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

For the period ending June 30, 2023

53rd Edition





Andy Beshear, Governor of the Commonwealth of Kentucky

Holly M. Johnson, Secretary of the Finance and Administration Cabinet

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Prior copies of this report:

https://finance.ky.gov/office-of-the-controller/office-of-statewide-accountingservices/financial-reporting-branch/Pages/annual-comprehensive-financialreports.aspx

The Commonwealth's Annual Comprehensive Financial Report (ACFR): <u>https://finance.ky.gov/office-of-the-controller/office-of-statewide-accounting-services/financial-reporting-branch/Pages/annual-comprehensive-financial-reports.aspx</u>

> The Municipal Securities Rulemaking Board (MSRB) Electronic Municipal Market Access (EMMA): <u>http://emma.msrb.org/</u>

Commonwealth of Kentucky Investor Relations: <u>https://bonds.ky.gov/</u>

Office of Financial Management (OFM): https://ofm.ky.gov



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INTRODUCTION

The Kentucky Asset/Liability Commission ("ALCo" or the "Commission") presents its 53rd 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 January 1, 2023 through June 30, 2023.

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 all financial agreements entered into during the reporting period.

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

- Federal Reserve Board of Governors raised the federal funds rate to a target range of 5.00 percent to 5.25 percent during the first half of 2023.
- The unemployment rate rose to 3.6 percent in June 2023, up from 3.5 percent in December 2022.
- The annual rate of economic growth as measured by the gross domestic product ("GDP") slowed in the first half of 2023. The seasonally adjusted rate for the first quarter was 2.0 percent and for the second quarter was 2.4 percent.
- Inflation remained below highs seen last year but still ended the second quarter with the core consumer price index ("CPI") rate (ex-energy and food) at an elevated 4.8 percent.

On the state level

- General Fund receipts totaled \$15.1 billion for Fiscal Year ("FY") 2023, an increase of \$445.2 million over FY 2022 collections. General Fund revenues exceeded the budgeted estimate by \$1.4 billion.
- Road Fund receipts for FY 2023 totaled \$1.75 billion, an increase of 4.7 percent from the previous fiscal year. Road Fund collections exceeded the official revenue forecast by \$32.3

million, or 1.9 percent.

- Kentucky non-farm employment growth rates for the four quarters of FY 2023 were 3.3 percent, 2.4 percent, 2.4 percent, and 2.5 percent.
- Kentucky personal income growth rates for the four quarters of FY 2023 were 3.8 percent, 4.7 percent, 4.7 percent, and 4.3 percent.
- Primarily from the FY 2023 General Fund budget surplus, \$1.45 billion was deposited into the Budget Reserve Trust Fund, bringing the total balance up to \$3.7 billion which equates to 24.6 percent of the FY 2023-2024 official revenue estimate.
- The current Budget Reserve Trust Fund balance, and third consecutive year the surplus has exceeded \$1 billion, is a material credit improvement for the Commonwealth. However, large unfunded pension liabilities continue to put stress on the Commonwealth's credit rating.

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State Investment Commission

The State Investment Commission ("SIC") is responsible for investment oversight with members of the Commission being State Treasurer (Chair), Finance and Administration Cabinet Secretary, State Controller and two Gubernatorial Appointees. The investment objectives are three-fold: 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.

Market Overview

The first half of 2023 saw the Federal Open ("FOMC" Committee the Market or "Committee") achieve further success in its goal to drive inflation closer to the long-run objective of 2 percent after two years of stubbornly high price gains. While supply chain restraints have resolved in most industries, the labor market remains extremely tight and has so far defied predictions of a rising unemployment rate as higher interest rate take effect. With unemployment remaining near historic lows, the FOMC has been reluctant to signal the end of the current tightening cycle. While most economists still predict a looming recession, odds of the FOMC achieving a "soft landing" have increased in recent months as GDP growth remained about 2 percent for both the first and second quarters of 2023.

