



Financial Services Audit Committee Communication

Date: May 21, 2021

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Quarterly Investment Report (Unaudited)

Background: As stated in section 14 of the Great Lakes Water Authority (GLWA) Investment Policy, quarterly reporting shall be presented to provide a clear picture of the status of the current GLWA investment portfolio. The attached report, prepared and presented by PFM Asset Management LLC, summarizes portfolio information through March 31, 2021 (unaudited).

Analysis: The Quarterly Investment Report complies with the requirements of Public Act 20 of 1948, as amended and the GLWA Investment Policy. GLWA is investing its funds in a diversified portfolio which includes bank deposits, money market funds, a local government investment pool, U.S. Treasuries, Federal Agencies, and commercial paper. All securities in the portfolio comply with the GLWA investment policy. Key metrics are provided below with additional commentary in the attached report.

- Yield at Cost:
 - As of March 31, 2021: 0.66%
 - As of December 31, 2020: 0.69%

- Portfolio Allocation in Cash/Money Market Securities:
 - As of March 31, 2021: 35%
 - As of December 31, 2020: 51%

The Treasury group continues to work with PFM Asset Management LLC to identify strategies to maximize investment returns while meeting the GLWA standards for safety and liquidity.

Proposed Action: Receive and file this report.

Great Lakes Water Authority

Investment Performance Report – March 2021



Table of Contents

I. Executive Summary

II. Investment Strategy

III. Summary Market Overview and Outlook

IV. Portfolio Snapshot

Security Type

Credit Quality

Account Purpose

Maturity Distribution

Yield at Cost and Market

Peer Analysis

Investment Income by Month

Investment Income Year over Year

Monthly Investment Income Compared to Fed Funds Rate

VI. Appendix

Portfolio Holdings

Economic Update

Executive Summary

PORTFOLIO RECAP

- Safety – The aggregate portfolio is diversified amongst cash, bank deposits, U.S. Treasuries, Federal Agencies, commercial paper, SEC-registered money market funds, and a local government investment pool. The total credit profile of the portfolio is strong with 98% of the assets invested in bank deposits or securities that are rated within the two highest short and long-term rating classifications as established by Standard & Poor's.
- Liquidity – Great Lakes Water Authority (“GLWA”) has continued to monitor its portfolio with the goal of limiting the allocation to cash and bank deposit accounts and maximizing the use of short-term investments to meet liquidity requirements. As of March 31, 2021, around 35% of the funds were held in cash and money market accounts maturing overnight.
- Return – The overall yield at cost decreased to 0.66% as of March 31, 2021, versus 0.69% as of December 31, 2020. The lower yield is reflective of the near zero-interest rate environment in the current market. GLWA has earned over \$5.7 million (unaudited) in investment income for the first nine months of fiscal 2021 on a book value basis. We expect the investment income for GLWA for FY 2021 to be about \$6.9 million.

AVAILABLE FUNDS (Unaudited)

Type	Financial Institution	Book Value	Market Value	Yield @ Cost (as of 3/31/21)	Yield @ Market (as of 3/31/21)
Deposit Account	Comerica	\$5,903,051	\$5,903,051	0.01%	0.01%
Deposit Account - Retainage	First Independence	\$19,481,138	\$19,481,138	0.01%	0.01%
Deposit Account – Flint Security Deposit	Chase	\$3,814,190	\$3,814,190	0.01%	0.01%
Deposit Account	Chase	\$42,349,679	\$42,349,679	0.14%	0.14%
Trust Money Market Fund	U.S. Bank	\$247,315,244	\$247,315,244	0.03%	0.03%
Money Market Fund	JP Morgan	\$11,624,013	\$11,624,013	0.01%	0.01%
Local Government Investment Pool	GovMIC	\$6,166,337	\$6,166,337	0.05%	0.05%
Managed Funds	PFM	\$615,876,618	\$619,554,661	0.99%	0.17%
<u>MARCH 2021 TOTALS:</u>		<u>\$952,530,271</u>	<u>\$956,208,315</u>	<u>0.66%</u>	<u>0.13%</u>
<u>PREVIOUS QUARTER TOTALS:</u>		<u>\$956,416,305</u>	<u>\$961,736,022</u>	<u>0.69%</u>	<u>0.10%</u>

The accounts at Comerica Bank get an earnings credit to offset bank fees. The funds and earnings in the Retainage account are held on behalf of the contractors and do not belong to GLWA. The funds and earnings in the Flint Security Deposit account are held on behalf of the City of Flint and do not belong to GLWA. In addition to the above, there also exists surety bonds in the amount of \$324,809,258 as of 3/31/2021.

Investment Strategy

OVERALL STRATEGY

- All investment activity is conducted subject to GLWA's investment policy and state statutes while meeting the primary objectives of safety and liquidity. The portfolio is managed to a disciplined investment plan to provide improved safety and diversification while putting every dollar to work.
- GLWA, working with its investment advisor PFM Asset Management LLC ("PFM"), has continued to invest its funds in a mixture of short and intermediate-term securities to ensure adequate liquidity to cover upcoming debt, pension payments, and operational requirements.
- PFM will continue to actively manage long-term portfolios with full discretion and align short-term balances with expected liabilities and identify strategies to maximize future investment income in the current interest rate environment, subject to GLWA's investment policy and state statutes.

PORTFOLIO PERFORMANCE – CURRENT PERIOD*

- The overall portfolio's original yield at cost went from 0.69% as of December 31, 2020, to 0.66% as of March 31, 2021. The lower yield is a result of investing in a lower interest rate environment.
- The total portfolio had a market yield of 0.13% at the end of March. Yield at market represents what the market would provide in return if the portfolio was purchased on March 31, 2021 (versus purchased in prior months / years)
 - We utilize a variety of investment sectors, and because of that, this 0.13% yield at market as of 3/31/2021 is beneficial when compared to the 0.02% yield of the 3-Month U.S. Treasury Bill Index, which is a comparable market indicator.

