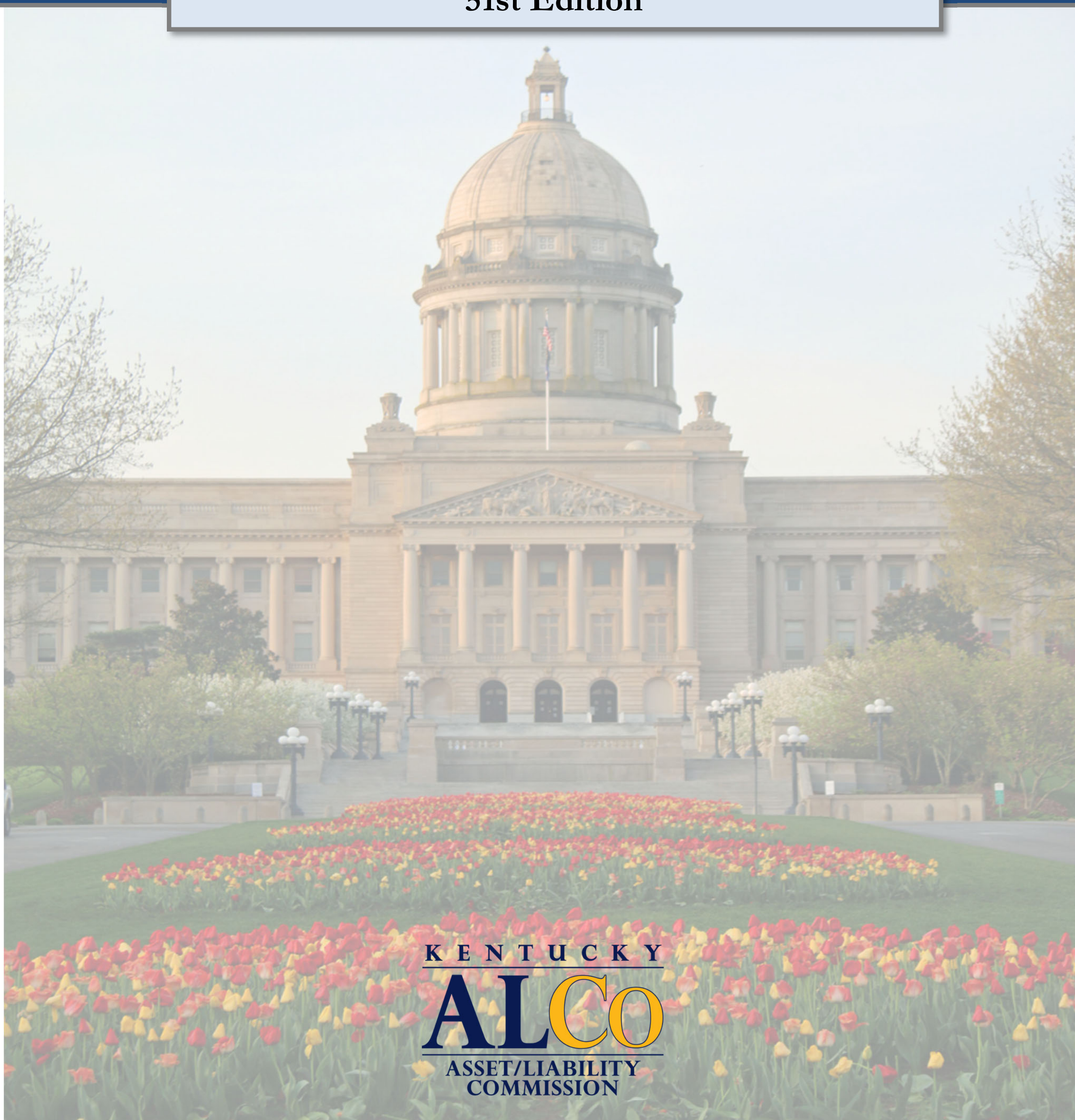
COMMONWEALTH OF KENTUCKY

KENTUCKY ASSET/LIABILITY COMMISSION

SEMI-ANNUAL REPORT

For the period ending June 30, 2022

51st 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

A copy of this report:

[ALCo Semi-Annual Reports - Finance and Administration Cabinet (ky.gov)]

The Commonwealth's Annual Comprehensive Financial Report (ACFR):

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

The Municipal Securities Rulemaking Board (MSRB)

Electronic Municipal Market Access (EMMA):

http://emma.msrb.org/

Commonwealth of Kentucky Investor Relations (BondLink):

https://bonds.ky.gov/

Office of Financial Management (OFM):

https://ofm.ky.gov

TEAM KENTUCKY™

Table of Contents

SECTION	PAGE
Introduction	4
Investment Management	5
Market Overview	5
Portfolio Management	11
Tax-Exempt Interest Rates and Relationships	13
Credit Management	15
Mid-Year Reflection	15
Credit Process	15
Debt Management	17
Authorized But Unissued Debt	17
Ratings Update	22
Cash Management Strategies	23
ALCo Financial Agreements	25
Asset/Liability Model	25
Road Fund	27
Summary	28

Appendix

A - Approved Credits	30
B - Appropriation Supported Debt	31
C - ALCo Notes Outstanding	32

INTRODUCTION

The Kentucky Asset/Liability Commission ("ALCo" or the "Commission") presents its 51st semi-annual 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, 2022 through June 30, 2022.

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. An analysis of the Commonwealth's outstanding debt is provided as well as a description of financial agreements entered into during the reporting period.

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 raised the federal funds rate to 1.50 percent to 1.75 percent during the first half of 2022.
- The unemployment rate fell to 3.6 percent ending June 2022 from 3.9 percent in December 2021.
- The annual rate of economic growth as measured by GDP fell over the first two quarters of 2022. The seasonally adjusted rate for the first quarter was negative 1.6 percent and second quarter was a negative 0.9 percent.
- Inflation continued the trend upward during the first quarter of 2022 but then fell over the second quarter with the core rate (ex-energy and food) ending the first half of 2022 at 4.8 percent.

On the state level

- General Fund receipts totaled $14.7 billion for Fiscal Year (FY) 2022, an increase of 14.6 percent over FY 2021 collections. General Fund revenues exceeded the budgeted estimate by $945.4 million.
- Road Fund receipts for FY 2022 totaled $1.67 billion, an increase of 2.0 percent from the previous fiscal year. Road Fund collections were below the budgeted estimate by $4.7 million, or 0.3 percent.
- The 2022 Regular Session of the General Assembly delivered House Bill 1 (Executive Branch Budget other than the Transportation Cabinet) and House Bill 241 (Kentucky Transportation Cabinet Budget) to the Governor on March 30, 2022. Together the bills authorize bond financing for projects totaling a net amount of $3.767 billion to support various capital initiatives of 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.

INVESTMENT MANAGEMENT

Market Overview

In the first part of the year, inflation remained well above the Federal Open Market Committee's (FOMC) longer-run objective of 2 percent, with some inflation measures rising to their highest levels in more than 40 years. These price pressures reflect supply and demand imbalances, higher energy and food prices, and broader price pressures, including those resulting from an extremely tight labor market. In the labor market, demand has remained strong, and supply has increased only modestly. As a result, the unemployment rate fell noticeably below the median of FOMC participants' estimates of its longer-run normal level, and nominal wages continued to rise rapidly. Although overall economic activity edged down, household spending and business fixed investment remained strong. The most recent indicators suggest that private fixed investment may be moderating, but consumer spending remains strong.

In response to sustained inflationary pressures and a strong labor market, the FOMC has been adjusting its policies and communications since last fall. At its March meeting, the FOMC raised the target range for the federal funds rate to 0.25 to 0.50 percent. The Committee continued to raise the target range in May and June, bringing it to 1.5 to 1.75 percent following the June meeting, and indicated that ongoing increases are likely to be appropriate. The Committee ceased net asset purchases in early March and began reducing its securities holdings in June.

Employment

Demand for labor continued to outstrip available supply across many parts of the economy, and nominal wages continued to increase at a robust pace. While labor demand remained very strong, labor supply increased only modestly. As a result, the labor market tightened further between December and June, with job gains averaging 475,000 per month and the unemployment rate falling from 3.9 percent to 3.6 percent, just above the bottom of its range over the past 50 years.

At the end of April, there were 11.4 million job openings, 60 percent above pre-pandemic levels and down a bit from the all-time high recorded in March. Meanwhile, the supply of labor rose only gradually and remained below pre-pandemic levels. The labor force participation rate (LFPR), which measures the share of people either working or actively seeking work, edged up just 0.1 percentage point in the first half of the year following a 0.4 percentage point improvement last year to 62.3 percent.

Despite these improvements, the LFPR remains 1.1 percentage points below its February 2020 level. About one-half of this decline in the participation rate was expected even in the absence of the pandemic, as additional members of the large baby-boom generation have reached retirement age. In addition, several pandemic-related factors appear to be continuing to hold down the participation rate, including a pandemic-induced surge in retirements (beyond that implied by the aging of the baby boomers) and, to a diminishing extent, increased caregiving responsibilities and some continuing concerns about contracting COVID-19.

In addition to subdued participation, a second factor constraining the size of the labor force has been a marked slowing in population growth since the start of the pandemic. Over 2020 and

INVESTMENT MANAGEMENT

2021, the working-age (16 and over) population grew by 0.4 percent per year on average which is notably less than the 0.9 percent average rate over the previous five years. The slowing in population growth over 2020–21 was due to both a sharp decline in net immigration and a spike in COVID-related deaths. Had the population increased over 2020–21 at the same rate as over the previous five years, the labor force would have been about 1.75 million larger as of the second quarter of this year.

Inflation

Consumer price inflation, as measured by the 12-month change in the price index for personal consumption expenditures (PCE), rose from 5.8 percent in December 2021 to 6.8 percent in June, its highest level since the early 1980s and well above the FOMC's objective of 2 percent. This increase was driven by an acceleration of retail food and energy prices, reflecting further increases in commodity prices. The 12-month measure of inflation that excludes the volatile food and energy categories (so-called core inflation) rose initially and then fell back to 4.8 percent in June, basically unchanged from last December. Three-month measures of core inflation have softened since December but remain far above levels consistent with price stability. Measures of near-term inflation expectations continued to rise markedly, while longer-term expectations moved up by less.