With headline inflation peaking at over 9 percent in the middle of 2022, the FOMC committed to raising interest rates until inflation was back under control. While the majority of rate hikes occurred in the second half of 2022, the first half of 2023 saw four more quarter-point hikes to bring the federal funds rate range to 5.00 to 5.25 percent at the end of June. While traders are carefully watching for any sign that interest rates have peaked, FOMC members have committed to additional hikes as needed if market data shows inflation isn't making sufficient progress towards the 2 percent goal. The Committee has continued to shrink its balance sheet and reduce security holdings as part of the current tightening cycle.

Employment

The labor market remains surprisingly robust despite the highest interest rates in the past two decades. Although slowing from the robust pace at the end of 2022, the economy still added an average of 278,000 jobs per month while the unemployment rate ended June near a historic low of 3.6 percent. There are signs of the labor market finally beginning to soften, however. Total job openings have continued to decline from highs set in early 2022 while income gains have been unable to outpace inflation for most of the year.

At the end of June, job openings totaled 9.5 million, down from a peak of over 12 million in early 2022. The Labor Force Participation Rate ("LFPR") has continued to tick upwards to 62.6 percent at the end of June but remains threequarters of a point below where it was at the beginning of 2020. The longer-term implications of a stubbornly low LFPR are still being discovered as the measure plummeted after the 2008 financial crisis and never recovered, currently sitting at 4 points below the average from the early 2000s. With a population the size of the U.S., this represents millions of workers that have permanently left the work force with

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no intention to return. This lack of available workers will have major consequences to not only companies desperate to meet labor needs, but also pension funds struggling to keep up with an aging population.

Inflation

The FOMC continued to see results from its aggressive hiking cycle as price increases continued to slow in the first half of 2023. After beginning the year still above 6 percent, consumer price inflation as measured by CPI ended the first half at 3 percent. The Fed's gauge, preferred inflation core Personal Consumption Expenditures ("PCE"), strips out more volatile categories like food and energy to present a more stable picture of price increases. The PCE gauge began the year around 4.6 percent and fell half a point to end June at 4.1 percent, still double where it was pre-2020 and twice the Fed's state long-run goal of 2 percent. Expectations for longer-run inflation continue to fall as peak inflation seems to be firmly in the rear-view.

Economic Growth

Following a strong end to 2022, real gross domestic product ("GDP") began 2023 with a 2.0 percent gain in the first quarter, a number that increased to 2.4 percent for the second quarter. While not outstanding, this slow but steady growth contrasts with the negative numbers posted in the first half of 2022. Consumption was the main driver of growth in the first quarter as companies emptied built-up inventories and sold to willing consumers. For the second quarter, business fixed investment contributed the most to growth as inventories remained steady and consumption weakened.

Interest Rates

The federal funds rate began the year at 4.25 -4.50 percent after an aggressive series of hikes in the latter half of 2022. The pace slowed in 2023 as inflation continued to fall from earlier peaks. The FOMC raised the rate a quarter point at the February, March, and May meetings. Only the June meeting saw a brief pause as the Committee waited for additional data to come in to determine the path forward. Traders are now trying to determine where exactly the rate will end up before the Committee has decided it's sufficiently high to tame inflation for good this cycle. While the end of hiking is expected to come before the end of the year, the first rate cut isn't expected until 2024. The current Fed dot plot shows rates remaining above 3 percent through the end of 2025 and settling around 2.5 percent in the long-term.

Yields on treasury securities and corporate bonds, as well as all types of consumer credit, all continued to rise in the first half of 2023 in response to a rising federal funds rate. This yield increase continued to be seen primarily on the shorter end, as the yield curve between 2-year and 10-year treasuries remained sharply inverted. Mid-term treasury yields, such as the 2-year, were particularly volatile in the first half as traders struggled to grasp how high rates would go and how long they would stay there. The Federal Reserve has continued to reduce its balance sheet by allowing treasuries and mortgages to mature and roll off without being replaced.

