / 2040$ | $23,883.68$ | $23,883.68$ |
|  | $477,680.10$ | $477,680.10$ |

## BOND SOLUTION

## Daviess County, KY Schools SFCC (Middle School)

| Period <br> Ending | Proposed <br> Principal | Proposed <br> Debt Service | Total Adj <br> Debt Service | Revenue <br> Constraints | Unused <br> Revenues | Debt Serv <br> Coverage |
| :---: | :---: | :---: | :---: | :---: | ---: | ---: |
| $06 / 30 / 2020$ |  |  |  |  |  |  |
| $06 / 30 / 2021$ | 11,094 | 23,883 | 23,883 | 23,884 | $100.00343 \%$ |  |
| $06 / 30 / 2022$ | 11,972 | 23,884 | 23,884 | 23,885 | 1 | $100.00268 \%$ |
| $06 / 30 / 2023$ | 12,337 | 23,884 | 23,884 | 23,885 | 1 | $100.00268 \%$ |
| $06 / 30 / 2024$ | 12,720 | 23,885 | 23,885 | 23,885 | 0 | $100.00025 \%$ |
| $06 / 30 / 2025$ | 13,120 | 23,884 | 23,884 | 23,885 | 1 | $100.00402 \%$ |
| $06 / 30 / 2026$ | 13,540 | 23,884 | 23,884 | 23,885 | 1 | $100.00251 \%$ |
| $06 / 30 / 2027$ | 13,986 | 23,883 | 23,883 | 23,884 | 1 | $100.00419 \%$ |
| $06 / 30 / 2028$ | 14,462 | 23,884 | 23,884 | 23,884 | 1 | $100.00243 \%$ |
| $06 / 30 / 2029$ | 14,968 | 23,884 | 23,884 | 23,884 | 1 | $100.00360 \%$ |
| $06 / 30 / 2030$ | 15,515 | 23,884 | 23,884 | 23,885 | 1 | $100.00218 \%$ |
| $06 / 30 / 2031$ | 16,096 | 23,883 | 23,883 | 23,884 | 1 | $100.00327 \%$ |
| $06 / 30 / 2032$ | 16,708 | 23,884 | 23,884 | 23,885 | 1 | $100.00343 \%$ |
| $06 / 30 / 2033$ | 17,352 | 23,885 | 23,885 | 23,885 | 0 | $100.00059 \%$ |
| $06 / 30 / 2034$ | 18,029 | 23,885 | 23,885 | 23,885 | 0 | $100.00092 \%$ |
| $06 / 30 / 2035$ | 18,740 | 23,884 | 23,884 | 23,884 | 1 | $100.00268 \%$ |
| $06 / 30 / 2036$ | 19,491 | 23,885 | 23,885 | 23,885 | 0 | $100.00100 \%$ |
| $06 / 30 / 2037$ | 20,279 | 23,884 | 23,884 | 23,884 | 0 | $100.00201 \%$ |
| $06 / 30 / 2038$ | 21,111 | 23,884 | 23,884 | 23,885 | 1 | $100.00230 \%$ |
| $06 / 30 / 2039$ | 21,987 | 23,884 | 23,884 | 23,885 | 1 | $100.00360 \%$ |
| $06 / 30 / 2040$ | 22,910 | 23,884 | 23,884 | 23,884 | 1 | $100.00318 \%$ |
|  | 326,417 | 477,680 | 477,680 | 477,692 | 12 |  |

## BOND SOLUTION

| Daviess County, KY Schools District (Middle School) |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Period <br> Ending | Proposed Principal | Proposed Debt Service | Existing Debt Service | Total Adj Debt Service | Revenue Constraints | Unused Revenues | Debt Serv Coverage |
| 06/30/2020 |  |  |  |  |  |  |  |
| 06/30/2021 |  | 1,650,663 | 7,740,653 | 9,391,316 | 11,835,755 | 2,444,439 | 126.02872\% |
| 06/30/2022 |  | 1,580,422 | 7,739,771 | 9,320,193 | 11,835,755 | 2,515,562 | 126.99045\% |
| 06/30/2023 |  | 1,580,422 | 7,735,371 | 9,315,793 | 11,835,755 | 2,519,962 | 127.05043\% |
| 06/30/2024 |  | 1,580,422 | 7,737,805 | 9,318,227 | 11,835,755 | 2,517,528 | 127.01725\% |
| 06/30/2025 |  | 1,580,422 | 6,382,644 | 7,963,066 | 11,835,755 | 3,872,689 | 148.63315\% |
| 06/30/2026 |  | 1,580,422 | 6,107,179 | 7,687,601 | 11,835,755 | 4,148,154 | 153.95901\% |
| 06/30/2027 |  | 1,580,422 | 6,094,576 | 7,674,997 | 11,835,755 | 4,160,757 | 154.21184\% |
| 06/30/2028 |  | 1,580,422 | 5,393,409 | 6,973,831 | 11,835,755 | 4,861,924 | 169.71669\% |
| 06/30/2029 | 1,167,142 | 2,747,564 | 4,098,822 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87596\% |
| 06/30/2030 | 1,208,819 | 2,746,640 | 4,099,746 | 6,846,386 | 11,835,755 | 4,989,368 | 172.87594\% |
| 06/30/2031 | 2,238,484 | 3,730,974 | 3,115,412 | 6,846,386 | 11,835,755 | 4,989,368 | 172.87594\% |
| 06/30/2032 | 2,323,579 | 3,731,007 | 3,115,379 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87596\% |
| 06/30/2033 | 2,407,811 | 3,725,781 | 3,120,605 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87595\% |
| 06/30/2034 | 2,647,106 | 3,871,172 | 2,975,214 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87596\% |
| 06/30/2035 | 3,371,540 | 4,491,045 | 2,355,341 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87596\% |
| 06/30/2036 | 4,364,835 | 5,349,478 | 1,496,908 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87595\% |
| 06/30/2037 | 4,938,864 | 5,746,732 | 1,099,654 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87596\% |
| 06/30/2038 | 5,257,799 | 5,863,173 | 983,213 | 6,846,386 | 11,835,755 | 4,989,369 | 172.87596\% |
| 06/30/2039 | 4,002,429 | 4,389,604 | 984,138 | 5,373,742 | 10,363,111 | 4,989,369 | 192.84720\% |
| 06/30/2040 | 5,154,669 | 5,373,742 |  | 5,373,742 | 10,363,111 | 4,989,369 | 192.84719\% |
|  | 39,083,077 | 64,480,529 | 82,375,838 | 146,856,367 | 233,769,810 | 86,913,443 |  |

## BOND SOLUTION

## Daviess County, KY Schools <br> District (Apollo HS)

| Period <br> Ending | Proposed <br> Principal | Proposed <br> Debt Service | Total Adj <br> Debt Service | Revenue <br> Constraints | Unused <br> Revenues | Debt Serv <br> Coverage |
| :---: | ---: | :---: | ---: | ---: | ---: | ---: |
| $06 / 30 / 2020$ |  |  |  |  |  |  |
| $06 / 30 / 2021$ | 743,906 | $1,603,148$ | $1,603,148$ | $11,835,755$ | $10,232,607$ | $738.28230 \%$ |
| $06 / 30 / 2022$ | 803,028 | $1,603,389$ | $1,603,389$ | $11,835,755$ | $10,232,366$ | $738.17117 \%$ |
| $06 / 30 / 2023$ | 827,663 | $1,603,532$ | $1,603,532$ | $11,835,755$ | $10,232,223$ | $738.10550 \%$ |
| $06 / 30 / 2024$ | 857,280 | $1,607,491$ | $1,607,491$ | $11,835,755$ | $10,228,264$ | $736.28745 \%$ |
| $06 / 30 / 2025$ | 881,880 | $1,605,087$ | $1,605,087$ | $11,835,755$ | $10,230,668$ | $737.39037 \%$ |
| $06 / 30 / 2026$ | 911,460 | $1,606,447$ | $1,606,447$ | $11,835,755$ | $10,229,308$ | $736.76617 \%$ |
| $06 / 30 / 2027$ | 941,014 | $1,605,922$ | $1,605,922$ | $11,835,755$ | $10,229,832$ | $737.00666 \%$ |
| $06 / 30 / 2028$ | 970,538 | $1,603,452$ | $1,603,452$ | $11,835,755$ | $10,232,303$ | $738.14218 \%$ |
| $06 / 30 / 2029$ | $1,007,890$ | $1,606,835$ | $1,606,835$ | $11,835,755$ | $10,228,920$ | $736.58803 \%$ |
| $06 / 30 / 2030$ | $1,040,666$ | $1,602,823$ | $1,602,823$ | $11,835,755$ | $10,232,932$ | $738.43177 \%$ |
| $06 / 30 / 2031$ | $1,080,420$ | $1,603,552$ | $1,603,552$ | $11,835,755$ | $10,232,203$ | $738.09605 \%$ |
| $06 / 30 / 2032$ | $1,124,713$ | $1,606,789$ | $1,606,789$ | $11,835,755$ | $10,228,966$ | $736.60908 \%$ |
| $06 / 30 / 2033$ | $1,164,837$ | $1,603,612$ | $1,603,612$ | $11,835,755$ | $10,232,143$ | $738.06863 \%$ |
| $06 / 30 / 2034$ | $1,209,865$ | $1,603,211$ | $1,603,211$ | $11,835,755$ | $10,232,544$ | $738.25307 \%$ |
| $06 / 30 / 2035$ | $1,259,720$ | $1,605,276$ | $1,605,276$ | $11,835,755$ | $10,230,478$ | $737.30325 \%$ |
| $06 / 30 / 2036$ | $1,310,674$ | $1,605,842$ | $1,605,842$ | $11,835,755$ | $10,229,913$ | $737.04374 \%$ |
| $06 / 30 / 2037$ | $1,360,857$ | $1,602,942$ | $1,602,942$ | $11,835,755$ | $10,232,813$ | $738.37685 \%$ |
| $06 / 30 / 2038$ | $1,421,090$ | $1,607,380$ | $1,607,380$ | $11,835,755$ | $10,228,375$ | $736.33824 \%$ |
| $06 / 30 / 2039$ | $1,475,584$ | $1,602,899$ | $1,602,899$ | $10,363,111$ | $8,760,212$ | $646.52306 \%$ |
| $06 / 30 / 2040$ | $1,537,421$ | $1,602,761$ | $1,602,761$ | $10,363,111$ | $8,760,350$ | $646.57853 \%$ |
|  | $21,930,506$ | $32,092,390$ | $32,092,390$ | $233,769,810$ | $201,677,420$ |  |