Economic Growth

Real gross domestic product (GDP) is reported to have surged at a 6.9 percent annual rate in the fourth quarter of 2021 and then to have declined at a 1.6 percent annual rate in the first quarter of 2022. The large swings in growth rates reflected fluctuations in the volatile expenditure categories of net exports and inventory investment. Abstracting from these volatile components, growth in private domestic final demand (consumer spending plus residential and business fixed investment, a measure that tends to be more stable and better reflects the strength of overall economic activity) was strong in the first quarter, supported by some unwinding of supply bottlenecks and a further reopening of the economy. The most recent indicators suggest that private fixed investment may be moderating, but consumer spending remains strong. Even so, real GDP declined again in the second quarter, posting a negative 0.9 percent.

Interest Rates

In March, May, and June, the FOMC raised the target range for the federal funds rate a total of 1.50 percentage points. The expected path of the federal funds rate over the next few years also shifted up substantially since late February. Economic data releases and FOMC communications were viewed by market participants as implying tighter monetary policy than previously expected. Market-based measures suggest that investors anticipate the federal funds rate to exceed 3.6 percent by the end of 2022, which is about 2 percentage points higher than the level expected in late February. The same measures suggest that the federal funds rate is expected to peak at about 4 percent in mid-2023 before gradually declining to about 3.1 percent by the end of 2025, which is about 1.4 percentage points higher than the end 0f 2025 rate expected in late February.

Before late February, the expected path of the federal funds rate had started to increase notably in the third quarter of last year, in anticipation of

INVESTMENT MANAGEMENT

increases in the target range. Consistent with the rise in the expected path of the federal funds rate, yields on Treasury securities and corporate bonds, as well as mortgage rates, all started to increase materially. Overall, these moves in asset prices suggest tightening of financial conditions even before the initial increase in the target range of the federal funds rate occurred in March.

Yields on nominal Treasury securities across maturities have risen considerably since late February. After a brief dip in late February, yields rose steadily amid higher inflationary pressures and associated expectations for monetary policy tightening. The increases in nominal Treasury yields were primarily accounted for by rising real yields. Uncertainty about longer-term interest rates also increased significantly, reportedly reflecting, in part, an increase in uncertainty about the policy outlook.

Since late February, yields on agency mortgage-backed securities (MBS), an important pricing factor for home mortgage rates increased significantly, as longer-term Treasury yields increased and spreads over comparable maturity Treasury securities widened. MBS spreads increased as market participants' expectations of a gradual reduction in the Federal Reserve's balance sheet shifted to a faster reduction.

Equities

Broad equity price indexes were volatile and declined sharply, on net, amid sustained inflation pressures and expectations of monetary policy tightening, as well as heightened uncertainty and the economic outlook. One-month option-implied volatility on the S&P 500 index, the VIX rose notably to elevated levels in the days following Russia's invasion of Ukraine. The VIX trended down for some time only to increase again and remain elevated since late April amid a notable deterioration in risk sentiment.

Outlook

The Committee is strongly committed to returning inflation to its 2 percent 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 and inflation expectations, wages, other measures of labor market conditions, financial and international developments, and public health.

In conjunction with the Federal Open Market Committee (FOMC) meeting held on June 14 and 15, 2022, meeting participants submitted their projections of the most likely outcomes for real gross domestic product (GDP) growth, the unemployment rate, and inflation for each year from 2022 to 2024 and over the longer run.

For 2022, the median forecast for GDP, unemployment rate and inflation is 1.7 percent, 3.7 percent and 5.2 percent, respectively. The expected Federal funds rate at the end of 2022 is 3.4 percent.

For 2023, the median forecast for GDP, unemployment rate and inflation is 1.7 percent, and 5.2 percent, respectively. The expected Federal funds rate at the end of 2022 is 3.4 percent.

For 2023, the median forecast for GDP, unemployment rate and inflation is 1.7 percent,

INVESTMENT MANAGEMENT

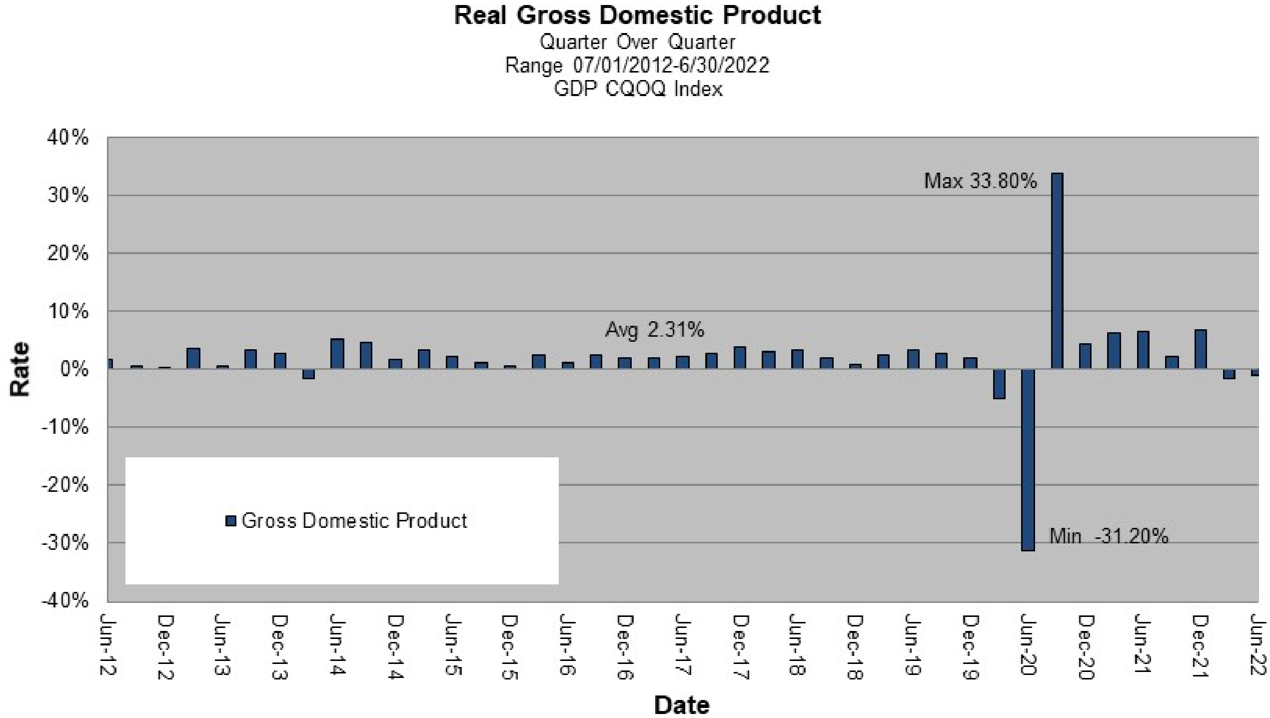
3.9 percent and 2.6 percent, respectively. The expected Federal funds rate at the end of 2023 is 3.8 percent.

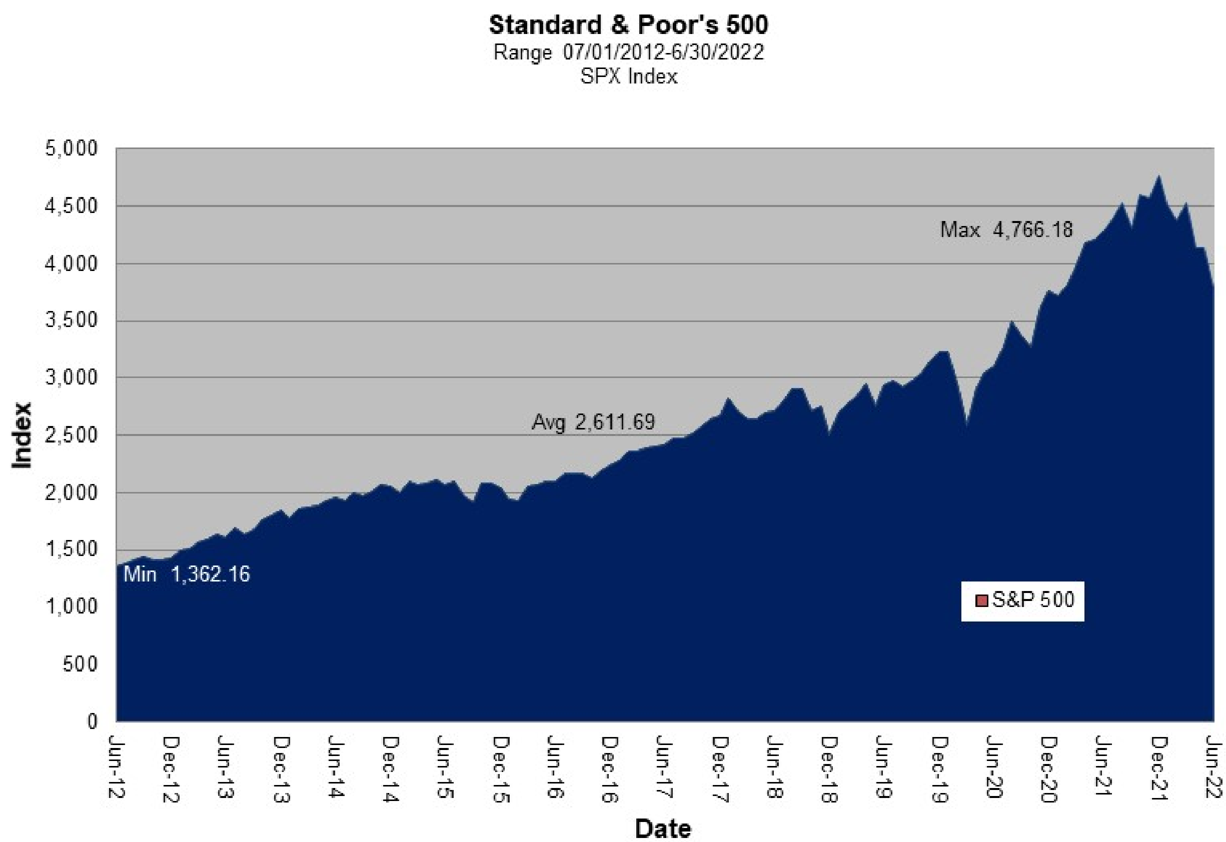
For 2024, the median forecast for GDP, unemployment rate and inflation is 1.9 percent, 4.1 percent and 2.2 percent, respectively. The expected Federal funds rate at the end of 2023 is 3.4 percent.