PORTFOLIO PERFORMANCE – PROJECTIONS

- GLWA earned over \$5.7 million (unaudited) in investment income for fiscal year-to-date 2021 (as of March 31, 2021) on a book value basis.
- The current period earnings are in line with the figure for the amended budget however, we anticipate a drop in earnings for the remainder of the year as a result of reinvesting in a near zero-interest rate environment.
- The FY 2021 total interest earnings projection forecast is currently is \$6.9 million.

** Yield at cost is based on the original cost of the individual investments from the purchase date to maturity. On the other hand, yield at market is calculated on a specific day (in this case, March 31, 2021) and assumes that all the securities in the portfolio are purchased given the market price/yield on that particular day. If one is to generally hold their investments to the stated maturity date, then the yield at cost would be the better number to use to gauge how the portfolio is performing.*

Summary Market Overview and Outlook

ECONOMIC HIGHLIGHTS UPDATE

- The vaccine rollout has accelerated, causing COVID-19 cases, hospitalizations, and deaths to fall sharply. Most economists, including those at the Fed, have raised growth forecasts and now see the U.S. economy expanding by 6% – 7% this calendar year, which is a remarkable pace. Congress passed the American Rescue Plan Act to provide \$1.9 trillion in relief to households, businesses, schools, and state, local and tribal governments. The plan extends unemployment benefits, increases the child tax credit, and provides additional funding for vaccinations and testing.
- Economic optimism, fiscal stimulus, and an easy monetary policy are fueling a rise in inflation expectations. Although the inflation trend remains muted and well below the Fed's 2.0% average inflation target, near-term inflation is likely to rise as the recovery accelerates. At the most recent FOMC meeting, the Fed maintained its current easy money policy. Fed Chair Jerome Powell acknowledged an improving economic outlook and suggested that higher inflation readings would likely be transitory.

ECONOMIC IMPACT ON PORTFOLIO

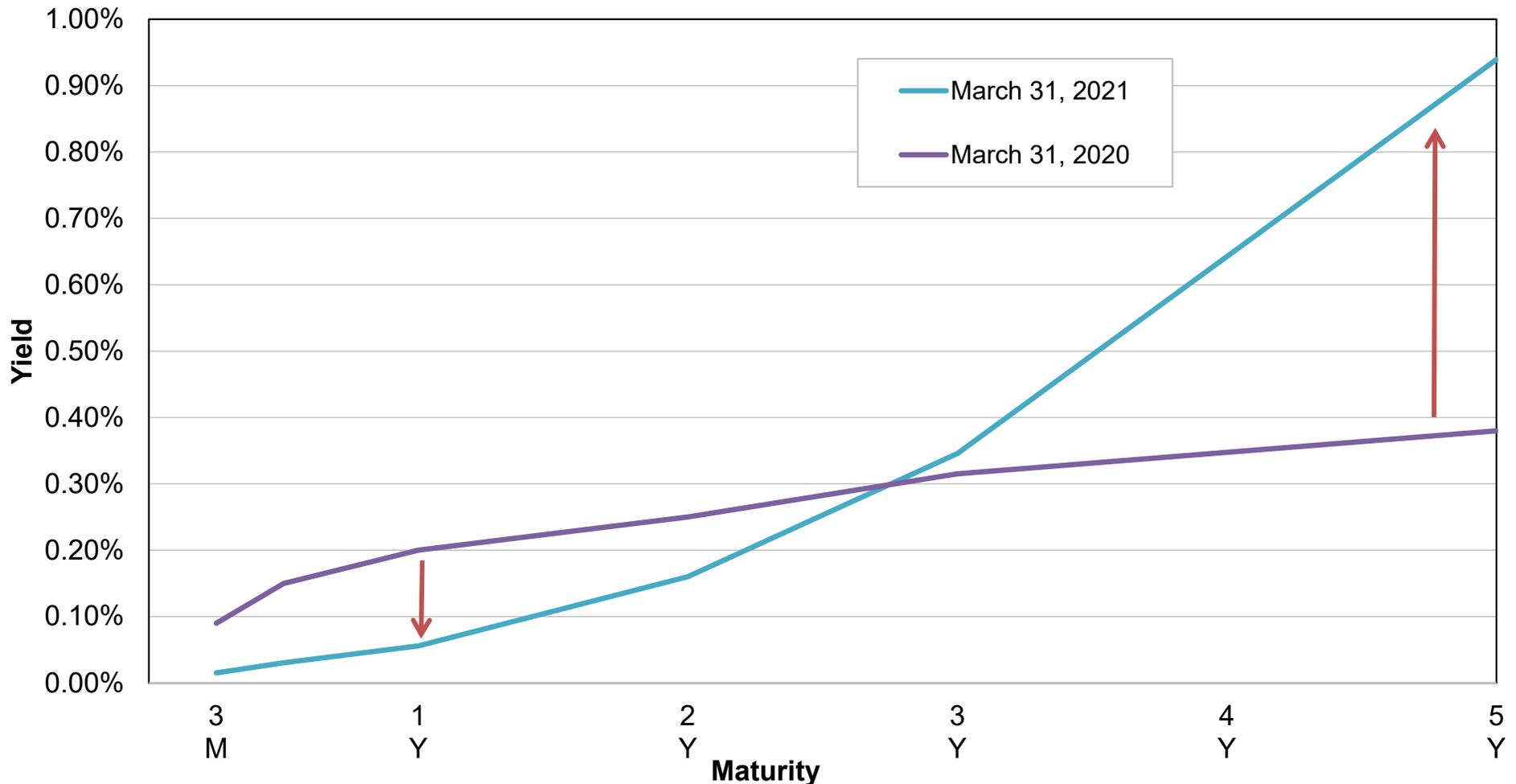
- The U.S. Treasury yield curve steepened significantly as the yield on the benchmark 3-month Treasury Bill fell to 0.02% while economic optimism and rising inflation expectations continued to push longer-term Treasury yields higher. The yield on the benchmark 10-year Treasury Note rose to end March at 1.74% and the 2 to 10-year Treasury yield spread reached its steepest level since 2015.
- The outlook for the U.S. economy brightened over the past quarter on rising vaccinations, fiscal support, and a supportive Federal Reserve.
- The expectation is for very strong growth for the balance of 2021 and beyond with a gradual trend of rising intermediate and long-term bond yields.
- In the money market space, yield spreads on short-term commercial paper have increased, offering better opportunities as Treasury Bill yields continue to approach zero.
- Portfolio Impact: Diversification across all permitted sectors will remain a key element of our strategy, with allocations dependent upon our assessment of changing relative value. Since Agency yield spreads have remained tight, we have increased allocations to Treasuries. This enhances liquidity, which could be deployed should spreads in other sectors widen.