Equities

After stumbling in the second half of 2022, equity price indices posted strong gains in the first half of the year. The S&P 500 gained over

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16 percent while the tech-focused NASDAQ gained a robust 31 percent. Despite these gains, both indices still remain well below all-time highs reached at the end of 2021 but have made up a lot of ground lost during a tough 2022. One-month option-implied volatility on the S&P 500 index (the VIX) fell significantly during the first half and approached prepandemic lows as the full picture of FOMC policy began to come into view and uncertainty dissipated.

Outlook

The FOMC is strongly committed to returning inflation to the 2 percent long-term objective. In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee's assessments will take into account a wide range of information, including readings on inflation expectations, and inflation wages, other measures of labor market conditions and financial and international developments.

In conjunction with the FOMC meeting held on June 14, 2023, meeting participants submitted their projections of the most likely outcomes for GDP, the unemployment rate, and inflation for each year from 2023 to 2025 and over the longrun.

For 2023, the median forecast for GDP, unemployment rate and inflation is 1.0 percent, 4.1 percent and 3.2 percent, respectively. The expected federal funds rate at the end of 2023 is 5.6 percent.

For 2024, the median forecast for GDP, unemployment rate and inflation is 1.1 percent, 4.5 percent and 2.5 percent, respectively. The expected federal funds rate at the end of 2024 is 4.6 percent.

For 2025, the median forecast for GDP, unemployment rate and inflation is 1.8 percent, 4.5 percent and 2.0 percent, respectively. The expected federal funds rate at the end of 2025 is 3.4 percent.

Additionally, longer run projections are 1.8 percent for GDP, 4.0 percent for unemployment and 2.0 percent inflation with an expected Federal funds rate of 2.5 percent.

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Real Gross Domestic Product & Standard & Poor's 500



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Federal funds Target Rate & NonFarm Payrolls





Date

Nonfarm Payrolls Range 07/01/2013-06/30/2023 NFPTCH Index



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Portfolio Management

For the six months ended June 30, 2023, the Commonwealth's combined investment portfolio was approximately \$13 billion. The portfolio was invested in U. S. Treasury Securities (34.8%), U. S. Agency Securities (33.6%), Mortgage-Backed Securities (0.2%), Repurchase Agreements (3.1%), Corporate Securities (0.1%), Asset-Backed Securities (0.4%), and Money Market Securities (27.8%). The portfolio had a market yield of 4.8 percent and an effective duration of 0.36 of a year.

The total portfolio is broken down into three investment pools. The pool balances as of June 30, 2023 were \$6.3 billion (Short Term Pool), \$2.9 billion (Limited Term Pool), and \$3.7 billion (Intermediate Term Pool).

Distribution of Investments as of June 30, 2023



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Portfolio Management

As the total portfolio continued to grow due to record high revenues and budget surpluses, OFM adjusted the investment strategy of the Short Term Pool portfolio. This portfolio has historically had a low or negative balance prior to the pandemic and was only invested in Government Money Market Funds and Repurchase Agreements. In January of 2023, with a balance of approximately \$5 billion, and post the historic rate increase, the portfolio was further diversified to include investments in U.S. Treasury Securities and U.S. Agency Securities maturing up to 13 months to increase yields while maintaining liquidity.



Short Term Pool Sector Allocation

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Tax-Exempt Interest Rates and Relationships

The Bond Buyer 20 General Obligation Index averaged 3.61 percent for FY 2023. The high was 4.16 percent in October 2022 and the low was 3.21 percent in August 2022.

The Securities Industry and Financial Markets Association ("SIFMA") Municipal Swap Index averaged 2.56 percent for FY 2023. The high was 4.35 percent in March 2023, and the low was 0.65 percent in July 2022. The 30-day USD London Interbank Offered Rate ("LIBOR") averaged 4.02 percent for FY 2023. The high was 5.22 percent in June 2023 and the low was 1.80 percent in July 2022. During the year, SIFMA traded at a high of 90.05 percent of the 30-day LIBOR in March 2023, at a low of 28.86 percent in July 2022, and at an average of 61.98 percent for the FY.