And, 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.

INVESTMENT MANAGEMENT

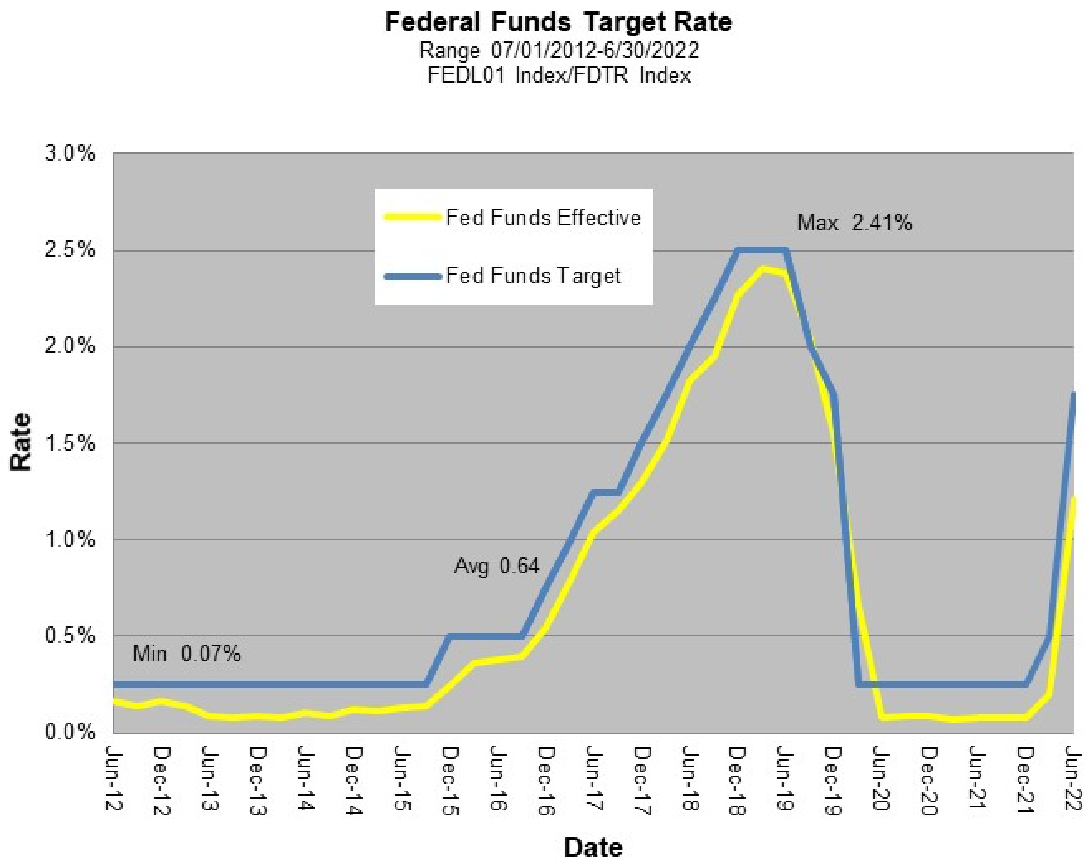
Real Gross Domestic Product & Standard & Poor's 500

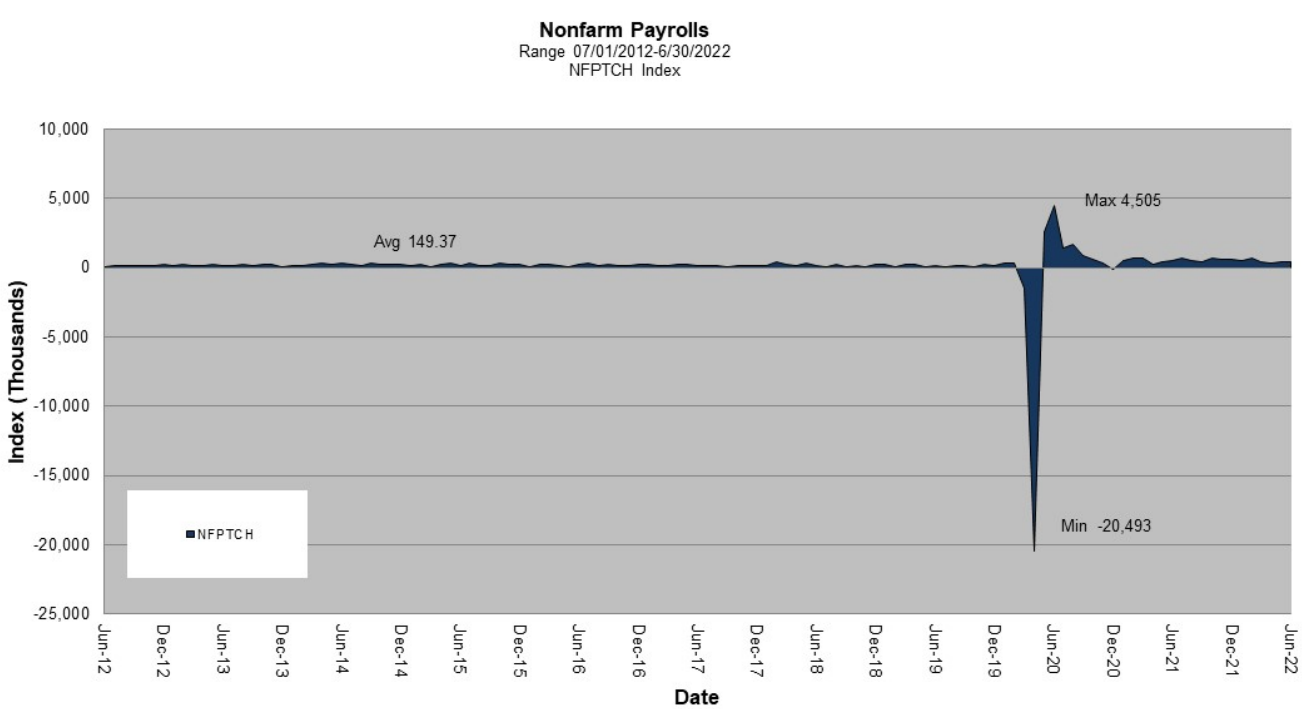




INVESTMENT MANAGEMENT

Federal Funds Target Rate & NonFarm Payrolls





INVESTMENT MANAGEMENT

Portfolio Management

For six months ended June 30, 2022, the Commonwealth's combined investment portfolio was approximately $11.7 billion. The portfolio was invested in U. S. Treasury Securities (21.8%), U. S. Agency Securities (15.9%), Mortgage-Backed Securities (0.3%), Repurchase Agreements (3.4%), Corporate Securities (0.3%), Asset-Backed Securities (0.9%), and Money Market Securities (57.4%). The portfolio had a market yield of 1.71% and an effective duration of 0.43 of a year.

The total portfolio is substantially larger than historical amounts due to receipt of federal funds. It is broken down into three investment pools. The pool balances as of June 30, 2022 was $6.1 billion (Short Term Pool), $2.5 billion (Limited Term Pool), $3.1 billion (Intermediate Term Pool).

Intermediate Pool Performance: In the current rising interest rate environment

The last six to eight months have been very volatile for fixed income portfolios. Regardless of duration, portfolios have suffered mark-to-market losses, and the Intermediate Pool is no exception. The Federal Reserve began raising rates at the March 2022 meeting, increasing the Fed Funds rate by 25 basis points and indicated rate increases at future meetings. After March, it became apparent that inflation was a bigger problem than the Federal Reserve and much of the market expected. The prospect of a faster interest rate policy shift by the Federal Reserve emerged quickly with the expected size of future rate hikes changing from 25 to 50 basis point increments. As a result, the Federal Reserve rose rates 50 basis points in May to 0.75 percent.

With the Consumer Price Index at its highest number in 40-years at 8.6 percent for May, the Federal Reserve, only a few days later, at their June meeting raised rates 75 basis points moving the rate to 1.50 percent, the largest rate increase since 1994. As of June, the bond market has moved in anticipation of a Fed Funds rate of 3.50 percent by the end of calendar year 2022 with the expectation they will move 50 to 75 basis points at each of the remaining four meetings.

Using the 2YR Treasury as a benchmark, rates have gone from a low of 0.202 percent at the end of August 2021 to 2.957 percent at the end of June 2022. An increase of 276 basis points.

For marked-to-market portfolios such as the Intermediate Pool, as rates rise, prices fall and there will be "paper" losses on any given day and month.