## Memo

To: KSFCC

From: Lincoln Theinert
Subject: Bond Payee Disclosure Form -Madison County School District Series 2020

Date: March 24, 2020
cc:
File

Please find enclosed a Bond Payee Disclosure Form and Plan of Financing for the Madison County School District. Please process this issue at the next meeting of the Capital Projects and Bond Oversight Committee.

If you should have any questions or require any additional information, please do not hesitate to contact our office.

## BOND PAYEE DISCLOSURE FORM



## Note: No Local Tax increase is required

# MADISON COUNTY SCHOOL DISTRICT <br> Plan of Financing 

Date of Report: $\quad 3 / 24 / 2020$
Local Bond Payments Outstanding ..... 1
Summary of Funds Available for Bond Payments ..... 2
Projected Current Bond Issue ..... 3

## MADISON COUNTY SCHOOL DISTRICT

## OUTSTANDING NET LOCAL DEBT SERVICE

|  | A | B | $\underline{\text { c }}$ | D | E | F | G | H | I | $\underline{ }$ | $\underline{\underline{K}}$ | $\underline{L}$ | M | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | New | Imp. Madison | Refunds | New | Refunds | Imp. MSHS | Refunds | Refunds | Imp. D. Boone | Silver Creek | Refunds 2006 | Refunds | New |  |
|  | Middle School | Southern | 95B \& 99A | Middle School | 98 B \& 01 | \& CMMS | 03 \& 04 | 05 | K. Carson, W. Hall | Foley | 2006B, 2010 | 08 and 09 | Elementary |  |
|  | 2008 | 2008B | 2009R | 2010 BABS | 2010R | 2011 | 2013R | 2014R | 2014 | 2015 | 2016R | 2016BR | 2017 |  |
| FYE | Series | Series | Series | Series | Series | Series | Series | Series | Series | Series | Series | Series | Series | Total |
| 2020 |  | \$868,622 |  |  | \$996,175 | \$280,973 | \$1,442,169 | \$1,157,650 | \$280,881 | \$539,769 | \$1,577,845 | \$1,868,710 | \$437,231 | \$9,450,024 |
| 2021 |  | \$874,033 |  |  | \$958,375 | \$275,703 | \$1,451,019 | \$1,158,650 | \$283,981 | \$538,319 | \$1,602,096 | \$1,868,360 | \$443,080 | \$9,453,615 |
| 2022 |  | \$998,871 |  |  |  | \$185,433 | \$1,577,969 | \$1,464,400 | \$280,157 | \$540,369 | \$1,707,344 | \$2,253,610 | \$443,480 | \$9,451,632 |
| 2023 |  | \$378,556 |  |  |  | \$187,118 | \$1,578,069 | \$1,470,400 | \$279,357 | \$537,194 | \$1,699,344 | \$2,872,781 | \$443,580 | \$9,446,398 |
| 2024 |  |  |  |  |  | \$183,608 | \$1,175,200 | \$1,480,050 | \$283,182 | \$538,794 | \$1,803,343 | \$3,543,132 | \$438,380 | \$9,445,689 |
| 2025 |  |  |  |  |  | \$185,098 | \$1,168,716 | \$1,483,200 | \$281,632 | \$535,169 | \$1,804,544 | \$3,554,407 | \$433,031 | \$9,445,795 |
| 2026 |  |  |  |  |  | \$396,393 |  |  | \$378,281 | \$644,669 | \$3,017,194 | \$4,011,331 | \$562,530 | \$9,010,398 |
| 2027 |  |  |  |  |  | \$393,993 |  |  | \$437,157 | \$642,219 | \$2,713,999 | \$4,027,081 | \$562,829 | \$8,777,278 |
| 2028 |  |  |  |  |  | \$396,193 |  |  | \$439,236 | \$644,122 | \$2,617,000 | \$4,028,381 | \$562,679 | \$8,687,611 |
| 2029 |  |  |  |  |  | \$397,458 |  |  | \$440,330 | \$807,331 | \$2,620,150 | \$1,610,506 | \$677,080 | \$6,552,854 |
| 2030 |  |  |  |  |  | \$397,758 |  |  | \$519,101 | \$807,019 | \$2,611,050 |  | \$687,579 | \$5,022,507 |
| 2031 |  |  |  |  |  | \$407,063 |  |  | \$524,910 | \$824,888 |  |  | \$697,180 | \$2,454,040 |
| 2032 |  |  |  |  |  |  |  |  | \$543,514 | \$830,738 |  |  | \$745,881 | \$2,120,132 |
| 2033 |  |  |  |  |  |  |  |  | \$540,425 | \$830,169 |  |  | \$747,480 | \$2,118,074 |
| 2034 |  |  |  |  |  |  |  |  | \$541,376 | \$833,163 |  |  | \$743,329 | \$2,117,867 |
| 2035 |  |  |  |  |  |  |  |  | \$541,387 | \$835,069 |  |  | \$738,580 | \$2,115,036 |
| 2036 |  |  |  |  |  |  |  |  |  | \$835,375 |  |  | \$732,173 | \$1,567,548 |
| 2037 |  |  |  |  |  |  |  |  |  |  |  |  | \$739,061 | \$739,061 |
| Totals: | \$0 | \$3,120,082 | \$0 | \$0 | \$1,954,550 | \$3,686,785 | \$8,393,141 | \$8,214,350 | \$6,594,907 | \$11,764,372 | \$23,773,910 | \$29,638,300 | \$10,835,164 | 07,975,560 |