CREDIT MANAGEMENT

Mid-Year Reflection

Credit

As inflation continued to slow in the first half of 2023, the pace of interest rate hikes by the Federal Reserve also tapered off. By the end of June, the federal funds rate sat at 5.00 percent to 5.25 percent with only one or two more hikes anticipated in the current tightening cycle. The result of these aggressive rate hikes is a headline inflation rate that peaked at over 9 percent but came in around 3 percent at the end of June. Supply chain restraints have been mostly resolved, dropping the increase in producer prices paid year-over-year to 0.1 percent at the end of June after peaking at more than 11 percent early last year. After decreasing in the final two months of 2022, consumer spending began to show modest gains again and now sits above \$18 trillion when adjusted to an annual rate. Personal income continues to follow the pre-2020 trend line, meaning that real incomes have declined slightly when high inflation rates are taken into consideration. Household debt continued to rise and exceeded \$17 trillion in the first quarter as delinquency rates also increased on all types of consumer loans. Total mortgage balances exceeded \$12 trillion for the first time after rising sharply since last year while credit card debt remained flat.

Despite higher borrowing rates, non-financial corporations increased their debt load to nearly \$20 trillion in the first quarter. The growth rate slowed however, causing the ratio of corporate debt to GDP to drop slightly. Investment grade debt remained the vast majority of new issuance as investors enjoyed higher rates without having to dip into junk territory to find them. After falling in the previous year, higher borrowing rates finally began to take a toll on balance sheets as corporate corporate bankruptcies in the first half of 2023 were double what they were the year prior and the highest since 2010. After rising in the first quarter, spreads on investment grade bonds compared to U.S. Treasuries fell back in the second quarter and finished the first half of the year very close to where they began it and below the elevated level seen during most of 2022. The Senior Loan Officer Opinion Survey on Bank Lending Practices, or SLOOS, reported that standards tightened for all categories of consumer and business loans while demand decreased, a trend carried over from the previous year. Banks cited a decreased appetite for risk during an uncertain economic environment as the reason for tighter standards.

Credit Process

OFM's 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, where the lowest rating of the three is used to determine credit rating compliance. 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, our 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

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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").

Industry/Company Analysis

OFM uses a combination top-down and bottomup 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 Portfolio Managers focus on specific company fundamentals, picking the strongest companies within a sector. Fundamental analysis is then performed by 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 first half of 2023, Intel and US Bank were removed from the Corporate Credits Approved list. The Corporate Credits Approved list as of June 30, 2023 is located in Appendix A.

DEBT MANAGEMENT

Authorized but Unissued Debt Summary

As of June 30, 2023, the Commonwealth's 2023-2024 budget includes authorized debt service for over \$3.9 billion of projects supported by the General Fund, Agency Fund, Road Fund, and Federal Fund, which were approved during prior sessions of the General Assembly. This pipeline of projects is anticipated to be financed over a number of future bond transactions. 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. The balance of prior bond authorizations of the General Assembly dating from 2010 through 2023 subject to moral obligation or state intercept totals \$3,963.45 million. Of these prior authorizations, \$2,860.74 million is General Fund supported, \$940.21 million is Agency Fund supported, \$12.50 million is supported by Road Fund appropriations and \$150.00 million is supported through Grant Anticipation Revenue Vehicle Bonds designated for the Brent Spence Bridge project.