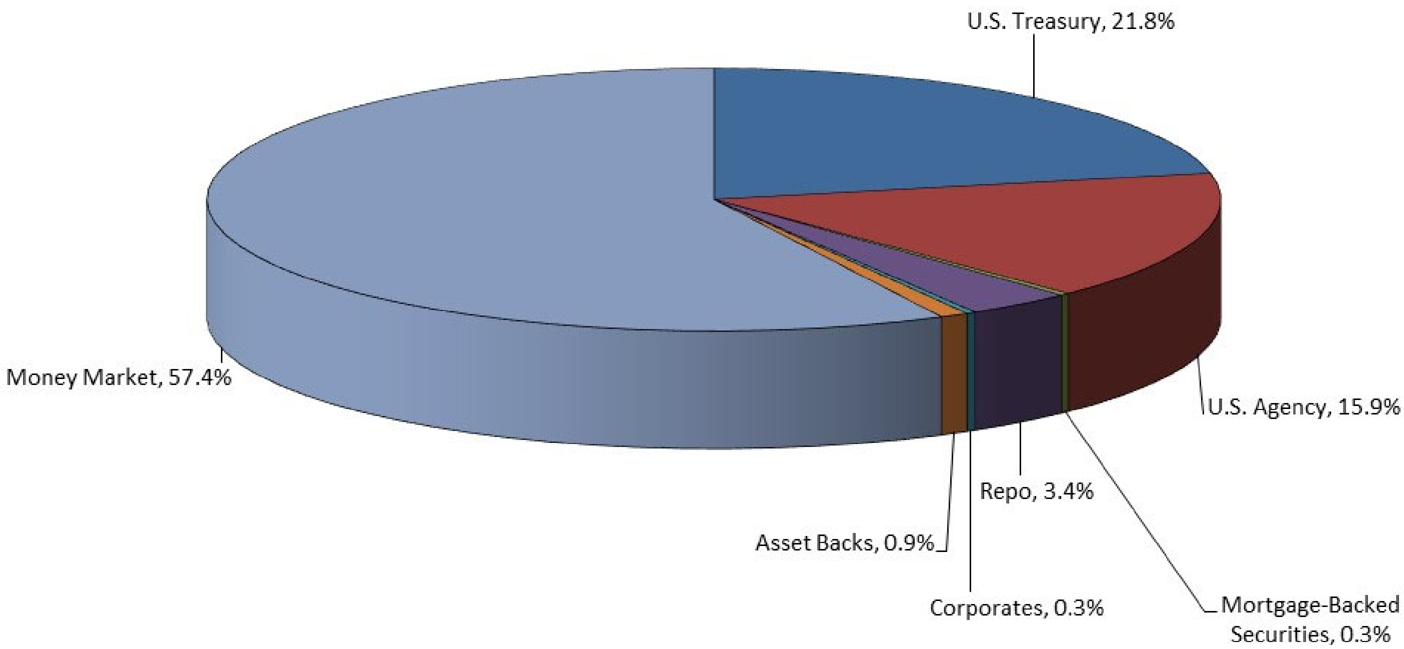
Hypothetical Example for illustration:

In mid-October $75 million of a Treasury was purchased maturing 6/15/2024 with a coupon of 0.25 percent. Over the total holding period, the interest earned will be over $1 million with an annualized total return of 0.544 percent.

However, as market rates rise the monthly losses will be reflected on reports from purchase to maturity. This is because the reports show the value if the security is sold but if held to maturity it is redeemed at par with the investor receiving interest earnings (i.e. over $1 million).

INVESTMENT MANAGEMENT

Distribution of Investments as of June 30, 2022

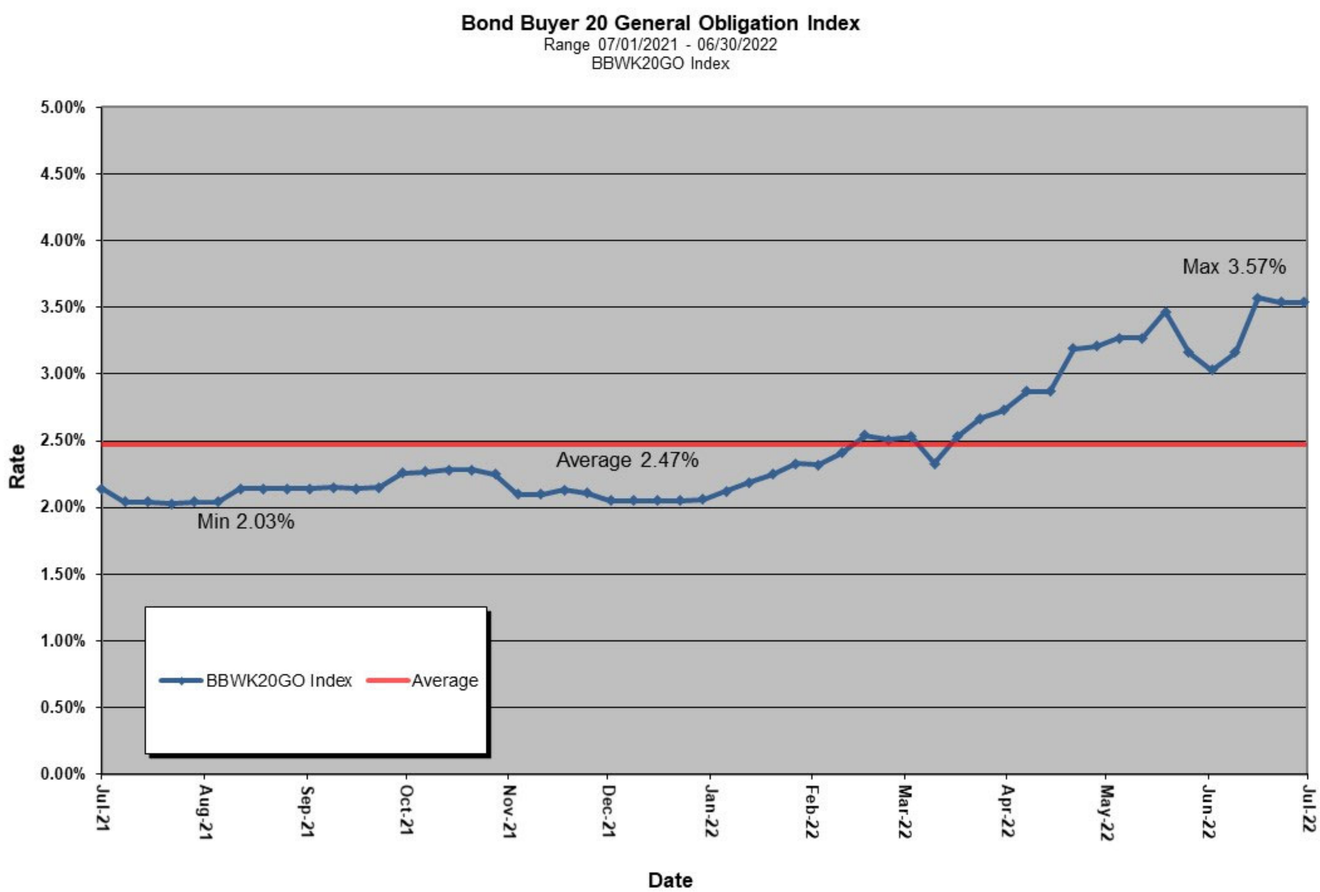


INVESTMENT MANAGEMENT

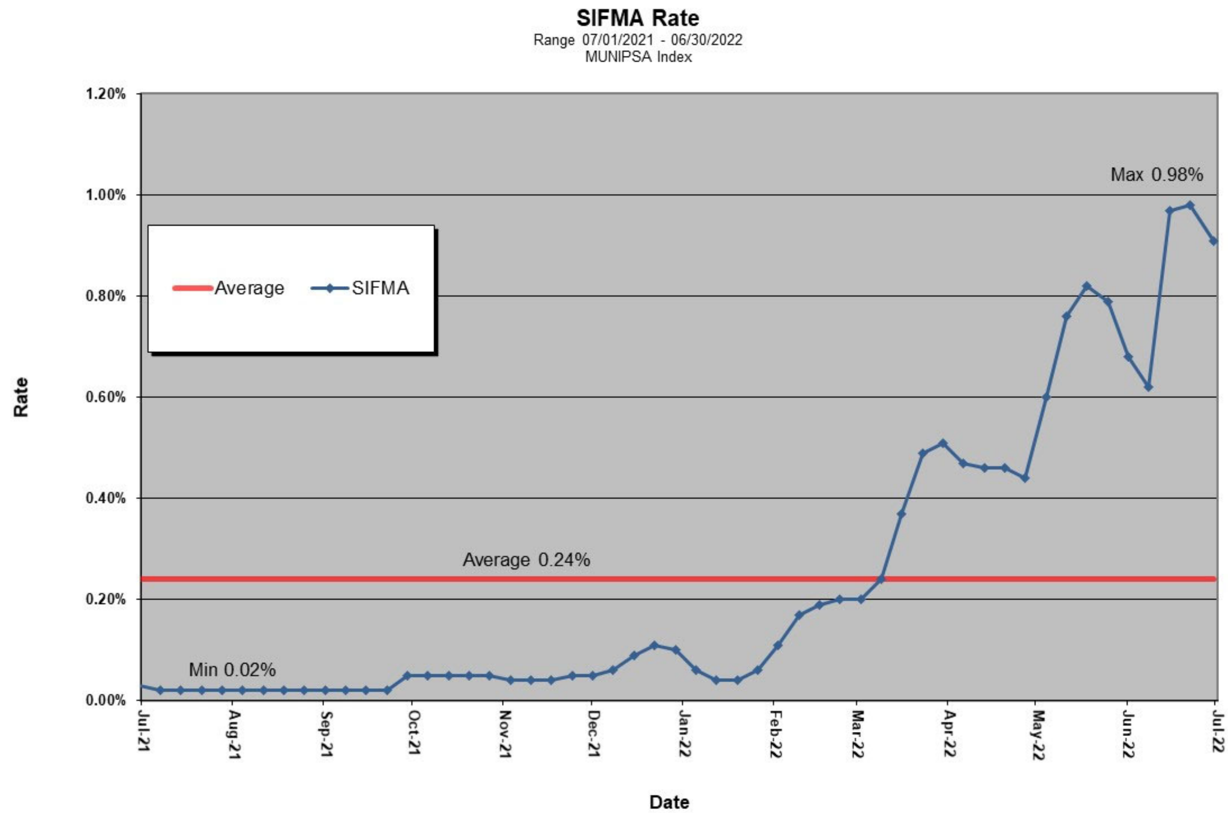
Tax-Exempt Interest Rates and Relationships