Summary Market Overview and Outlook

Short-Term Interest Rates Remain Low

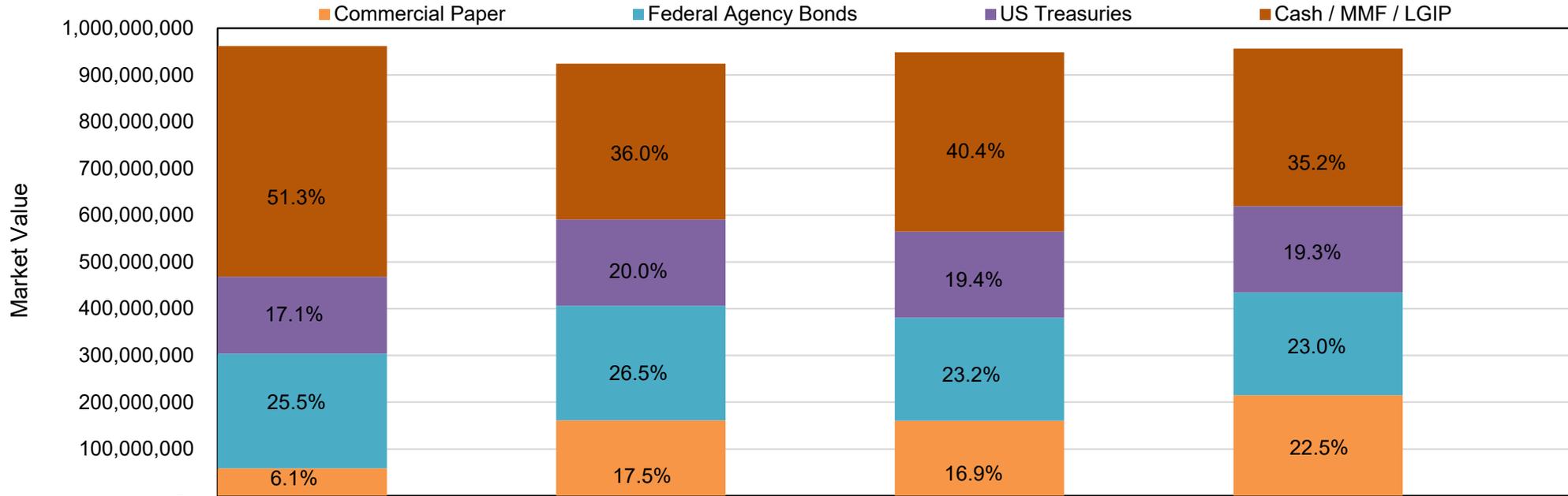
- It should be noted that as a result of the Federal Reserve's current zero interest rate policy, the markets have seen a dramatic drop in fixed-income yields over the past year.