# MADISON COUNTY SCHOOL DISTRICT SUMMARY OF FUNDS AVAILABLE 

| A | B | C | D | E | F | G | H | 1 | J | K | L |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| FYE | Local Nickel | 1st Growth Nickel |  | Capital Outlay <br> @ 80\% | FSPK | AddtI. <br> FSPK | Total Local <br> Funds | Less Current Payments | Local Funds Available | 2016 SFCC Offer | Total Funds Available |
| 2020 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,450,024) | \$3,115,800 |  | \$3,115,800 |
| 2021 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,453,615) | \$3,112,208 | \$62,845 | \$3,175,053 |
| 2022 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,451,632) | \$3,114,191 | \$62,845 | \$3,177,036 |
| 2023 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,446,398) | \$3,119,425 | \$62,845 | \$3,182,270 |
| 2024 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,445,689) | \$3,120,135 | \$62,845 | \$3,182,980 |
| 2025 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,445,795) | \$3,120,028 | \$62,845 | \$3,182,873 |
| 2026 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$9,010,398) | \$3,555,426 | \$62,845 | \$3,618,271 |
| 2027 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$8,777,278) | \$3,788,545 | \$62,845 | \$3,851,390 |
| 2028 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$8,687,611) | \$3,878,213 | \$62,845 | \$3,941,058 |
| 2029 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$6,552,854) | \$6,012,969 | \$62,845 | \$6,075,814 |
| 2030 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$5,022,507) | \$7,543,317 | \$62,845 | \$7,606,162 |
| 2031 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$2,454,040) | \$10,111,783 | \$62,845 | \$10,174,628 |
| 2032 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | $(\$ 2,120,132)$ | \$10,445,692 | \$62,845 | \$10,508,537 |
| 2033 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$2,118,074) | \$10,447,749 | \$62,845 | \$10,510,594 |
| 2034 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$2,117,867) | \$10,447,957 | \$62,845 | \$10,510,802 |
| 2035 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$2,115,036) | \$10,450,788 | \$62,845 | \$10,513,633 |
| 2036 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$1,567,548) | \$10,998,276 | \$62,845 | \$11,061,121 |
| 2037 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | (\$739,061) | \$11,826,762 | \$62,845 | \$11,889,607 |
| 2038 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | \$0 | \$12,565,824 | \$62,845 | \$12,628,669 |
| 2039 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 | \$0 | \$12,565,824 | \$62,845 | \$12,628,669 |
| 2040 | \$2,946,938 | \$2,946,938 | \$2,946,938 | \$841,916 | \$1,441,547 | \$1,441,547 | \$12,565,824 |  | \$12,565,824 | \$62,845 | \$12,628,669 |
| Totals: | \$61,885,698 | \$61,885,698 | \$61,885,698 | \$17,680,228 | \$30,272,487 | \$30,272,487 | \$263,882,296 | (\$107,975,560) | \$155,906,736 | \$1,256,900 | \$157,163,636 |

NOTES: Data based on assessments of $\$ 5,893,876,648$ and ADA of $10,475.685$ per KDE SEEK Website (FY 2019-20)

> MADISON COUNTY SCHOOL DISTRICT PROJECTED 2020 BONDS (RICHMOND \& Berea ATC)

|  | B | C | D | E | F | G | H |  | J | $\underline{K}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current <br> Payments | $\begin{gathered} \text { FY } \\ \text { June } 30 \end{gathered}$ | Principal <br> Payment | Estimated Coupon | w Bond Issu Interest Payments | Total Payments | SFCC <br> Portion | Local <br> Portion | Projected <br> All Local Payments Outstanding | Local <br> Funds <br> Available | Funds <br> Available <br> For Future <br> Projects |
| \$9,453,615 | 2021 | \$310,000 | 2.750\% | \$958,808 | \$1,268,808 | \$62,845 | \$1,205,963 | \$10,659,578 | \$12,565,824 | \$1,906,246 |
| \$9,451,632 | 2022 | \$315,000 | 2.750\% | \$950,283 | \$1,265,283 | \$62,845 | \$1,202,438 | \$10,654,070 | \$12,565,824 | \$1,911,754 |
| \$9,446,398 | 2023 | \$325,000 | 2.750\% | \$941,620 | \$1,266,620 | \$62,845 | \$1,203,775 | \$10,650,173 | \$12,565,824 | \$1,915,650 |
| \$9,445,689 | 2024 | \$335,000 | 2.750\% | \$932,683 | \$1,267,683 | \$62,845 | \$1,204,838 | \$10,650,526 | \$12,565,824 | \$1,915,298 |
| \$9,445,795 | 2025 | \$345,000 | 2.750\% | \$923,470 | \$1,268,470 | \$62,845 | \$1,205,625 | \$10,651,420 | \$12,565,824 | \$1,914,403 |
| \$9,010,398 | 2026 | \$445,000 | 2.750\% | \$913,983 | \$1,358,983 | \$62,845 | \$1,296,138 | \$10,306,535 | \$12,565,824 | \$2,259,288 |
| \$8,777,278 | 2027 | \$570,000 | 2.750\% | \$901,745 | \$1,471,745 | \$62,845 | \$1,408,900 | \$10,186,178 | \$12,565,824 | \$2,379,645 |
| \$8,687,611 | 2028 | \$640,000 | 3.000\% | \$886,070 | \$1,526,070 | \$62,845 | \$1,463,225 | \$10,150,836 | \$12,565,824 | \$2,414,988 |
| \$6,552,854 | 2029 | \$1,630,000 | 3.000\% | \$866,870 | \$2,496,870 | \$62,845 | \$2,434,025 | \$8,986,879 | \$12,565,824 | \$3,578,944 |
| \$5,022,507 | 2030 | \$1,680,000 | 3.000\% | \$817,970 | \$2,497,970 | \$62,845 | \$2,435,125 | \$7,457,632 | \$12,565,824 | \$5,108,192 |
| \$2,454,040 | 2031 | \$1,730,000 | 3.000\% | \$767,570 | \$2,497,570 | \$62,845 | \$2,434,725 | \$4,888,765 | \$12,565,824 | \$7,677,058 |
| \$2,120,132 | 2032 | \$1,780,000 | 3.150\% | \$715,670 | \$2,495,670 | \$62,845 | \$2,432,825 | \$4,552,957 | \$12,565,824 | \$8,012,867 |
| \$2,118,074 | 2033 | \$1,840,000 | 3.250\% | \$659,600 | \$2,499,600 | \$62,845 | \$2,436,755 | \$4,554,829 | \$12,565,824 | \$8,010,994 |
| \$2,117,867 | 2034 | \$1,900,000 | 4.000\% | \$599,800 | \$2,499,800 | \$62,845 | \$2,436,955 | \$4,554,822 | \$12,565,824 | \$8,011,002 |
| \$2,115,036 | 2035 | \$1,975,000 | 4.000\% | \$523,800 | \$2,498,800 | \$62,845 | \$2,435,955 | \$4,550,991 | \$12,565,824 | \$8,014,833 |
| \$1,567,548 | 2036 | \$2,055,000 | 4.000\% | \$444,800 | \$2,499,800 | \$62,845 | \$2,436,955 | \$4,004,503 | \$12,565,824 | \$8,561,321 |
| \$739,061 | 2037 | \$2,135,000 | 4.000\% | \$362,600 | \$2,497,600 | \$62,845 | \$2,434,755 | \$3,173,816 | \$12,565,824 | \$9,392,007 |
| \$0 | 2038 | \$2,220,000 | 4.000\% | \$277,200 | \$2,497,200 | \$62,845 | \$2,434,355 | \$2,434,355 | \$12,565,824 | \$10,131,469 |
| \$0 | 2039 | \$2,310,000 | 4.000\% | \$188,400 | \$2,498,400 | \$62,845 | \$2,435,555 | \$2,435,555 | \$12,565,824 | \$10,130,269 |
|  | 2040 | \$2,400,000 | 4.000\% | \$96,000 | \$2,496,000 | \$62,845 | \$2,433,155 | \$2,433,155 | \$12,565,824 | \$10,132,669 |
| \$98,525,536 | Totals: | \$26,940,000 |  | \$13,728,940 | \$40,668,940 | \$1,256,900 | \$39,412,040 | \$137,937,576 | \$251,316,472 | \$113,378,896 |

# COMMONWEALTH OF KENTUCKY KENTUCKY ASSET/LIABILITY COMMISSION SEMI-ANNUAL REPORT 

## For the period ending December 31, 2019

## 46th Edition



## Andy Beshear, Governor of the Commonwealth of Kentucky

Holly M. Johnson, Secretary of the Finance and Administration Cabinet
Ryan Barrow, Executive Director, Office of Financial Management

# An electronic copy of this report may be viewed at: http://finance.ky.gov/services/ofm/Pages/semi-annualreports.aspx 

# The Commonwealth's Comprehensive Annual Financial Report (CAFR) may be viewed at: http://finance.ky.gov/services/statewideacct/Pages/ReportsandPublications.aspx 

The Municipal Securities Rulemaking Board (MSRB)
Electronic Municipal Market Access (EMMA)
may be viewed at:
http://emma.msrb.org/

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## INTRODUCTION

The Kentucky Asset/Liability Commission (ALCo or the Commission) presents its 46th semiannual report to the Capital Projects and Bond Oversight Committee and the Interim Joint Committee on Appropriations and Revenue pursuant to KRS 56.863 (11) for the period beginning July 1, 2019 through December 31, 2019.
Provided in the report is the current structure of the Commonwealth's investment and debt portfolios and the strategy used to reduce both the impact of variable revenue receipts on the budget of the Commonwealth and fluctuating interest rates on the interest-sensitive assets and interest-sensitive liabilities of the Commonwealth. Additionally, an analysis of the Commonwealth's outstanding debt is provided as well as a description of all financial agreements entered into during the reporting period. And finally, the report makes available a summary of gains and losses associated with outstanding financial agreements.