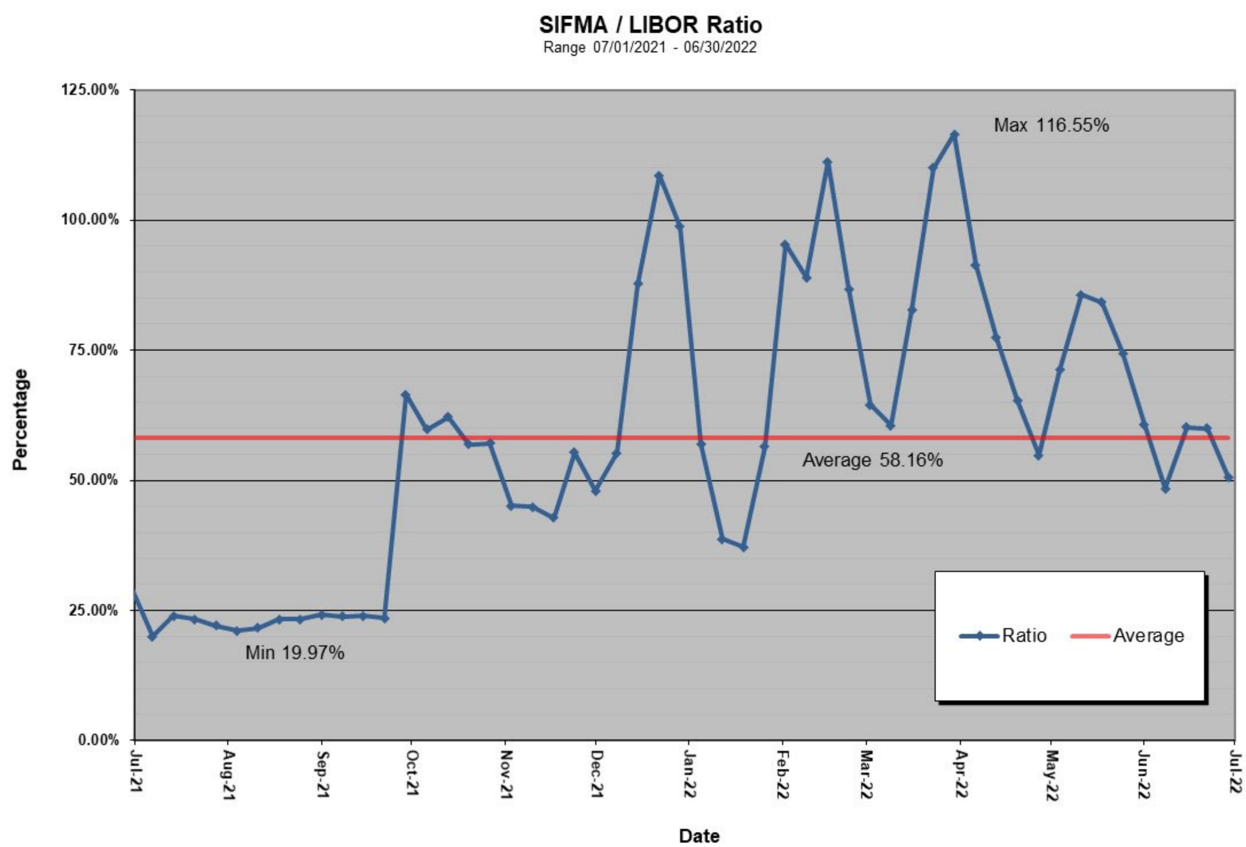
The Bond Buyer 20 General Obligation Index averaged 2.47 percent for Fiscal Year 2022. The high was 3.57 percent in June 2022 and the low was 2.03 percent in July 2021.

The Securities Industry and Financial Markets Association (SIFMA) Municipal Swap Index averaged 0.24 percent for Fiscal Year 2022. The high was 0.98 percent in June 2022 and the low was 0.02 percent in July 2021. The 30-day USD London Interbank Offered Rate (LIBOR) averaged 0.37 percent for Fiscal Year 2022. The high was 1.63 percent in June 2022 and the low was 0.075 percent in October 2021. During the year, SIFMA traded at a high of 116.55 percent of the 30-day LIBOR in April 2022, at a low of 19.97 percent in July 2021, and at an average of 58.16 percent for the Fiscal Year.



SIFMA & SIFMA/LIBOR Ratio





CREDIT MANAGEMENT

Mid-Year Reflection

Credit

The dominant story in the global economy for the first half of 2022 has been skyrocketing inflation in every region of the world. Global and domestic supply chain disruptions continue to wreak havoc on not only product and component availability but also prices paid by both producers and consumers. Consumer spending remains robust although not quite as hot as a few months ago. Personal income continues to follow the pre-pandemic trend line without the dramatic fluctuations seen the past couple years as government stimulus roiled the economy. Household debt continued to rise and approached $16 trillion in the first quarter of 2022. After two years spent hovering around historic lows, mortgage rates finally took off and ended the first half of 2022 over 5.5 percent. Credit card debt fell slightly in the first quarter but remains $70 billion higher than a year ago and just over $800 billion total. After a small spike early in the pandemic, delinquency rates continued to decline to historically low levels. The Federal Reserve sprang into action in the first half as runaway inflation threatened economic growth and the financial health of consumers.

As interest rates finally started to rise, the increase in corporate debt continued and now stands in excess of $12 trillion. The ratio of corporate debt to GDP remains steady above 50 percent, a very high level historically and a number not breached until 2020. Investment grade securities made up the vast majority of bond sales in the first half of 2022 as investors sought safety over yield. Continuing a trend that began in 2020, corporate bankruptcies continue to plummet to historic lows. Spreads on investment grade corporate debt finally began to rise after remaining low for all of 2021 and now sit around the 10-year average. The Senior Loan Officer Opinion Survey on Bank Lending Practices, or SLOOS, reported that lending standards for all types of loans to commercial and industrial firms continued to ease in the first quarter of 2022, continuing a trend from the previous year. Banks reported that standards for all categories of consumer loans were eased as well as demand for consumer credit began to pick up after a relatively flat 2021.

The first half of 2022 saw no changes in the Corporate Credit Approved list as reported in Appendix A. After dropping weaker names in the past couple years, the list now consists of profitable, stable companies with solid credit profiles.

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, 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 with

CREDIT MANAGEMENT

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 our credit approved list and their peers enabling us to track market activity in selected names including Credit Default Swaps (CDS).

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 viewed 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.

Corporate Credit Approved List

Once analysis has been completed, the State Investment Commission approves the list on a quarterly basis. During the first half of 2022, there were no changes to the list. The Corporate Credits Approved list as of June 2022 is located in Appendix A.

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 finally 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

KENTUCKY STATE PROPERTY AND BUILDINGS COMMISSION

KENTUCKY ALCo ASSET/LIABILITY COMMISSION

TURNPIKE AUTHORITY OF KENTUCKY

Authorized But Unissued Debt

As of June 30, 2022, the Commonwealth's 2023-2024 budget includes authorized debt service for over $4.432 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 financed over a number of future biennia 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

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 Common-wealth. 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 and Road Fund authorizations and all of the Agency Restricted Fund and Federal Highway Trust Fund authorizations have been permanently financed. House Bill 201 from the 2018 Regular Session of the General Assembly deauthorized $59.5 million of Grant Anticipation Revenue Vehicle (GARVEE) Bonds which were not needed to complete the Lake Barkley and Kentucky Lake Bridges Project.

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

DEBT MANAGEMENT

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.

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 authorized bond financing for projects totaling a net amount of $1,364.05 million to support various capital initiatives of the Commonwealth whereas $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 the total Agency Restricted Fund and 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 authorized 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.

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 authorized bond financing for projects totaling a net amount of $972.7 million

DEBT MANAGEMENT

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, $396.44 million is General Fund supported and $602.89 million is supported by Agency Restricted Fund appropriations. A portion of the General Fund and Agency Restricted Fund authorizations have been permanently financed.

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 total authorization under House Bill 268 is General Fund supported. A portion of the General Fund authorizations have been permanently financed.

2020 Regular Session

The 2020 Regular Session of the General Assembly delivered House Bill 99 to the Governor on March 18, 2020 and delivered House Bill 352 (Executive Branch Budget other than the Transportation Cabinet) and House Bill 353 (Kentucky Transportation Cabinet Budget) to the Governor on April 1, 2020, establishing an Executive Branch Budget for the first year only of the biennium ending June 30, 2022. The Governor signed House Bill 99 on March 25, 2020 and vetoed certain line items in House Bill 352 and House Bill 353 on April 13, 2020. The General Assembly overrode all gubernatorial vetoed line items on April 15, 2020. Together, the bills authorized bond financing for projects totaling a net amount of $351.67 million to support various capital initiatives of the Commonwealth. The total authorization is General Fund supported. Agency Fund projects totaling $429.80 million were listed without debt service appropriation. No additional Road Fund supported authorizations were appropriated. A portion of the General Fund and Agency Restricted Fund authorizations have been permanently financed.

2021 Regular Session

The 2021 Regular Session of the General Assembly delivered House Bill 192 (Executive Branch Budget other than the Transportation Cabinet) to the Governor on March 16, 2021, and House Bill 193 (Kentucky Transportation Cabinet Budget) to the Governor on March 29, 2021, establishing an Executive Branch Budget for the second year of the biennium ending June 30, 2022. The Governor vetoed certain line items in House Bill 192 on March 26, 2021, and the General Assembly overrode certain gubernatorial vetoed line items on March 29, 2021, enacting House Bill 192 as vetoed in part. The Governor took final action on House Bill 193 on April 7, 2021. Together, the bills authorized bond financing for projects totaling a net amount of $455.35 million, to support various capital initiatives of the Commonwealth. Of the total authorization, $98.35 million is General Fund supported and $357 million is supported by Agency Fund appropriations. No additional Road Fund supported authorizations were appropriated.

DEBT MANAGEMENT

2022 Regular Session

The 2022 Regular Session of the General Assembly delivered House Bill 1 (Executive Branch Budget other than the Transportation Cabinet) and House Bill 241 (Kentucky Transportation Cabinet Budget) to the Governor on March 30, 2022, establishing an Executive Branch Budget for the biennium ending June 30, 2024. The Governor vetoed certain line items in House Bill 1 and House Bill 241 on April 11, 2022. The General Assembly overrode certain gubernatorial vetoed line items in House Bill 1 and overrode all gubernatorial vetoed line items in House Bill 241 on April 13, 2022. Together, the bills authorize bond financing for projects totaling a net amount of $3,767.21 million to support various capital initiatives of the Commonwealth. Of the total authorization, $2,834.13 million is General Fund supported, and $933.08 million is supported by Agency Fund appropriations. No additional Road Fund authorizations were appropriated.