U.S. Treasury Yield Curve



Portfolio Snapshot

Investments – By Security Type

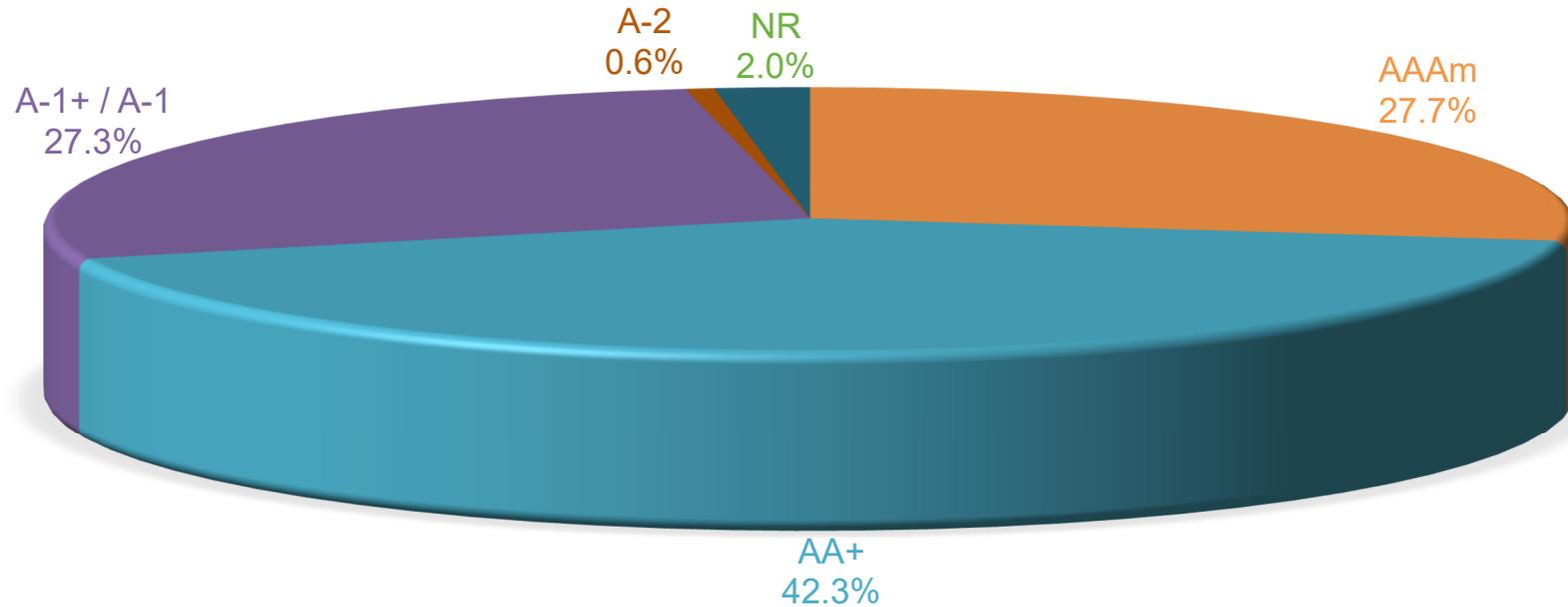


Security Type	December		January		February		March	
	Market Value	Asset Allocation						
Commercial Paper	58,829,073	6.1%	161,573,881	17.5%	160,622,690	16.9%	214,791,918	22.5%
Federal Agencies	245,113,617	25.5%	244,864,264	26.5%	220,070,864	23.2%	219,792,740	23.0%
U.S. Treasuries	164,560,000	17.1%	184,659,268	20.0%	184,311,815	19.4%	184,970,004	19.3%
Cash / MMF / LGIP	493,233,332	51.3%	333,068,528	36.0%	383,127,641	40.4%	336,653,653	35.2%
Total	961,736,022	100.0%	924,165,940	100.0%	948,133,010	100.0%	956,208,315	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Snapshot

Investments – By Credit Quality

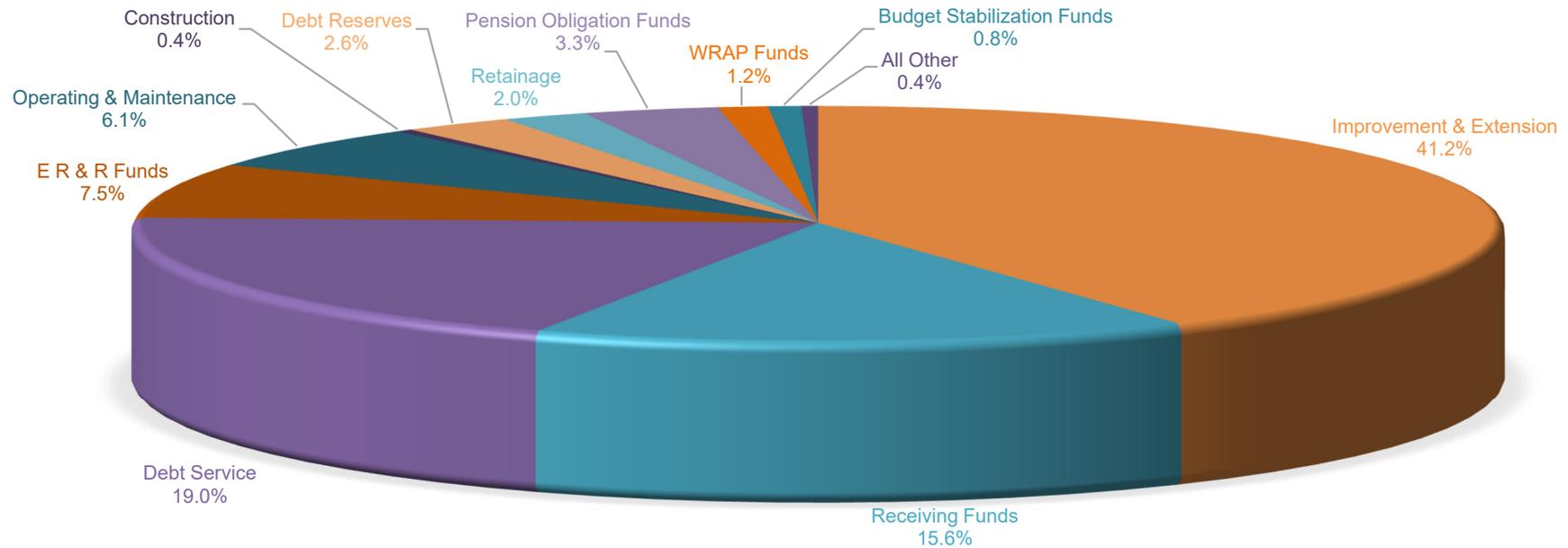


Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	265,105,595	27.7%
AA+	404,762,743	42.3%
A-1 + / A-1	260,955,787	27.3%
A-2	5,903,051	0.6%
NR	19,481,138	2.0%
Totals	956,208,315	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Snapshot