Several factors on both the state and national level had an impact on activity during the reporting period. The most significant factors were:

## On the national level

- The Federal Reserve Board of Governors voted in three of the four remaining meetings in 2019 to reduce the federal funds rate $0.25 \%$, ending the year with a target range of $1.50 \%-1.75 \%$.
- The unemployment rate continued the trend lower ending December 2019 at 3.5\% from $3.7 \%$ in June 2019.
- The annual rate of economic growth as measured by GDP remained consistent over the last two quarters of 2019. The seasonally adjusted rate for both the third and fourth quarter was $2.1 \%$.
- Inflation finished the second half of 2019 muted with the core rate (ex-energy and food) ending at $1.6 \%$ as of December 2019.


## On the international level

- Partly as a result of the trade war with the United States, economies in China and other Asian countries are weakening.
- China's first reported case of Covid-19 was identified in early December.


## On the state level

- General Fund receipts totaled $\$ 5.749$ billion for the first six months of Fiscal Year (FY) 2020, representing a $2.7 \%$ increase over the same period in 2019. The revised official General Fund revenue estimate for FY20 calls for revenue to grow $1.6 \%$ compared to FY19 actual receipts. Based on the first half results, General Fund revenues must increase $0.6 \%$ for the remainder of the FY to meet the official estimate of $\$ 11.576$ billion.


## INTRODUCTION

- Road Fund receipts totaled $\$ 779.7$ million for the first six months of FY20, representing a $1.1 \%$ increase over the same period in 2019. The official Road Fund revenue estimate for FY20 calls for revenue to increase $0.4 \%$ compared to FY19 actual receipts. Based on the first half results, Road Fund revenues can decrease $0.2 \%$ for the remainder of the FY and meet the official estimate of $\$ 1.573$ billion.
- Kentucky non-farm employment grew by $1.4 \%$ in the second quarter of FY20, continuing the pattern of growth from the last 10 quarters.
- Kentucky personal income grew by $4.9 \%$ in the second quarter of FY20. Personal Income has grown an average of $1.0 \%$ per quarter on an adjacent-quarter basis.
- Construction employment was the fastest growing sector in the second quarter of FY20, gaining 3.4\%, and it represented $4.1 \%$ of total Kentucky non-farm employment in the second quarter of FY20.
- Large unfunded pension liabilities continue to put stress on the Commonwealth.
- Implementation of bond authorizations from prior-year sessions of the General Assembly continued. Bond issues for the period are discussed later in the report.

[^2]
## INVESTMENT MANAGEMENT

## Market Overview

The U.S. economy continued to grow moderately last year and the labor market strengthened further. With these gains, the current expansion entered its 11th year, becoming the longest on record. However, inflation was below the Federal Open Market Committee's (FOMC) longer-run objective of $2 \%$. In light of the implications of global developments for the economic outlook as well as muted inflation pressures, the FOMC lowered the target range for the federal funds rate at its July, September, and October meetings, bringing it to the current range of $1.50 \%$ to $1.75 \%$. In the Committee's subsequent meetings, it judged that the prevailing stance of monetary policy was appropriate to support sustained expansion of economic activity, strong labor market conditions, and inflation returning to the Committee's $2 \%$ objective.

## Employment

The labor market continued to strengthen. Payroll employment growth remained solid in the second half of 2019 , and while the pace of job gains during the year as a whole was somewhat slower than in 2018, it was faster than what is needed to provide jobs for new entrants to the labor force. The unemployment rate moved down from 3.9\% at the end of 2018 to $3.5 \%$ in December, and the labor force participation rate increased.

## Inflation

After having been close to the FOMC's objective of $2 \%$ in 2018, consumer price inflation, as measured by the price index for personal consumption expenditures, moved back below $2 \%$ last year, where it has been during most of the current expansion. The 12-month change was $1.6 \%$ in December 2019, as was the 12month measure that excludes consumer food and energy prices (core inflation), which historically has been a better indicator of where inflation will be in the future than the overall figure. The downshift relative to 2018 partly results from particularly low readings in the monthly price data in the early part of last year that appear to reflect transitory influences. Survey-based measures of longer-run inflation expectations have been broadly stable since the middle of last year, and market based measures of inflation compensation are little changed on net basis.

## Economic Growth

Real gross domestic product (GDP) increased at a moderate rate in the second half of 2019, although growth was somewhat slower than in the first half of the year and in 2018. Consumer spending rose at a moderate pace, and residential investment turned up after having declined in 2018 and the first half of 2019. In contrast, business fixed investment declined in the second half of 2019, reflecting a number of factors that likely include trade policy uncertainty and weak

## INVESTMENT MANAGEMENT

global growth. Downside risks to the U.S. outlook seem to have receded in the latter part of the year, as the conflicts over trade policy diminished somewhat, economic growth abroad showed signs of stabilizing, and financial conditions eased.

## Interest Rates

After moving significantly lower over the first half of 2019, nominal Treasury yields also fell sharply in August, largely in response to investors' concerns regarding trade tensions between the United States and China and the global economic outlook. Later in the year, as these concerns abated, Treasury yields rose, the yield curve steepened, and uncertainty about near-term Treasury yields declined. Since the middle of 2019, Treasury yields ended lower on net. Consistent with changes in the yields on nominal Treasury securities, yields on 30-year agency mortgage-backed securities (MBS) an important determinant of mortgage interest rates decreased, since the middle of 2019 and remained low by historical standards. Meanwhile, yields on both investment and speculative grade corporate bonds continued to decline and also stayed low by historical standards. Spreads on corporate bond yields over comparable maturity Treasury yields narrowed moderately over the second half of 2019 and remained in the lower end of their historical distribution.

Decreases in the FOMC's target range for the federal funds rate in July, September, and October transmitted effectively through money markets, with yields of money market instruments moving lower in response to the FOMC's policy actions.

The effective federal funds rate moved nearly in parity with the interest rate paid on reserves and was closely tracked by the overnight Eurodollar rate. Other short-term interest rates, including those on commercial paper and negotiable certificates of deposit, also moved down in line with decreases in the policy rate. Domestic short -term funding markets were volatile in midSeptember amid large flows related to corporate tax payments and settlement of Treasury securities and experienced significant tightening.

## Equities

Equity prices fluctuated in August and September along with investors' concerns about trade developments and the economic outlook. Later in 2019, equity prices rose substantially and were reportedly boosted by greater certainty among investors that monetary policy would remain accommodative in the near term. Gains were spread across most major economic sectors, with the exception of the energy sector, for which stock prices declined markedly.

## INVESTMENT MANAGEMENT

## Outlook

The FOMC has continued to emphasize that the actual path of monetary policy will depend on the evolution of the economic outlook and risks to the outlook as informed by incoming data. Specifically, in deciding on the timing and size of future adjustments to the target range for the federal funds rate, the Committee is expected to assess economic conditions relative to its objectives of maximum employment and $2 \%$ inflation. This assessment will take into account a wide range of information, including measures of labor market conditions, indicators of inflation pressures and inflation expectations, and readings on financial and international developments.

A substantial majority of participants projected a federal funds rate of $1.63 \%$ for the end of 2020 . Four participants assessed that the most likely appropriate rate at year-end for 2020 would be $1.88 \%$. For subsequent years, the medians of the projections were $1.88 \%$ at the end of 2021 and $2.13 \%$ at the end of 2022 . The distribution of participants' estimates of the longer-run level of the federal funds rate was little changed, and the median estimate was unchanged from September at $2.50 \%$.

INVESTMENT MANAGEMENT
Real Gross Domestic Product \& Standard \& Poor's 500



INVESTMENT MANAGEMENT
Federal Funds Target Rate \& NonFarm Payrolls
Federal Funds Target Rate
Range 01/01/2010-12/31/2019
FEDL01 Index/FDTR Index


Nonfarm Payrolls
Range 01/01/2010-12/31/2019
NFPTCH Index


## INVESTMENT MANAGEMENT

## Portfolio Management

For six months ended December 31, 2019, the Commonwealth's investment portfolio was approximately $\$ 4.1$ billion. The portfolio was invested in U.S. Treasury Securities ( $34.3 \%$ ), U.S. Agency Securities ( $30.2 \%$ ), Mortgage-Backed Securities (5.7\%), Repurchase Agreements (10.8\%), Corporate Securities (2.3\%), AssetBacked Securities (5.0\%), and Money Market Securities ( $11.7 \%$ ). The portfolio had a market yield of $1.51 \%$ and an effective duration of 0.52 of a year.

The total portfolio is broken down into four investment pools. The pool balances as of December 31, 2019 were negative $\$ 104.8$ million (Short Term Pool), $\$ 1.4$ billion (Limited Term Pool), $\$ 2.3$ billion (Intermediate Term Pool) and $\$ 409.6$ million (TRAN Pool).