DEBT MANAGEMENT

Authorized but Unissued Debt Summary

The balance of prior bond authorizations of the General Assembly dating from 2010 through 2022 totals $4,432.28 billion. Of these prior authorizations, $3,168.74 million is General Fund supported, $1,201.04 million is Agency Fund supported, $62.50 million is supported by Road Fund appropriations.

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, 2022:

Legislative Session (Year)	General Fund (millions)	Agency Fund (millions)	Road Fund (millions)	TOTAL (millions)
2010	$ 23.10	$ 17.50	$ 50.00	$ 90.60
2012	2.17	-	12.50	14.67
2014	12.43	-	-	12.43
2016	44.81	-	-	44.81
2018	188.91	6.53	-	195.44
2019	67.46	-	-	67.46
2020-2021	245.73	243.93	-	489.66
2022	2,834.13	933.08	-	3,767.21
Bond Pool Proceeds	(250.00)			(250.00)
TOTAL	$ 3,168.74	$ 1,201.04	$ 62.50	$ 4,432.28

The balance of prior bond authorizations of the General Assembly dating from FY 2010 through FY 2022 totals $4,432.28 million. Of these prior authorizations, $3,168.74 million is General Fund supported, $1,201.04 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 The Turnpike Authority of Kentucky Economic Development Road Fund Revenue Refunding Bonds (Revitalization Projects) in October of 2021, the determination was made to add Kroll Bond Rating Agency's evaluation to the bond issuance.

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, 2022:

	Moody's	S & P	Fitch	Kroll
General Obligation Issuer Rating (GO)	Aa3	A	AA-	AA-
General Fund Appropriation Rating (GF)[i]	A1	A-	A+	A+
Road Fund Appropriation Rating (RF)[i]	Aa3	A-	A+	AA-
Federal Highway Trust Fund Appropriation Rating[i]	A2	AA	A+	

[i]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 (TRAN)

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 Commonwealth. Market conditions did not provide a beneficial interest rate environment, so 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, 2022 the total available liquid resources available to the General Fund was $11.668 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:

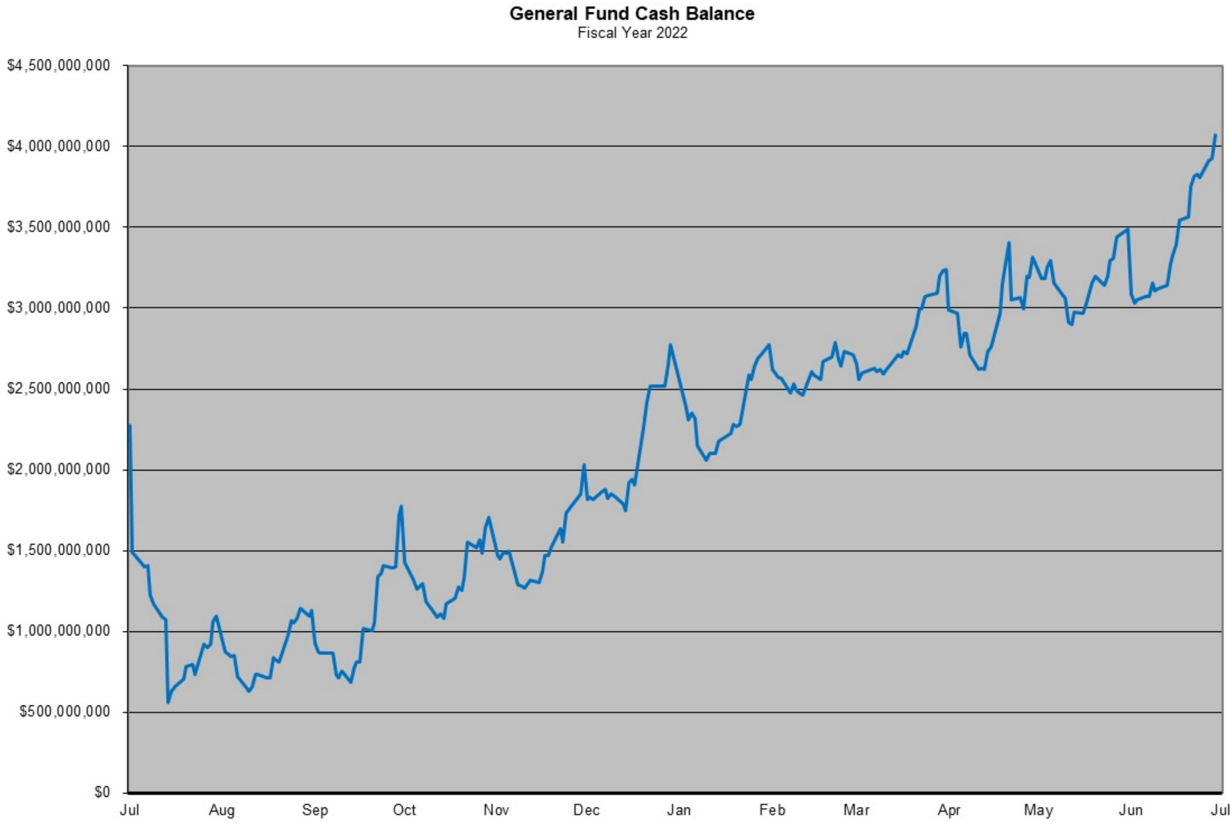
(a) Judgments, with a final maturity of not more than ten (10) years; and

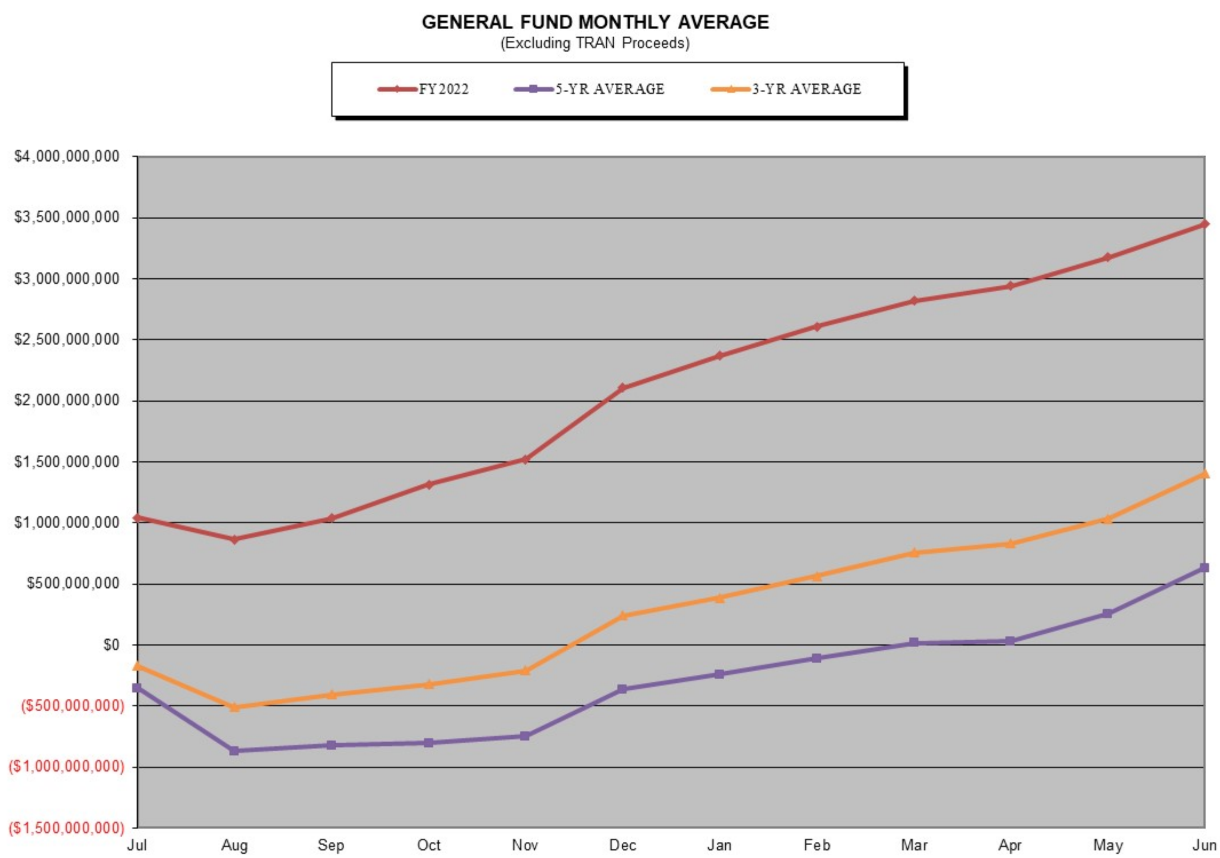
(b) The finance or refinance of obligations owed under KRS 161.550(2) or 161.553(2)

"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





DEBT MANAGEMENT

ALCo Financial Agreements

As of June 30, 2022, ALCo had no outstanding financial agreements.

Asset/Liability Model

General Fund

The total SPBC debt portfolio as of June 30, 2022 had $2.772 billion of bonds outstanding with a weighted average coupon of 4.83 percent and a weighted average life of 6.17 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 $1.118 billion callable portion had a weighted average coupon of 4.66 percent. The SPBC debt structure has 44.51 percent of principal maturing in 5 years and 76.82 percent of principal maturing in 10 years which is primarily influenced by the minimal amount of long-term new money permanent financings within the last several years.

The General Fund had a maximum balance of $4.089 billion on June 30, 2022, and a low of $558.3 million on July 14, 2021. The average and median balances were $2.108 billion and $2.272 billion, respectively. Return on investable balances is impacted by investment earnings, fees and mark-to-market rules on the underlying investments. 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 was $577.53 million for Fiscal Year 2022. In addition to the Commonwealth General Fund debt service, General Fund debt service of $11.257 million was provided for an Eastern State Hospital financing that was issued through the Lexington-Fayette Urban County Government in 2011. Also, General Fund debt service of $15.545 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. 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.