Investments – By Account Purpose



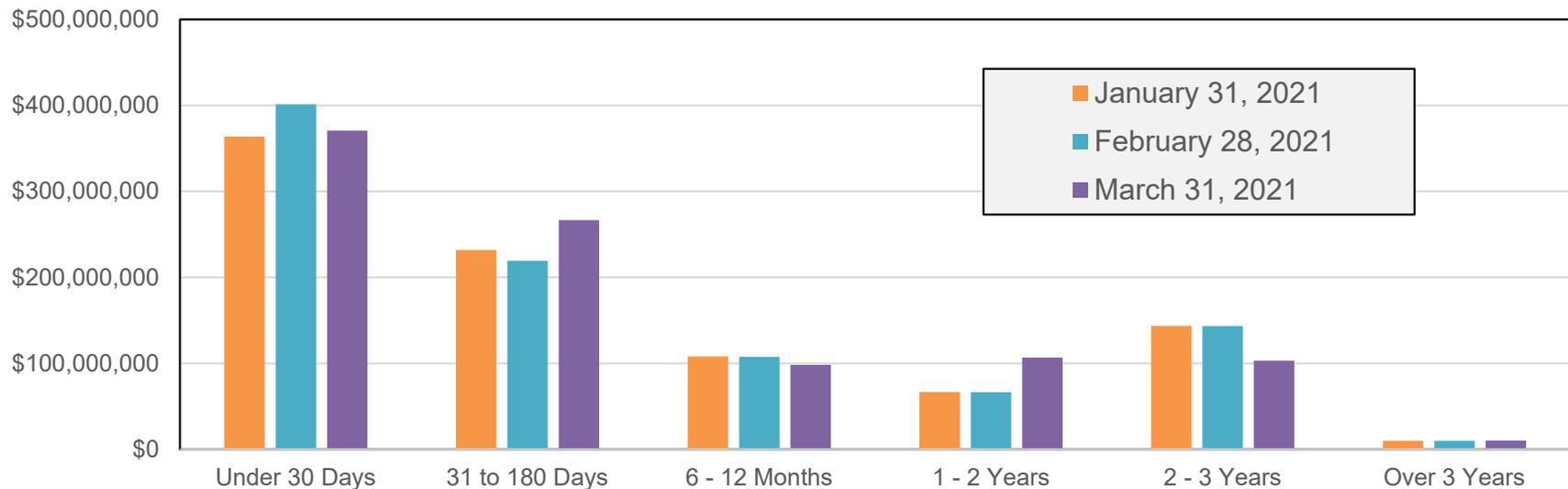
Account Purpose	Value Market	Allocation %	Cost Yield at	Market Yield at	Duration
Improvement & Extension	\$ 393,497,482	41.2%	1.11%	0.11%	0.975 Years
Debt Service	\$ 181,519,247	19.0%	0.22%	0.22%	0.246 Years
Receiving Funds (includes lockbox account)	\$ 148,953,789	15.6%	0.03%	0.03%	0.003 Years
Extraordinary Repair & Replacement Funds	\$ 71,717,934	7.5%	1.29%	0.25%	1.593 Years
Operating & Maintenance	\$ 58,159,238	6.1%	0.02%	0.02%	0.003 Years
Pension Obligation Funds	\$ 31,110,071	3.3%	0.14%	0.16%	0.163 Years
Debt Reserves	\$ 25,249,475	2.6%	1.57%	0.09%	0.876 Years
Retainage	\$ 19,481,138	2.0%	0.01%	0.01%	0.003 Years
WRAP Funds	\$ 11,420,293	1.2%	0.16%	0.17%	0.213 Years
Budget Stabilization Funds	\$ 7,546,528	0.8%	1.12%	0.30%	1.951 Years
Flint Security Deposit Account	\$ 3,814,190	0.4%	0.01%	0.01%	0.003 Years
Construction	\$ 3,738,930	0.4%	0.14%	0.14%	0.003 Years
Total	\$ 956,208,315	100.0%	0.66%	0.13%	0.614 Years

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Snapshot

Investments – By Maturity

Maturity Distribution	January 31, 2021		February 28, 2021		March 31, 2021	
	\$	%	\$	%	\$	%
Under 30 Days	\$ 363,843,974	39.4%	\$ 401,316,654	42.3%	\$ 370,737,304	38.8%
31 to 180 Days	231,766,184	25.1%	219,198,361	23.1%	266,571,462	27.9%
6 - 12 Months	108,240,843	11.7%	107,686,120	11.4%	98,303,417	10.3%
1 - 2 Years	66,763,535	7.2%	66,655,410	7.0%	106,924,532	11.2%
2 - 3 Years	143,490,041	15.5%	143,344,315	15.1%	103,353,903	10.8%
Over 3 Years	10,061,363	1.1%	9,932,150	1.0%	10,317,695	1.1%
Totals	\$ 924,165,940	100.0%	\$ 948,133,010	100.0%	\$ 956,208,315	100.0%