## Distribution of Investments as of December 31, 2019



## INVESTMENT MANAGEMENT

## Tax-Exempt Interest Rates and Relationships

The Bond Buyer 20-year General Obligation Index averaged $3.42 \%$ for Calendar Year 2019. The high was $4.24 \%$ in February 2019 and the low was $2.59 \%$ in October 2019.

The Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Index averaged $1.46 \%$ for Calendar Year 2019. The
high was $2.30 \%$ in April 2019 and the low was $1.06 \%$ in December 2019. The 30-day London Interbank Offered Rate (LIBOR) averaged $2.22 \%$ for Calendar Year 2019. The high was $2.52 \%$ in January 2019 and the low was $1.70 \%$ toward the end of November 2019. During the year, SIFMA traded at a high of $92.63 \%$ of the 30-day LIBOR in late April 2019, at a low of $50.60 \%$ in early July 2019, and at an average of $65.73 \%$ for the Calendar Year.

## Bond Buyer 20 General Obligation Index

Range 01/01/2019-12/31/2019
BBWK20GO Index


SIFMA \& SIFMA/LIBOR Ratio

## SIFMA Rate

Range 01/01/2019-12/31/2019
MUNIPSA Index


SIFMA / LIBOR Ratio
Range 01/01/2019- 12/31/2019


## CREDIT MANAGEMENT

## Year-End Reflection

Consumer spending dipped in the second half of 2019 despite an accommodative policy from the Federal Reserve that lowered interest rates three times. While personal income growth slowed, household debt continued to advance to a record $\$ 14$ trillion with the fastest annual growth since 2007. After a sharp decline in the first half of the year, mortgage rates stabilized but remained near a multiyear low, providing a jolt to both new and existing home sales. Auto loan delinquencies have risen to an eight-year high despite a strong labor market. Growth in the total amount of outstanding student loans leveled off and delinquency rates were flat.

Corporate debt continued to rise to record levels while also degrading in overall quality as BBB rated bonds reached a record $50 \%$ of all outstanding U.S. corporate bonds. A wave of downgrades following a recession could cause financial stability concerns if a significant amount of corporate debt loses investment grade status. Respondents to the Senior Loan Officer Opinion Survey on Bank Lending Practices, reported that lending standards for commercial and industrial loans remained largely unchanged. For those lenders that tightened standards, an uncertain economic outlook was often cited as the cause. Lending standards for commercial real estate loans also remained mostly unchanged. On the consumer side, demand for most mortgage loans categories strengthened in response to lower mortgage rates while demand in home equity lines of credit shrank.

The second half of 2019 saw several downgrades to companies on the State Investment Commission Corporate Credit Approved list. HSBC, Nestle, Pfizer, Oracle, and IBM all saw their credit rating revised downward. The biggest change was Boeing, who saw multiple downgrades and in December was removed entirely from the Corporate Credit Approved list.

## Credit Process

Our credit strategy invests in creditworthy corporate issuers having a long-term rating of A3/A-/A- or better as rated by Moody's, S\&P, or Fitch. The strategy focuses on adding value through a disciplined approach in the credit selection process. With independent research and prudent diversification with respect to industries and issuers, the goal is to deliver consistent longer-term investment performance over U.S. Treasuries.

## Default Monitoring

The Bloomberg credit risk model is the main tool for default monitoring. The default likelihood model is based on the Merton distance-to-default (DD) measure, along with additional economically and statistically relevant factors. Firms are assigned a default risk measure as a high-level summary of their credit health using an explicit mapping from default likelihood to default risk.

A daily report is generated using the approved list and their peers enabling us to track market activity in selected names including Credit Default Swaps (CDS).

## CREDIT MANGEMENT

## Industry/Company Analysis

We use a combination top-down and bottom-up approach for investing. The top-down approach refers to understanding the current (and future) business cycle or the "big picture" of the economy and financial world in order to identify attractive industries. Once industries are identified, a bottom-up approach is utilized where we focus on specific company fundamentals, picking the strongest companies within a sector.

Fundamental analysis is then performed looking at competitive position, market share, operating history/trends, management strategy/execution, and financial statement ratio analysis.

## Approved List

Once analysis has been completed, the State Investment Commission approves the list on a quarterly basis. During the second half of 2019, Boeing was removed from the Corporate Credits Approved list. The Corporate Credits Approved list as of December 2019 is found in Appendix A.

## State Investment Commission

The State Investment Commission is responsible for investment oversight with members of the Commission being Governor (Chair), State Treasurer (Vice Chair), Finance and Administration Cabinet Secretary and two Gubernatorial Appointees. The investment objectives are threefold: preservation of principal, maintain liquidity to meet cash needs and maximization of returns. The Office of Financial Management is staff to the SIC and follows KRS 42.500, 200 KAR 14.011, 14.081, and 14.091 when making investment decisions.

## DEBT MANAGEMENT

## Authorized But Unissued Debt

As of December 31, 2019, the Commonwealth's 2018-2020 budget includes authorized debt service for over $\$ 1.01$ billion of projects supported by the General Fund, Agency Funds, and the Road Fund, which were approved during prior sessions of the General Assembly. This pipeline of projects is anticipated to be bond financed over a number of future biennia. The speed at which this financing takes place is dependent upon factors managed by and between the project sponsors, the Office of the State Budget Director and the Office of Financial Management.

## 2010 Extraordinary (Special) Session

The 2010 Extraordinary (Special) Session of the General Assembly delivered House Bill 1 (Executive Branch Budget other than Transportation Cabinet) and House Bill 3 (Kentucky Transportation Cabinet Budget) to the Governor on May 29, 2010, establishing an Executive Branch Budget for the biennium ending June 30, 2012. The Governor took final action on the bills on June 4, 2010. Together, the bills authorized bond financing for projects totaling $\$ 1,980.2$ million to support various capital initiatives of the Commonwealth. Of the total authorization, $\$ 507.4$ million is General Fund supported, $\$ 515.3$ million is Agency Restricted Fund supported, \$522.5 million is supported by Road Fund appropriations and $\$ 435$ million is Federal Highway

Trust Fund supported through Grant Anticipation Revenue Vehicle Bonds designated for the US-68/KY-80 Lake Barkley and Kentucky Lake Bridges Project and the Louisville-Southern Indiana Ohio River Bridges Project. A portion of the General Fund, Agency Restricted Fund, Road Fund and Federal Highway Trust Fund authorizations have been permanently financed.

## 2012 Regular Session

The 2012 Regular Session of the General Assembly delivered House Bill 265 (Executive Branch Budget other than Transportation Cabinet) to the Governor on March 30, 2012 and House Bill 2 (Kentucky Transportation Cabinet Budget) to the Governor on April 20, 2012, establishing an Executive Branch Budget for the biennium ending June 30, 2014. The Governor took final action on House Bill 265 on April 13, 2012 and took final action on House Bill 2 on May 2, 2012. Together, the bills authorized bond financing for projects totaling $\$ 238.86$ million to support various capital initiatives of the Commonwealth. Of the total authorization, $\$ 182.86$ million is General Fund supported, $\$ 12.5$ million is supported by Road Fund appropriations, and $\$ 43.5$ million is Agency Restricted Fund supported. A portion of the General Fund authorization and the total Agency Restricted Fund authorizations listed above have been permanently financed.

## DEBT MANAGEMENT

## 2014 Regular Session

The 2014 Regular Session of the General Assembly delivered House Bill 235 (Executive Branch Budget other than Transportation Cabinet) to the Governor on March 31, 2014 and House Bill 236 (Kentucky Transportation Cabinet Budget) to the Governor on April 15, 2014, establishing an Executive Branch Budget for the biennium ending June 30, 2016. The Governor took final action on House Bill 235 on April 11, 2014 and took final action on House Bill 236 on April 25, 2014. Together, the bills authorize bond financing for projects totaling a net amount of $\$ 1,364.05$ million to support various capital initiatives of the Commonwealth due to $\$ 105$ million in previously authorized debt that was de-authorized in House Bill 235. Of the total authorization, $\$ 742.77$ million is General Fund supported, $\$ 721.28$ million is supported by Agency Restricted Fund appropriations, and $\$ 5.0$ million is Road Fund supported. A portion of the General Fund and Agency Restricted Fund, and all of the Road Fund authorizations listed above have been permanently financed.

## 2016 Regular Session

The 2016 Regular Session of the General Assembly delivered House Bill 303 (Executive Branch Budget other than the Transportation Cabinet) and House Bill 304 (Kentucky Transportation Cabinet Budget) to the Governor on April 15, 2016, establishing an Executive

Branch Budget for the biennium ending June 30, 2018. The Governor took final action on House Bill 303 and House Bill 304 on April 27, 2016. Together, the bills authorize bond financing for projects totaling a net amount of $\$ 1,251.24$ million to support various capital initiatives of the Commonwealth with $\$ 9.0$ million of previously authorized debt de-authorized in House Bill 303. Of the total authorization, $\$ 582.99$ million is General Fund supported and $\$ 677.25$ million is supported by Agency Restricted Fund appropriations. No additional Road Fund supported authorizations were appropriated. A portion of the General Fund and Agency Restricted Fund authorizations listed have been permanently financed.