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 |
|--|
| June 30, 2023: |

| Legislative Session | General Fund | Agency Fund | Road Fund | Federal Fund | TOTAL | |
|---------------------|--------------|-------------|------------|--------------|-------------|--|
| (Year) | (millions) | (millions) | (millions) | (millions) | (millions) | |
| 2010 | \$ 22.05 | \$ 17.50 | - | | \$ 39.55 | |
| 2012 | 1.85 | - | \$ 12.50 | | 14.35 | |
| 2014 | 7.26 | - | - | | 7.26 | |
| 2016 | 20.26 | - | - | | 20.26 | |
| 2018 | 189.07 | 6.53 | - | | 195.60 | |
| 2019 | 44.67 | - | - | | 44.67 | |
| 2020-2021 | 395.36 | 80.43 | - | | 475.79 | |
| 2022-2024 | 2,395.22 | 835.75 | - | \$ 150.00 | 3,380.97 | |
| Bond Pool Proceeds | (215.00) | | | | (215.00) | |
| TOTAL | \$ 2,860.74 | \$ 940.21 | \$ 12.50 | \$ 150.00 | \$ 3,963.45 | |

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 or variable rate 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. While significant recent contributions have been cited as a credit positive, pension unfunded liabilities have continued to put pressure on the Commonwealth's credit ratings. In Fiscal Year 2023, the Commonwealth received issuer level rating upgrades from Fitch Ratings and S&P Global Ratings. During the reporting period, the remaining ratings below were either affirmed or remained unchanged from the previous reporting period.

The Ratings Picture at June 30, 2023:

| | Moody's | S & P | Fitch | Kroll |
|--|---------|-------|-------|-------|
| General Obligation Issuer Rating (GO) | Aa3 | A+ | AA | AA- |
| General Fund Appropriation Rating (GF)* | A1 | А | AA- | A+ |
| Road Fund Appropriation Rating (RF)* | Aa3 | А | AA- | AA- |
| Federal Highway Trust Fund Appropriation | | | | |
| Rating* | A2 | AA | A+ | - |
| *All outstanding bonds do not necessarily receive a rating | | | | |

*All outstanding bonds do not necessarily receive a rating from every rating agency

DEBT MANAGEMENT

Cash Management Strategies

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

Tax and Revenue Anticipation Notes ("TRANs")

TRANs can provide liquidity or leverage the difference between taxable and tax-exempt interest rate markets to create economies that provide a financial benefit to the Common-wealth. No TRANs were issued during the reporting period.

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 June 30, 2023 the total available liquid resources available to the General Fund was \$13.021 billion.

Bond Anticipation Notes ("BANs")

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

No BANs were issued during the reporting period

Notes or 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

Synthetic Fixed Rate

Synthetic Fixed Rate is an alternative to traditional fixed rate borrowing in which funds are borrowed on a variable rate basis then an interest rate swap is used to fix the interest rate.

No Synthetic Fixed Rate bonds were issued during the reporting period.

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DEBT MANAGEMENT

ALCo Financial Agreements

As of May 3, 2021, ALCo retired all remaining outstanding financial agreements.

Asset/Liability Model

General Fund

The total State Property and Buildings Commission ("SPBC") debt portfolio as of June 30, 2023 had \$2.731 billion of bonds outstanding with a weighted average coupon of 4.84 percent and a weighted average life of 6.27 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 \$1.246 billion callable portion had a weighted average coupon of 4.73 percent. The SPBC debt structure has 45.82 percent of principal maturing in 5-years and 74.70 percent of principal maturing in 10-years which is primarily influenced by the reduced amount of long-term new money permanent financings within the last several years.

The General Fund had a maximum balance of \$4.849 billion on June 30, 2023, and a low of \$1.971 billion on September 12, 2022. The average and median balances were \$3.071 billion and \$2.933 billion, respectively. Return on investable balances is impacted by investment earnings, fees and mark-to-market rules on the underlying investments.

From a liability management perspective, total Commonwealth General Fund debt service, net of credits was \$536.52 million for FY 2023. In addition to the Commonwealth General Fund debt service, General Fund debt service of \$9.811 million was provided for an Eastern State Hospital financing that was first issued through the Lexington-Fayette Urban County Government in 2011. Also, General Fund debt service of \$11.293 million was 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 not direct obligations of the Commonwealth, but they are General Fund supported.