In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Snapshot

Investment Accounts – Yield at Cost & Market

	As of March 31, 2021		As of December 31, 2020	
	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market
Bank Deposits				
Comerica	0.01%	0.01%	0.01%	0.01%
First Independence	0.01%	0.01%	0.03%	0.03%
Flint Deposit Account	0.01%	0.01%	0.10%	0.10%
JP Morgan Chase	0.14%	0.14%	0.10%	0.10%
Sub-Total Bank Deposits	0.09%	0.09%	0.07%	0.07%
Money Market Funds / LGIPs				
GoMIC	0.05%	0.05%	0.05%	0.05%
U.S. Bank - First American MMF	0.03%	0.03%	0.03%	0.03%
JP Morgan Securities - Blackrock MMF	0.01%	0.01%	0.02%	0.02%
Sub-Total MMF / LGIPs	0.03%	0.03%	0.03%	0.03%
Investment Portfolios				
Sewage SR Debt Serv 5403	0.20%	0.20%	0.25%	0.25%
Sewage SR Res 5400	1.46%	0.10%	1.46%	0.15%
Sew 2nd Debt Serv 5403	0.19%	0.21%	0.24%	0.27%
Sewage 2nd Res 5481	1.80%	0.07%	1.80%	0.14%
Sew SRF Debt Serv 5410	0.19%	0.23%	0.21%	0.19%
Sewage ER & R	1.27%	0.25%	1.61%	0.15%
Sewer Improvement & Extension	1.39%	0.14%	1.44%	0.15%
Sewer Pension Obligation	0.17%	0.19%	0.33%	0.17%
Sewer Wrap Fund	0.19%	0.21%	0.24%	0.18%
Sewer Budget Stabilization Fund	1.12%	0.30%	1.77%	0.18%
Sewer O&M Pension Sub Account	0.17%	0.19%	0.00%	0.00%
Water SR Debt Ser 5503	0.20%	0.19%	0.24%	0.26%
Water SR Reserve 5500	1.80%	0.07%	1.80%	0.14%
Water 2nd Debt Serv 5503	0.21%	0.19%	0.25%	0.25%
Water 2nd Res 5581	1.80%	0.07%	1.80%	0.14%
Water SRF Debt Serv 5575	0.20%	0.22%	0.20%	0.21%
Water ER & R	1.31%	0.24%	1.63%	0.15%
Water Improvement & Extension	1.46%	0.14%	1.58%	0.16%
Water Pension Obligation	0.17%	0.19%	0.33%	0.17%
Water Wrap Fund	0.18%	0.19%	0.00%	0.00%
Water Budget Stabilization Fund	1.11%	0.30%	1.77%	0.18%
Water O&M Pension Sub Account	0.17%	0.19%	0.00%	0.00%
Sub-Total Investment Portfolios	0.99%	0.17%	1.39%	0.17%
Grand Total	0.66%	0.13%	0.69%	0.10%

The accounts at Comerica Bank get an earnings credit to offset bank fees. The earnings in the accounts at First Independence Bank is credited to the contractors and not the Authority. The funds in the Flint Security Deposit account are held on behalf of the City of Flint and the earnings do not belong to GLWA. YTM @ Cost is the expected return, based on the original cost, the annual interest receipts, maturity value and the time period from purchase date to maturity, stated as a percentage, on an annualized basis. YTM @ Market is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.

Portfolio Snapshot

Peer Analysis Comparison

- The comparison agencies included in the list below were selected based on type and/or other non-performance-based criteria to show a broad range of water entities/utilities; this peer group list does not represent an endorsement of any of the public agencies or their services.
- The overall yield of GLWA's aggregate portfolio compares somewhat favorably to those of other short-term market indices (i.e., the S&P LGIP index and the 3-month U.S. Treasury index), despite the zero-interest rate environment and the limited ability in managing assets to a longer-term strategy.
- GLWA does have some limitations and unique constraints related to its ordinance and covenants that restricts the potential for a longer duration portfolio when compared to other similar water agencies.

As of March 31, 2021

	Market Value	YTM @ Market	Effective Duration	Weighted Average Maturity
GLWA				
Great Lakes Water Authority	\$956,208,315	0.13%	0.61 Years	225 Days
Short/Intermediate-Term Indices				
S&P Rated Government Investment Pool Index		0.01%	0.08 Years	30 Days
BoA / ML 3-Month Treasury Index		0.02%	0.15 Years	55 Days
BoA / ML 6-Month Treasury Index		0.03%	0.40 Years	146 Days
BoA / ML 1-Year Treasury Index		0.09%	0.91 Years	332 Days
BoA / ML 1-3 Year Treasury Index		0.19%	1.84 Years	672 Days
BoA / ML 1-5 Year Treasury Index		0.37%	2.60 Years	949 Days
Peer Analysis (Water Entities / Utilities)				
District of Columbia Water & Sewer Authority, DC	\$247,984,784	0.19%	1.05 Years	405 Days
DuPage Water Commission, IL	\$176,370,359	0.60%	2.20 Years	1,106 Days
Fairfax County Water Authority, VA	\$159,329,460	0.35%	2.17 Years	835 Days
Metro Wastewater Reclamation District, CO	\$309,125,059	0.38%	2.09 Years	821 Days
Metropolitan Water District of Southern California, CA	\$1,001,566,107	0.43%	0.97 Years	403 Days
Philadelphia Water Department, PA	\$195,332,054	0.19%	0.95 Years	366 Days
San Bernardino Valley Municipal Water District, CA	\$375,913,736	0.27%	1.83 Years	679 Days
Tohopekaliga Water Authority, FL	\$105,238,198	0.36%	2.22 Years	841 Days
Truckee Meadows Water Authority, NV	\$105,238,198	0.36%	2.22 Years	841 Days

The BoA / ML indexes are unmanaged indexes tracking on-the-run Treasuries. These indexes are produced and maintained by Bank of America / Merrill Lynch & Co. Yield to maturity is the rate of return, based on the current market value, the annual interest receipts, maturity value and time period remaining until maturity, stated as a percentage, on an annualized basis.