## 2017 Regular Session

The 2017 Regular Session of the General Assembly delivered House Bill 13 and House Bill 482 to the Governor on March 30, 2017. House Bill 13 authorized a general fund bond supported project for the Kentucky Department of Veterans' Affairs for the financing of the Bowling Green Veterans Center totaling $\$ 10.5$ million. House Bill 482 authorized a general fund bond supported project for the Kentucky Economic Development Finance Authority Loan Pool to support programs administered by the Kentucky Economic Development Finance Authority for the sole purpose of facilitating a private sector investment of not less than

## DEBT MANAGEMENT

$\$ 1$ billion in one or more locations in the Commonwealth. The Governor took final action on House Bill 13 and House Bill 482 on April 11, 2017. The total authorization under House Bill 482 has been permanently financed.

## 2018 Regular Session

The 2018 Regular Session of the General Assembly delivered House Bill 200 (Executive Branch Budget other than Transportation Cabinet) to the Governor on April 2, 2018 and House Bill 201 (Kentucky Transportation Cabinet Budget) to the Governor on April 14, 2018, establishing an Executive Branch Budget for the biennium ending June 30, 2020. The Governor vetoed House Bill 200 on April 9, 2018 and on April 13, 2018 the General Assembly enacted House Bill 200 over the Governor's veto. On April 14, 2018, the General Assembly delivered House Bill 265 (amending the 2018-2020 Executive Branch Budget Bill) to the Governor. The Governor took final action on House Bill 201 on April 26, 2018. House Bill 265 became law without the Governor's signature on April 27, 2018. Together, the bills authorize bond financing for projects totaling a net amount of $\$ 972.7$ million to support various capital initiatives of the Commonwealth whereas $\$ 26.62$ million in previously authorized debt was de-authorized in House Bill 200 and House Bill 201. Of the total authorization, $\$ 377.69$ million is General Fund supported, $\$ 602.89$ million is supported by Agency Fund appropriations, and $\$ 18.75$ million is Road Fund supported.

## 2019 Regular Session

The 2019 Regular Session of the General Assembly delivered House Bill 268 to the Governor on March 14, 2019. House Bill 268 authorized general fund bond supported projects totaling $\$ 75$ million to support various capital initiatives of the Commonwealth. The Governor took final veto action on House Bill 268 on March 26, 2019. The Legislature partially overrode the Governor's vetoes on March 28, 2019. The authorization of $\$ 75$ million in General Fund supported authorization under House Bill 268 was appropriated for Fiscal Year 2020.

## DEBT MANAGEMENT

## Authorized but Unissued Debt Summary

The balance of prior bond authorizations of the General Assembly dating from 2010 through 2019 totals $\$ 1,101.40$ million. Of these prior authorizations, $\$ 413.18$ million is General Fund supported, $\$ 625.72$ million is Agency Restricted Fund supported, $\$ 62.50$ million is supported by Road Fund appropriations. HB 201 from the

2018 Regular Session de-authorized the remaining $\$ 59.50$ million which was authorized for the Federal Highway Trust Fund.

The following table summarizes, in aggregate, the information in connection with authorized but unissued debt of the Commission as described in this section.

## Summary of Authorized but Unissued Debt by Fund Type As of December 31, 2019:

| Legislative Session <br> (Year) | General Fund <br> (millions) | Agency Fund <br> (millions) | Road Fund <br> (millions) | TOTAL <br> (millions) |
| :---: | ---: | ---: | ---: | ---: |
| 2010 | 27.03 | 17.50 | 50.00 | 94.53 |
| 2012 | 9.46 | - | 12.50 | 21.96 |
| 2014 | 44.07 | 9.00 | - | 53.07 |
| 2016 | 106.17 | 64.84 | - | 171.01 |
| 2017 | 10.50 | 0.00 | - | 10.50 |
| 2018 | 315.95 | 534.38 | - | 850.33 |
| 2019 | 75.00 |  |  | 75.00 |
| Bond Pool Proceeds | $(175.00)$ |  | - | - |
| TOTAL | 413.18 | 625.72 | 62.50 | $1,101.40$ |

The balance of prior bond authorizations of the General Assembly dating from FY 2010 through FY 2019 totals $\$ 1,101.40$ million. Of these prior authorizations, $\$ 413.18$ million is General Fund supported, $\$ 625.72$ million is Agency Restricted Fund supported, and $\$ 62.5$ million is supported by Road Fund appropriations.

## Looking Forward

The Commission continues to monitor the municipal bond interest rate market and uses this information together with other relevant market
data to evaluate whether or not the interim financing program would provide and economic advantage in conjunction with the fixed rate bonds.

## DEBT MANAGEMENT

## Ratings Update

The rating agencies continually monitor the Commonwealth's budgetary policies and actual performance in areas such as revenue, the economy, pensions, and debt management. Pension unfunded liabilities have continued to put downward pressure on the Commonwealth's credit ratings.

With the issuance of State Property and Buildings Commission project No. 122 in

October of 2019 (discussed in greater detail later) the determination was made to add Kroll Bond Rating Agency's evaluation of that issuance. The Kroll ratings were General Obligation Issuer Implied Rating of AA-, and General Fund Appropriation Rating of A+.

During the reporting period, the remaining ratings below were either affirmed or remained unchanged from the previous reporting period.

## The Ratings Picture at December 31, 2019:

|  | Moody's | S \& P | Fitch | Kroll |
| :---: | :---: | :---: | :---: | :---: |
| General Obligation Issuer Rating (GO) | Aa3 | A | AA- | AA- |
| General Fund Appropriation Rating (GF) ${ }^{\text {i }}$ | A1 | A- | A+ | A+ |
| Road Fund Appropriation Rating (RF) ${ }^{\text {i }}$ | Aa3 | A- | A+ | - |
| Federal Highway Trust Fund Appropriation Rating ${ }^{\text {i }}$ | A2 | AA | A+ | - |

[^3]
## DEBT MANAGEMENT

## Cash Management Strategies

All cash management strategies are market and interest rate dependent. Alternatives are listed below:

## Tax and Revenue Anticipation Notes (TRAN)

On June 25, 2019 ALCo issued $\$ 400$ million of Tax and Revenue Anticipation Notes (TRAN) to provide additional liquidity to the General Fund. The transaction closed on July 10, 2019, and OFM staff certified that as of August 1, 2019 state statutory and Internal Revenue Service safe harbor requirements for the TRAN had been met. Due to the added liquidity for the General Fund and market opportunities at that time, a portion of state investment portfolios were restructured for a longer duration. The cumulative net benefit was estimated at approximately $\$ 1.2$ million. As of December 31, 2019 the accrued net benefit to the General Fund for the six month period was calculated at $\$ 650,090$. The total net benefit to the Commonwealth will be calculated June 30, 2020, but is in line with original estimates.

## Inter-Fund Borrowing

Cash in one fund is loaned to another fund which is experiencing a short-term cash flow shortfall. Historically, funds are loaned to the short-term fund (General Fund).

As of December 31, 2019 the total available liquid resources available to the General Fund were $\$ 4.055$ billion.

## Bond Anticipation Notes (BAN)

A short-term interest-bearing security issued in advance of a larger, future bond issue. Bond anticipation notes are smaller short-term bonds that are issued to generate funds for upcoming projects.

No BANs were issued during the reporting period

## Notes (Direct Loans)

""Funding notes" means notes issued under the provisions of KRS 56.860 to 56.869 by the commission for the purpose of funding:
(a) Judgments, with a final maturity of not more than ten (10) years; and
(b) The finance or refinance of obligations owed under KRS 161.550(2) or 161.553(2)
"Project notes" means notes issued under the provisions of KRS 56.860 to 56.869 by the commission with a final maturity of not more than twenty (20) years for the purpose of funding authorized projects, which may include bond anticipation notes.

No Notes were issued during the reporting period

## DEBT MANAGEMENT

General Fund Cash Balance


GENERAL FUND MONTHLY AVERAGE (Excluding TRAN Proceeds)


## DEBT MANAGEMENT

## ALCo Financial Agreements

As of December 31, 2019, ALCo had three financial agreements outstanding, with a net notional exposure amount of $\$ 134,850,000$. These financial agreements are described in the section below and the terms of these transactions are detailed in Appendix B. No additional financial agreements were executed during the reporting period.