DEBT MANAGEMENT Call Analysis by Call Date State Property and Buildings Commission Bonds \$500,000,000 Callable Non-Callable \$450,000,000 \$400,000,000 \$350,000,000 \$300,000,000 \$250,000,000 \$200,000,000 \$150,000,000 \$100,000,000 \$50,000,000 \$0 2030 2023 2026 2024 2025 2027 2029 2031 2032 2028

Call Analysis by Maturity Date State Property and Buildings Commission Bonds



DEBT MANAGEMENT

Looking Forward

Since January 1, 2018, federal tax law has prohibited tax-exempt advanced refunding bonds. In response, the Commonwealth has added to the methods of evaluation for examining potential refunding candidates. The Commonwealth now gives consideration and has executed advance refunding its municipal bonds on a taxable basis through a forward delivery of tax-exempt bonds, convertible taxable to tax-exempt bonds, and through a tender and exchange. Additional diligence and financial modeling is necessary to ensure economic savings in these transactions.

Road Fund

The net Road Fund average daily cash balance for FY 2023 was \$445 million compared to \$493 million for Fiscal Year 2022. The Road Fund cash was invested in the Intermediate Term Investment Pool which had a duration of 0.96 years as of June 30, 2023. The Road Fund earned \$6.3 million on a cash basis for FY 2023 versus negative \$11 million for FY 2022.

As of June 30, 2023, the Turnpike Authority of Kentucky ("TAK") had \$765.19 million of bonds outstanding with a weighted average coupon of 4.62% and an average life of 5.17 years.

Road Fund debt service paid in FY 2023 was \$132.82 million, resulting in a net interest margin (investment income earned year-to-date less debt service paid) of negative \$126.51 million. The negative amount stems from the level of investable balances in addition to the limited callability of fixed rate obligations on the liability side.

ALCo 2023 GARVEEs

On June 6, 2023, ALCo priced a \$54,840,000 bond transaction which currently refunded \$55,405,000 of outstanding Kentucky ALCo, Project Notes 2013 Federal Highway Trust Fund Series A. The transaction achieved an All-In True Interest Cost of 3.423% and a net present value savings of \$1,598,618 (2.885% savings of refunded par). The bonds were issued taxexempt via competitive sale with Hilltop Securities Inc serving as Financial Advisor and Dinsmore & Shohl LLP serving as Bond Counsel. The bonds achieved a rating of AA from S&P. The transaction closed on June 22, 2023.



SUMMARY

During the reporting period for the 53rd semiannual report, the FOMC achieved success in its goal to drive inflation closer to the long-run objective of 2 percent after two years of stubbornly high price gains. After an aggressive series of interest rate hikes in 2022, the pace slowed in 2023 as inflation continued to fall from earlier peaks. Yields on treasury securities and corporate bonds continued to rise on the shorter end and the 2-year and 10-year treasury curve remained sharply inverted. This contributed to a higher cost of capital across the Commonwealth, but provided debt issuers numerous opportunities for investment income from banking deposits.

ALCo's approach to managing the Commonwealth's interest-sensitive assets and interestsensitive liabilities has provided flexibility and savings in financing the Commonwealth's capital construction program. 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. 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 an economic advantage in conjunction with the fixed-rate bonds.

The balance of prior bond authorizations of the General Assembly from 2010 – 2023 totals over \$3.96 billion with existing debt for SPBC of \$2.59 billion, SFCC \$955.70 million, ALCo GARVEEs \$264.68 million, ALCo bonds \$76.56 million and Turnpike bonds \$765.19 million. The bonds are monitored for potential refunding savings on an advance refunding basis as well as taxable refunding bonds.