Portfolio Snapshot

Monthly Investment Income

(Book Value)

FY 2021 INVESTMENT INCOME BY MONTH (Unaudited)

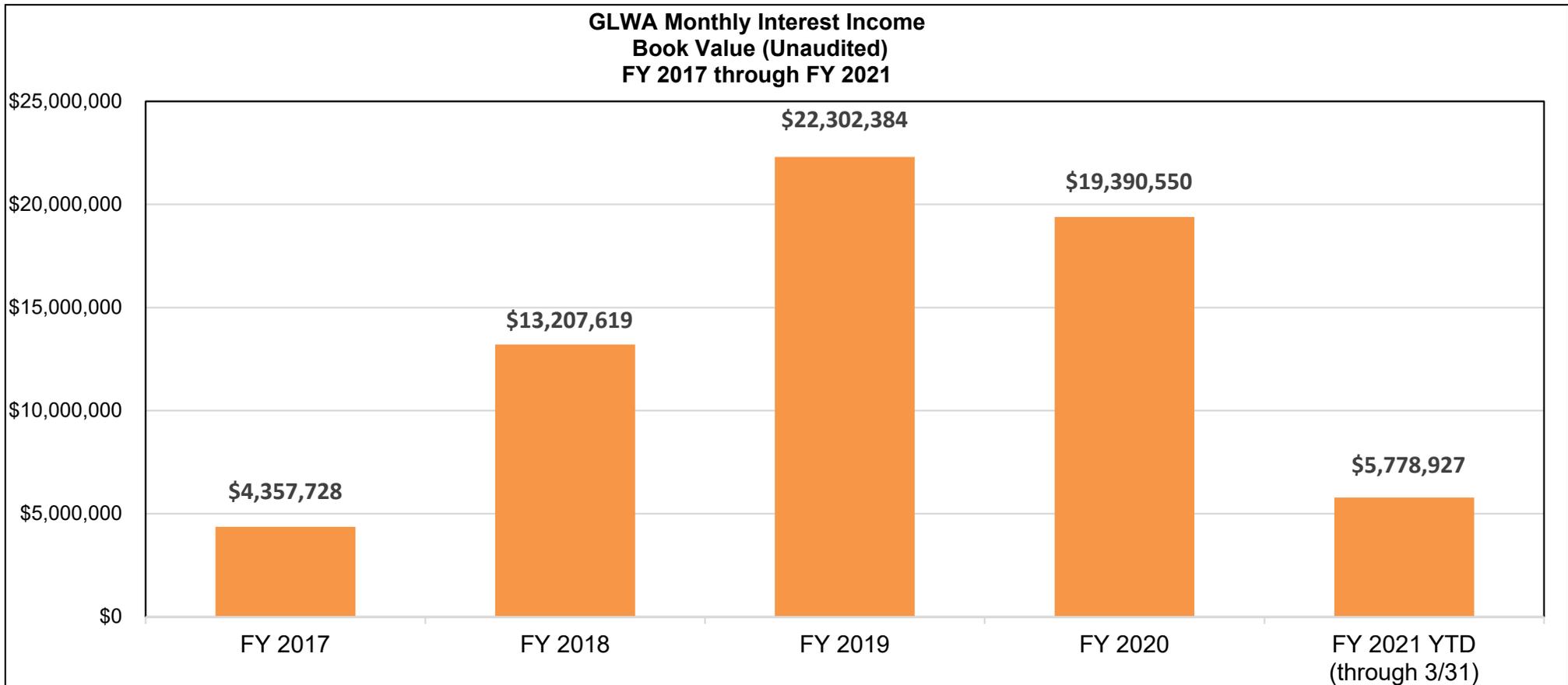
Month	Interest Earned During Period	Realized Gain / Loss	Investment Income
July 2020	\$819,118.39	\$0.00	\$819,118.39
August 2020	\$804,779.94	\$0.00	\$804,779.94
September 2020	\$677,008.40	\$0.00	\$677,008.40
October 2020	\$684,428.35	\$0.00	\$684,428.35
November 2020	\$628,192.58	\$0.00	\$628,192.58
December 2020	\$571,545.59	\$0.00	\$571,545.59
January 2021	\$555,530.42	\$0.00	\$555,530.42
February 2021	\$491,722.08	\$0.00	\$491,722.08
March 2021	\$546,601.70	\$0.00	\$546,601.70
<u>FY 2021 Y-T-D</u>	<u>\$5,778,927.45</u>	<u>\$0.00</u>	<u>\$5,778,927.45</u>

These figures are based upon actual interest earned and posted to the Authority's various accounts via book value and does not include any earnings credit rate tied to the Authority's bank deposits.