## General Fund - Floating Rate Note Hedges

In May, 2007, ALCo issued $\$ 243.08$ million of Floating Rate Notes (FRNs) to permanently finance $\$ 100$ million of General Fund bond supported projects and to advance refund certain outstanding State Property and Buildings Commission (SPBC) bonds for present value savings. The transaction entailed ALCo issuing four FRNs, each paying a rate of interest indexed to 3-Month LIBOR plus a fixed spread. Integrated into the transaction were four separate interest rate swaps which perfectly hedged the floating rates on the FRNs and locked in a fixed rate payable by ALCo on the transaction. The terms of the four interest rate swaps exactly match the notional amount, interest rate, and amortization schedule of the four FRNs and allowed ALCo to elect "superintegrated" tax status on the transaction, whereby it receives similar tax treatment as a fixed rate bond issue under IRS rules.

Under the FRN transaction, the Notes and interest rate swaps were each insured under
separate policies by FGIC, which maintained an Aaa/AAA credit rating at the time from Moody's and S\&P. Under the terms of the original interest rate swaps, the counterparty (Citibank) could optionally terminate the agreements if the insurer's claims paying rating fell below an A3/A- level. Subsequent to the transaction, FGIC was downgraded multiple times by the credit rating agencies and currently are no longer rated. In December 2008, MBIA (rated A2 by Moody's at the time) reinsured FGIC's municipal insurance portfolio providing additional coverage on the transaction. However, MBIA Insurance Corporation's credit rating was also subsequently downgraded on multiple occasions and is currently rated Caa1 by Moody's and is no longer rated by S\&P. In February of 2009, MBIA established a new U.S. public finance financial guaranty insurance company known as National Guaranty Public Finance Corporation (National). National, at no additional charge, provided reinsurance on the FRNs and related swaps. However, on December 22, 2010, S\&P downgraded National from A to BBB leaving both of National's claims paying ratings below the required A3/A- level.

In early 2011, ALCo spent considerable time working with Citibank and other parties analyzing a variety of remedies that would prevent the potential early termination of the interest rate swaps. After much consideration, ALCo determined the preferred remedy was

## DEBT MANAGEMENT

one offered by Citibank whereby the remaining notional amount of each interest rate swap would be assigned to a new counterparty under the existing financial terms and at no cost to ALCo or the Commonwealth. On February 14, 2011, ALCo, Citibank and the new counterparty, Deutsche Bank AG, executed the assignment of the remaining notional balances of each swap to Deutsche Bank. The terms of the new interest rate swaps with Deutsche Bank were identical to the original swaps, with two exceptions; 1) the new swaps were not insured and there were no insurer provisions contained in the new agreements, and 2) the credit rating triggers under the automatic termination provisions were now symmetrical for both counterparties (ALCo and Deutsche Bank) at A3/A-. Under the original swaps, ALCo's credit rating triggers were Baa2/BBB, but rating recalibrations by the rating agencies caused municipal issuers to be rated on the same scale as corporations and other debt issuing entities, which facilitated the need for equal credit rating triggers for both parties. On July 10, 2014, the credit rating triggers were lowered to Baa3/BBB- for both counterparties. On January 25 2016, Moody's downgraded Deutsche Bank from A3 to Baa1 reflecting changes in Germany's insolvency legislation which took effect in January 2017. The changes resulted in protection from the subordination of certain senior unsecured debt obligations relative to other senior liabilities, including deposits. Moody's downgraded Deutsche Bank once again on May 23, 2016 from Baa1 to Baa2
reflecting "the increased execution challenges Deutsche Bank faces in achieving its strategic plan." Even with two downgrades, Deutsche Bank continues to be in compliance with the swap agreement credit rating threshold of not falling below Baa3. ALCo continues to monitor the credit of our counterparty for compliance with terms of the agreement. Fitch downgraded Deutsche Bank on June 7, 2019 from BBB+ to BBB , but the ratings termination triggers are only related to Moody's and S\&P.

Details related to the interest rate swaps as of December 31, 2019 are presented in Appendix B.

## Asset/Liability Model

## General Fund

The total SPBC debt portfolio as of December 31, 2019 had $\$ 3.308$ billion of bonds outstanding with a weighted average coupon of $4.94 \%$ and a weighted average life of 6.62 years. The average coupon reflects an amount of taxable bonds issued under the Build America Bond Program during 2009 and 2010 as well as continued investor preference for tax-exempt callable premium bonds in the current market at a yield lower than par or discount coupon bonds. The $\$ 540.469$ million callable portion had a weighted average coupon of $4.63 \%$.

The SPBC debt structure has $45 \%$ of principal maturing in 5 years and $72 \%$ of principal maturing in 10 years. The ratios are above the rating agencies' proposed target of $27-30 \%$ due in 5 years and $55-60 \%$ maturing within 10 years,

## DEBT MANAGEMENT

primarily influenced by debt restructuring and the minimal amount of long-term new money permanent financings within the last several years.

For the first six months of Fiscal Year 2020 the General Fund had a maximum balance of $\$ 631.899$ million on July 1, 2019, and a low of negative $\$ 1.682$ billion on September 9, 2019.

The average and median balances were a negative $\$ 1.300$ billion and a negative $\$ 1.361$ billion, respectively. Since the General Fund continued to have a negative available cash balance for the fiscal year, there is little, if anything, that can be done from an asset management point of view beyond current actions.

From a liability management perspective, total Commonwealth General Fund debt service, net of credits is expected to be $\$ 1.115$ billion for Fiscal Year 2020. This number is significantly higher than the prior year because of the TRAN debt service repayment that will be paid in Fiscal Year 2020. In addition to the Commonwealth General Fund debt service, General Fund debt service of $\$ 11.256$ million will be provided for the Eastern State Hospital financing that was issued through the Lexington-Fayette Urban County Government in 2011. Also, General Fund debt service of $\$ 3.938$ million will be provided for the 2015 and 2018 Certificates of Participation (related to the two Commonwealth State office Building projects). These projects are separately identified because they are public
private partnerships but they are General Fund supported. Net interest margin will continue to be negative due to low cash balances versus outstanding fixed rate debt, low level of interest rates, and the callability of the debt portfolio.

## SPBC 122

On October 30, 2019, SPBC closed $\$ 252,090,000$ par of General Fund Revenue and Revenue Refunding bonds, Project No. 122 consisting of Series A Revenue Bonds, Series B Refunding Bonds, and Series D Federally Taxable Refunding bonds. The Project No. 122 bond proceeds provided permanent financing for approximately $\$ 175$ million of General Fund supported capital projects authorized over multiple sessions of the General Assembly, and refunded approximately $\$ 94,150,000$ par of outstanding SPBC Bonds for present value savings. The transaction achieved an All-In True Interest Cost of $2.751 \%$ and a net present value savings of $\$ 10,795,564.58$ (or $11.466 \%$ savings from the refunded bonds). The bonds were issued via negotiated sale with Citigroup serving as senior managing underwriter and Kutak Rock LLP as bond counsel. The bonds achieve ratings of A1/A+//A+ from Moody's, Fitch, and Kroll respectively.

The remaining component of this transaction is the Series C (Forward Delivery) which is expected to close May 4, 2020. This piece of the transaction involves pricing refunding bonds on October 8, 2019 and closing the refunding bonds on May 4, 2020 when the refunded bonds

## DEBT MANAGEMENT

are callable. The $\$ 66,710,000$ par amount of bonds will refund certain outstanding SPBC Project No. 98 bonds for a net present value savings of $\$ 1,742,738$ upon close.

## Looking Forward

In light of the January 1, 2018 federal tax law change that tightened the parameters by which tax-exempt municipal bonds could be advanced refunded, the Commonwealth has added to the methods of evaluation for examining potential
refunding candidates. Since tax advantaged bonds are no longer eligible to be advance refunded on a tax-exempt basis, the Commonwealth now gives consideration to advance refunding its municipal bonds on a taxable basis or through a forward delivery of tax-exempt bonds. Additional diligence and financial modeling is necessary to ensure optimal economic savings in these transactions.

## DEBT MANAGEMENT

Call Analysis by Call Date State Property and Buildings Commission Bonds


Call Analysis by Maturity Date State Property and Buildings Commission Bonds


## DEBT MANAGEMENT

## Road Fund

The Road Fund average daily cash balance for the first half of Fiscal Year 2020 was $\$ 259$ million compared to $\$ 303$ million for the first half of Fiscal Year 2019. The Road Fund cash was invested in the Intermediate Term Investment Pool which had a duration of 0.88 years as of December 31, 2019. The Road Fund earned a positive $\$ 2.568$ million on a cash basis for the first half of Fiscal Year 2020 versus a positive $\$ 3.799$ million for the first half of Fiscal Year 2019. The Road Fund investment earnings declined year-over-year because of lower short term rates and a lower road fund balance, the continued relatively low level of investable balances at certain times during the fiscal year limits the investment opportunities.