APPENDIX

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APPENDIX A

Corporate Credits Approved For Purchase 6/20/2023

| Company | Repurchase | Commercial | |
|--------------------------------|------------|------------|--------------|
| Name | Agreements | Paper | Bonds |
| Apple Inc | - | Yes | Yes |
| Bank of Montreal | Yes | Yes | Yes |
| Bank of Nova Scotia | Yes | Yes | Yes |
| Bank of Tokyo-Mitsubishi UFJ | | Yes | Yes |
| Berkshire Hathaway Inc | | Yes | Yes |
| BNP Paribas Securities Corp | Yes | Yes | Yes |
| BNY Mellon NA | | Yes | Yes |
| Canadian Imperial Bank of Comm | | Yes | Yes |
| Chevron Corp | | Yes | Yes |
| Cisco Systems Inc | | Yes | Yes |
| Cooperatieve Rabobank | | Yes | Yes |
| Cornell University | | Yes | No |
| Costco Wholesale Corp | | Yes | Yes |
| Deere & Co | | Yes | Yes |
| Exxon Mobil Corp | | Yes | Yes |
| Guggenheim Securities, LLC | Yes | No | No |
| Home Depot Inc | | Yes | Yes |
| IBRD - World Bank | | Yes | Yes |
| Johnson & Johnson | | Yes | Yes |
| Linde PLC | | Yes | Yes |
| Merck and Co Inc | | Yes | Yes |
| Microsoft Corp | | Yes | Yes |
| MUFG Securities Americas Inc | Yes | No | No |
| Natixis SA/New York | | Yes | Yes |
| Nestle Finance International | | Yes | Yes |
| PepsiCo Inc | | Yes | Yes |
| Pfizer Inc | | Yes | Yes |
| Procter & Gamble Co/The | | Yes | Yes |
| Royal Bank of Canada | Yes | Yes | Yes |
| Royal Dutch Shell PLC | | Yes | Yes |
| Salvation Army | | Yes | No |
| State Street Corp | | Yes | Yes |
| Sumitomo Mitsui Trust Bank | | Yes | Yes |
| Swedbank AB | | Yes | Yes |
| Texas Instruments Inc. | | Yes | Yes |
| Toronto-Dominion Bank/The | | Yes | Yes |
| Total Energies | | Yes | Yes |
| Toyota Motor Corp | | Yes | Yes |
| Wal-Mart Stores Inc | | Yes | Yes |
| | | | |





APPENDIX B



Appropriation Debt Principal Outstanding by Fund Source as of 06/30/2023



*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.

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APPENDIX C

COMMONWEALTH OF KENTUCKY ASSET/LIABILITY COMMISSION SCHEDULE OF NOTES OUTSTANDING AS OF 6/30/2023

| FUND TYPE SERIES TITLE | | AMOUNT ISSUED | DATE OF ISSUE | MATURITY DATE | PRINCIPAL OUTSTANDING |
|---|------------|------------------|------------------|------------------|--------------------------|
| General Fund Project & Funding Notes | | | | | |
| 2021 General Fund Refunding Project Notes | | \$113,940,000 | 5/2021 | 11/2027 | \$76,560,000 |
| | FUND TOTAL | \$113,940,000 | | | \$76,560,000 |
| Federal Hwy Trust Fund Project Notes | | | | | |
| 2013 1st Series | | \$212,545,000 | 8/2013 | 9/2025 | \$25,695,000 |
| 2014 1st Series | | \$171,940,000 | 3/2014 | 9/2026 | \$132,175,000 |
| 2015 1st Series | | \$106,850,000 | 10/2015 | 9/2027 | \$51,400,000 |
| 2023 Refunding Notes FHTF | | \$54,840,000 | 6/2023 | 9/2025 | \$54,840,000 |
| | FUND TOTAL | \$546,175,000 | | | \$264,110,000 |
| ALCo NOTES TOTAL | _ | \$660,115,000 | | | \$340,670,000 |

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