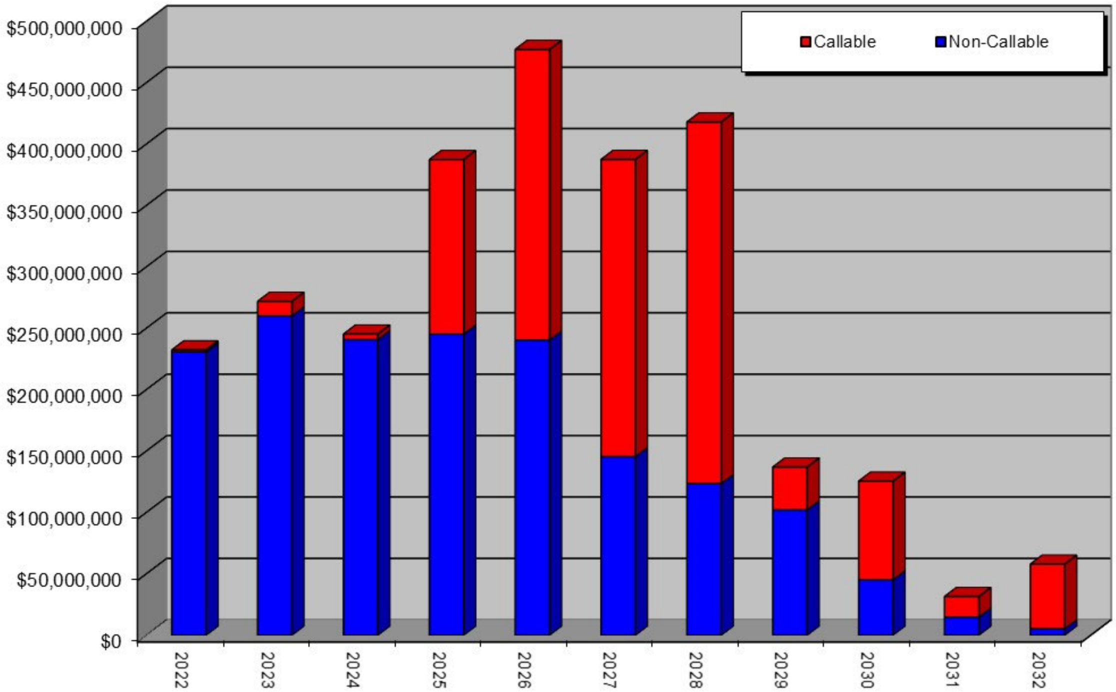
SPBC 126

On April 5, 2022, SPBC closed $85,365,000 par of General Fund Revenue Bonds, Project No. 126, in a single series. The transaction provided permanent financing for approximately $100 million of General Fund supported capital projects authorized over multiple sessions of the General Assembly.

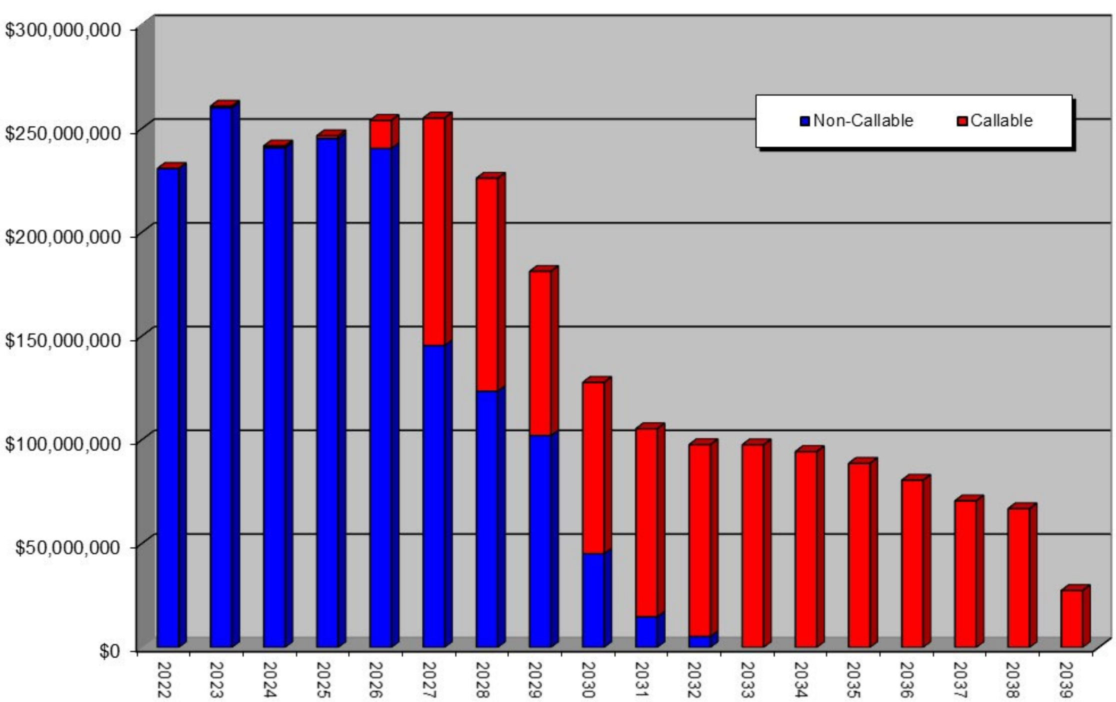
The SPBC Project No. 126 transaction achieved an All-In True Interest Cost of 3.0253 percent. The bonds were sold on a tax-exempt basis via negotiated sale with Citigroup serving as underwriter and Kutak Rock LLP as bond counsel. The bond received ratings of A1/A+ from Moody's Investors Service, Inc. and Fitch Ratings, respectively.

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

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, through a forward delivery of tax-exempt bonds or through a tender and exchange. Additional diligence and financial modeling is necessary to ensure economic savings in these transactions.

Road Fund

The Road Fund average daily cash balance for Fiscal Year 2022 was $493 million compared to $420 million for Fiscal Year 2021. The Road Fund cash was invested in the Intermediate Term Investment Pool which had a duration of 1.46 years as of June 30, 2022. The Road Fund earned a negative $11 million for Fiscal Year 2022 versus a negative $118 thousand for Fiscal Year 2021. The Road Fund earnings declined year over year because of lower short term rates and lower receipts. The continued relatively low level of investable balances at certain times during the fiscal year limits the investment opportunities.

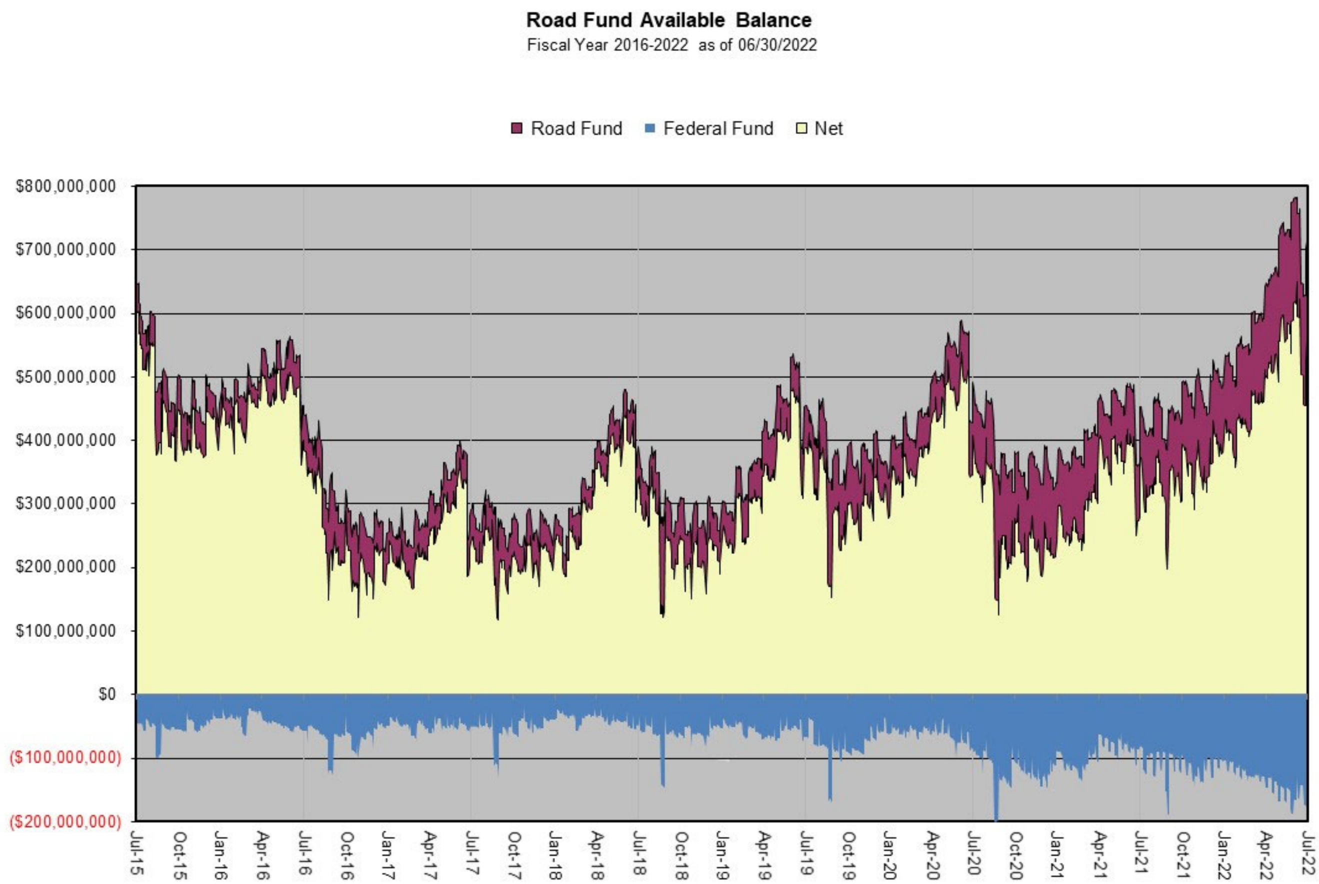
As of June 30, 2022, the Turnpike Authority of Kentucky (TAK) had $813.03 million of bonds outstanding with a weighted average coupon of 4.62 percent and an average life of 5.19 years.