As of December 31, 2019, the Turnpike Authority of Kentucky (TAK) had $\$ 1.104$ billion of bonds outstanding with a weighted average coupon of $4.87 \%$ and an average life of 6.18 years.

Road Fund debt service expected to be paid in Fiscal Year 2020 is $\$ 151.232$ million, resulting in a net interest margin (investment income earned year-to-date less debt service paid) of negative $\$ 148.664$ million. The negative amount stems from the level of investable balances and a general low level of interest rates on the investment side in addition to the limited callability of fixed rate obligations on the liability side.

No debt related to the road fund was issued or refunded during the reporting period.

Road Fund Available Balance
Fiscal Year 2015-2020 as of 12/31/2019
$\square$ Road Fund $\quad$ Federal Fund $\quad$ Net


## SUMMARY

ALCo's approach to managing the Commonwealth's interest-sensitive assets and interestsensitive liabilities has provided tremendous flexibility and savings in financing the Commonwealth's capital construction program.

Since its inception, ALCo has been instrumental in adding incremental returns on investment income to the Commonwealth's investment portfolio. ALCo has continued to manage General Fund intra-year cashflow deficits through its TRAN program when cost effective. Until Fiscal Year 2010, ALCo had issued a General Fund TRAN each fiscal year since 1998 (with the exception of FY 2004), providing millions of dollars of incremental gains for the

General Fund over this time. In fiscal 2019 market conditions again created an opportunity to utilize the TRAN program. ALCo's management approach to project funding has also allowed the Commonwealth to take advantage of short-term yields and achieve millions of dollars in budgetary savings through debt service lapses.

As always, ALCo continues to analyze potential opportunities for savings and to evaluate new financing structures which offer the Commonwealth the ability to diversify risk within its portfolio while taking advantage of market demand for various new or unique products.

APPENDIX

## APPENDIX A

## STATE INVESTMENT COMMISSION Corporate Credits Approved For Purchase as of December 31, 2019

Company
Name

Apple Inc
Bank of Montreal
Bank of Nova Scotia
Berkshire Hathaway Inc
BNP Paribas Securities Corp
BNY Mellon NA
Boeing Co/The
Canadian Imperial Bank of Comm
Chevron Corp
Cisco Systems Inc
Cooperatieve Rabobank
Cornell University
Costco Wholesale Corp
Deere \& Co
Exxon Mobil Corp
Guggenheim Securities, LLC
Home Depot Inc
Honda Motor Co Ltd
HSBC Bank USA NA
IBRD - World Bank
Intel Corp
Intl Business Machines Corp
Johnson \& Johnson
Lloyds Bank PLC
Merck \& Co. Inc.
Microsoft Corp

| Repurchase |  |  |
| :---: | :---: | :---: |
| Agreements | Debt | Notes |
|  | Yes | Yes |
| Yes | Yes | Yes |
| Yes | Yes | Yes |
|  | Yes | Yes |
| Yes | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | No |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
| Yes | No | No |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |
|  | Yes | Yes |

Company
Name

MUFG Securities Americas Inc
Natixis SA/New York
Nestle Finance International
Oracle Corp
PepsiCo Inc
Pfizer Inc
PNC Bank NA
Praxair Inc
Procter \& Gamble Co/The
Royal Bank of Canada
Royal Dutch Shell PLC
Salvation Army
State Street Corp
Sumitomo Mitsui Trust Bank
Swedbank AB
Texas Instruments Inc.
Toronto-Dominion Bank/The
Total SA
Toyota Motor Corp
UBS AG (U.S.)
US Bank NA
Wal-Mart Stores Inc
Walt Disney Co/The
Wells Fargo \& Co

Repurchase
Agreements Debt Notes

|  | Yes | Yes |
| :--- | :--- | :--- |
| Yes | No | No |
|  | Yes | Yes |

Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes Yes
Yes Yes
Yes No
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
Yes Yes
*Addition:

## APPENDIX A

## STATE INVESTMENT COMMISSION Securities Lending Agent Approved Counterparties as of December 31, 2019

| Company Name |
| :---: |
| Alaska USA Federal Credit Union |
| Alaska USA Trust Company |
| BMO Capital Markets Corp |
| Bank of Nova Scotia |
| Barclays Capital, Inc |
| BNP Paribas Prime Brokerage, Inc. BNP Paribas Securities Corp. |
|  |  |
|  |
| Citigroup Global Markets Inc |
| Credit Suisse Securities (USA) LLC |
| CYS Investments, Inc. |
| Daiwa Capital Markets America Inc |
| Deutsche Bank Securities Inc. |
| Dynex Capital Inc. |
| Goldman Sachs and Company |
| Hatteras Financial Corp |
| HSBC Securities (USA) Inc |
| ING Financial Markets LLC |
| Jefferies LLC |
| JP Morgan Securities LLC |
| Merrill Lynch Pierce Fenner \& Smith IncMizuho Securities USA, Inc |
|  |  |
|  |
| NatWest Markets Securities Inc.* |
| Nomura Securities International Inc |
| Pershing LLC |
| Redwood Trust |
| RBC Capital Markets LLC |
| SG Americas Securities LLC |
| Societe Generale |
| TD Securities (USA), Inc |
| Two Harbors Investment Corp |
| UBS Securities LLC |
| Wells Fargo Securities LLC |


| Securities Lending | REPO |
| :---: | :---: |
| Yes | Yes |
| Yes | Yes |
| Yes | No |
| Yes | No |
| Yes | Yes |
| Yes | No |
| Yes | No |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | No |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | No |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |
| Yes | Yes |

## APPENDIX B



## APPENDIX C

## Appropriation Supported Debt Service by Fund Source as of 12/31/2019

 by Fund Source as of 12/31/2019

*This data does not include debt issued for judicial center projects and paid for by the Administrative Office of the Courts in the Court of Justice or debt issued by the Lexington -Fayette Urban County Government for the Eastern State Hospital.

## APPENDIX D

## COMMONWEALTH OF KENTUCKY <br> ASSET/LIABILITY COMMISSION SCHEDULE OF NOTES OUTSTANDING AS OF 12/31/2019

| FUND TYPE <br> SERIES TITLE <br> General Fund Project \& Funding Notes |  | AMOUNT ISSUED | DATE OF ISSUE | MATURITY DATE | PRINCIPAL OUTSTANDING |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 2007 A, B Series |  | \$243,080,000 | 5/2007 | 11/2027 | \$134,850,000 |
| 2010 1st Series-KTRS Funding Notes |  | \$467,555,000 | 8/2010 | 4/2020 | \$8,560,000 |
| 2011 1st Series-KTRS Funding Notes |  | \$269,815,000 | 3/2011 | 4/2022 | \$76,860,000 |
| 2013 1st Series-KTRS Funding Notes |  | \$153,290,000 | 2/2013 | 4/2023 | \$64,825,000 |
|  | FUND TOTAL | \$1,133,740,000 |  |  | \$285,095,000 |
| Tax and Revenue Anticipation Notes |  |  |  |  |  |
| 2019 Series A |  | \$400,000,000 | 7/2019 | 6/2020 | \$400,000,000 |
|  | FUND TOTAL | \$400,000,000 |  |  | \$400,000,000 |
| Agency Fund Project Notes |  |  |  |  |  |
| 2018 Agency Fund Project Note (KCTCS) |  | \$27,775,000 | 6/2018 | 10/2023 | \$14,169,640 |
|  | FUND TOTAL | \$27,775,000 |  |  | \$14,169,640 |
| Federal Hwy Trust Fund Project Notes |  |  |  |  |  |
| 2010 1st Series |  | \$89,710,000 | 3/2010 | 9/2022 | \$89,710,000 |
| 2013 1st Series |  | \$212,545,000 | 8/2013 | 9/2025 | \$151,325,000 |
| 2014 1st Series |  | \$171,940,000 | 3/2014 | 9/2026 | \$132,175,000 |
| 2015 1st Series |  | \$106,850,000 | 10/2015 | 9/2027 | \$77,145,000 |
|  | FUND TOTAL | \$581,045,000 |  |  | \$450,355,000 |
| ALCo NOTES TOTAL |  | \$2,142,560,000 |  |  | \$1,149,619,640 |

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Creating Financial Value for the Commonwealth



[^0]:    + Not to Exceed

[^1]:    * Preliminary, subject to change

[^2]:    *The information reported is accurate as of December 31, 2019. Estimates made as
    that time may be revised due to events caused by the spread of Covid-19.

[^3]:    ${ }^{i}$ All outstanding bonds do not necessarily receive a rating