Road Fund debt service paid in Fiscal Year 2022 is $137.865 million, resulting in a net interest margin (investment income earned year-to-date less debt service paid) of negative $148.87 million. The negative amount stems from the balances and a general low level of interest rates on the investment side in addition to the limited callability of fixed rate obligations.

TAK 2021 Series A & B

On April 5, 2022, TAK closed $56,875,000 par of Economic Development Road Revenue Refunding Bonds (Revitalization Projects), Series 2022 A (Forward Delivery). This transaction priced on September 21, 2021 with TAK 2021 Series A and Federally Taxable Series B to lock in an historic low rate. The Forward Delivery bonds refunded $71.1 million of certain outstanding 2012 Series A bonds for net present value savings of $17,787,267 (or 25.017 percent) and achieved an All-In True Interest Cost of 1.576 percent. The bonds were issued via negotiated sale with J.P. Morgan serving as senior managing underwriter and Dinsmore & Shohl, LLP as bond counsel. The bonds achieved ratings of Aa3 and AA- from Moody's and Kroll, respectively.

DEBT MANAGEMENT



SUMMARY

ALCo's approach to managing the Commonwealth's interest-sensitive assets and interest-sensitive liabilities has provided 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. In fiscal 2021, ALCo was able to eliminate the Floating Rate Note hedge by refunding the remaining debt service into a fixed rate note at historically low rates. Combined with the elimination of interest rate risk, the concessions received from the swap provider and the economic savings, this was a highly beneficial transaction for the Commonwealth.

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

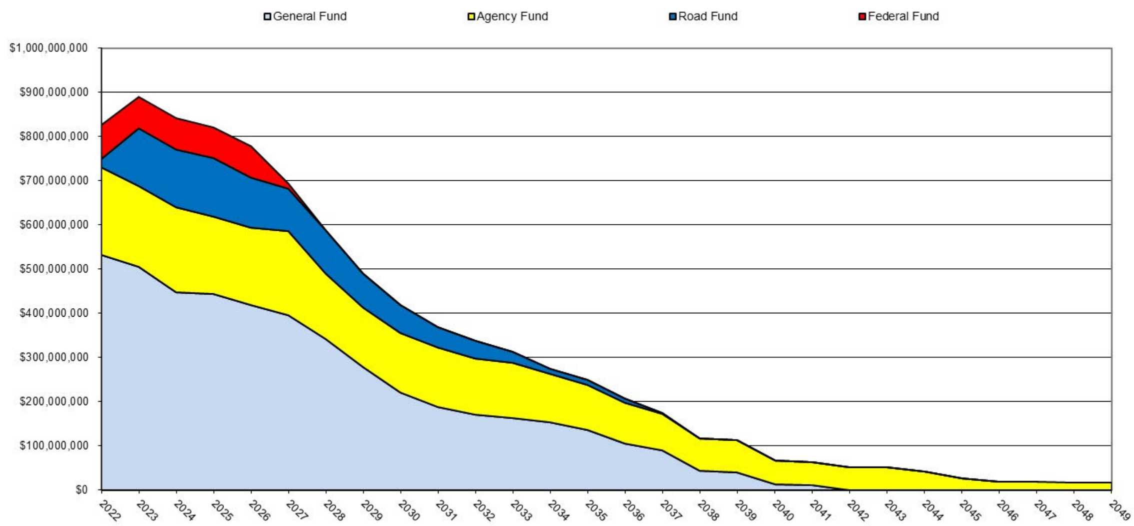
Corporate Credits Approved For Purchase
As of June 30, 2022

Company Name	Repurchase Agreements	Money Market Securities	Notes
Apple Inc		Yes	Yes
Bank of Montreal	Yes	Yes	Yes
Bank of Nova Scotia	Yes	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
Cantor Fitzgerald	Yes	No	No
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
Home Depot Inc		Yes	Yes
IBRD - World Bank		Yes	Yes
Intel Corp		Yes	Yes
Johnson & Johnson		Yes	Yes
Linde PLC		Yes	Yes
Merck & Co. Inc.		Yes	Yes
Microsoft Corp		Yes	Yes
MUFG Bank LTD/NY		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 SA		Yes	Yes
Toyota Motor Corp		Yes	Yes
US Bank NA		Yes	Yes
Wal-Mart Stores Inc		Yes	Yes

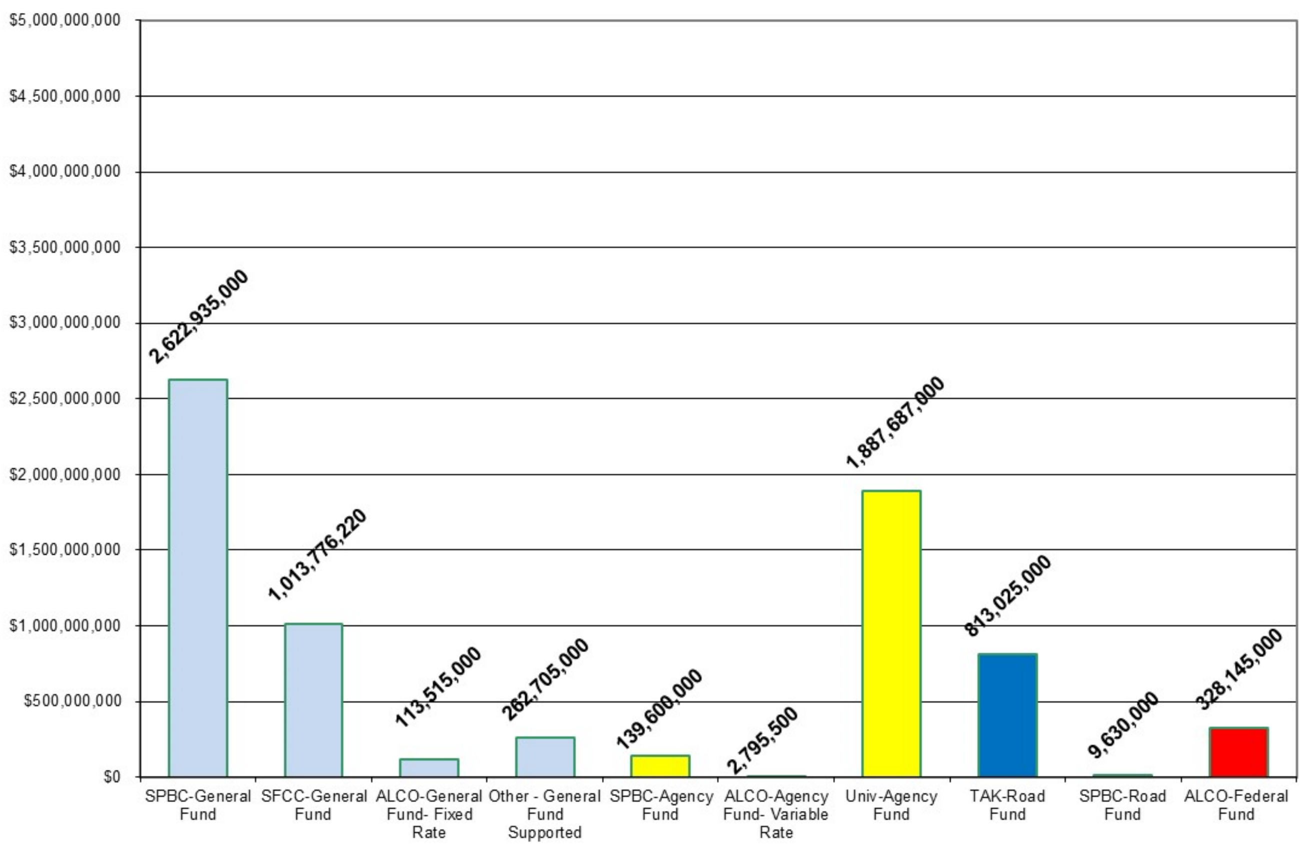
*Addition: Removed:

APPENDIX B

Appropriation Supported Debt Service
by Fund Source as of 06/30/2022



Appropriation Debt Principal Outstanding
by Fund Source as of 06/30/2022



*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 C

COMMONWEALTH OF KENTUCKY
ASSET/LIABILITY COMMISSION
SCHEDULE OF NOTES OUTSTANDING
AS OF 06/30/2022

FUND TYPE SERIES TITLE		AMOUNT ISSUED	DATE OF ISSUE	MATURITY DATE	PRINCIPAL OUTSTANDING
General Fund Project & Funding Notes					
2013 1st Series-KTRS Funding Notes		$153,290,000	2/2013	4/2023	$16,860,000
2021 General Fund Refunding Project Notes		$113,940,000	5/2021	11/2027	$96,655,000
	FUND TOTAL	**$267,230,000**			**$113,515,000**
Agency Fund Project Notes					
2018 Agency Fund Project Note (KCTCS)		$27,775,000	6/2018	10/2023	$2,795,800
	FUND TOTAL	**$27,775,000**			**$2,795,800**
Federal Hwy Trust Fund Project Notes					
2013 1st Series		$212,545,000	8/2013	9/2025	$105,585,000
2014 1st Series		$171,940,000	3/2014	9/2026	$132,175,000
2015 1st Series		$106,850,000	10/2015	9/2027	$60,365,000
2020 1st Series		$59,405,000	12/2020	9/2022	$30,020,000
	FUND TOTAL	**$550,740,000**			**$328,145,000**
ALCo NOTES TOTAL		**$845,745,000**			**$444,455,800**

REPORT PREPARED BY:

Office of Financial
Management

Commonwealth of Kentucky
200 Mero Street, 5th Floor
Frankfort, KY 40622
Phone: 502-564-2924

Creating Financial Value for the Commonwealth

TEAM
KENTUCKY