Portfolio Snapshot

Year-Over-Year Investment Income

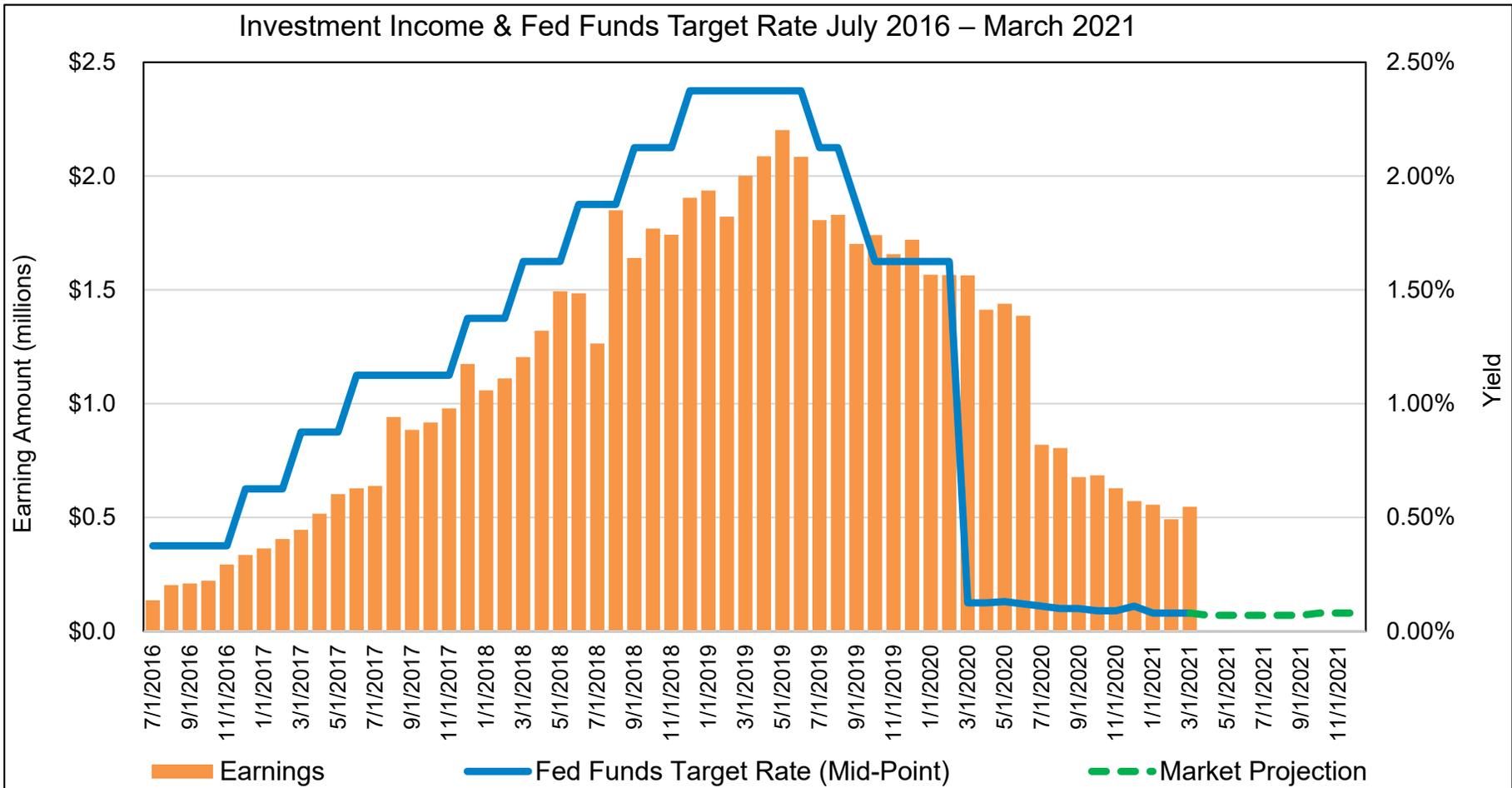
- GLWA earned \$5,778,927 in investment income for the first nine months of fiscal year 2021 on a book value basis compared to \$15,151,992 for the first nine months of fiscal year 2020.
- Based on current market assumptions, projected investment income for fiscal year 2021 is forecasted to be around \$6.9 million, as the market expects the overnight lending rate to be maintained at its current range of 0.00% to 0.25% for the foreseeable future.



Portfolio Snapshot

Monthly Investment Income Compared to Fed Funds Rate

- As a result of the short-term duration of GLWA’s portfolio, it is heavily impacted by changes in the Fed Funds target rate; the chart below illustrates that GLWA’s investment income has consistently followed the trend of the Fed Funds rate.
- According to effective Fed Funds futures, the market expects the overnight lending rate to be maintained at its current range of 0.00% to 0.25% through at least the next year; based on the historical trend, the current zero interest rate monetary policy by the Federal Reserve will translate into lower interest earnings for GLWA going forward.



Appendix I: Portfolio Holdings

Portfolio Holdings As of March 31, 2021

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Short-Term Bank Deposits / MMF / LGIP									
COMERICA BANK		\$ 5,903,051	4/1/2021	12/31/2020	0.01%	\$ 5,903,051	1	\$ -	\$ 5,903,051
FIRST INDEPENDENCE BANK		19,481,138	4/1/2021	12/31/2020	0.01%	19,481,138	1	-	19,481,138
FLINT DEPOSIT ACCOUNT		3,814,190	4/1/2021	12/31/2020	0.01%	3,814,190	1	-	3,814,190
JP MORGAN CHASE		42,349,679	4/1/2021	12/31/2020	0.14%	42,349,679	1	-	42,349,679
GovMIC		6,166,337	4/1/2021	12/31/2020	0.05%	6,166,337	1	-	6,166,337
U.S. BANK - FIRST AMERICAN MMF		247,315,244	4/1/2021	12/31/2020	0.03%	247,315,244	1	-	247,315,244
JP MORGAN SECURITIES - BLACKROCK MMF		11,624,013	4/1/2021	12/31/2020	0.01%	11,624,013	1	-	11,624,013

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Holdings As of March 31, 2021

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Commercial Paper									
Crown Point Capital Co 0 4/1/2021	2284K0R15	\$ 450,000	4/1/2021	1/14/2021	0.16%	\$ 449,846	1	\$ -	\$ 450,000
Societe Generale NY 0 5/5/2021	83369BS56	1,000,000	5/5/2021	1/25/2021	0.19%	999,472	35	-	999,840
Societe Generale NY 0 5/5/2021	83369BS56	1,000,000	5/5/2021	1/25/2021	0.19%	999,472	35	-	999,840
CitiGroup Global Markets 0 5/28/2021	17327ASU2	2,500,000	5/28/2021	9/3/2020	0.23%	2,495,735	58	-	2,499,325
CitiGroup Global Markets 0 5/28/2021	17327ASU2	7,500,000	5/28/2021	9/3/2020	0.23%	7,487,206	58	-	7,497,975
CitiGroup Global Markets 0 5/28/2021	17327ASU2	2,500,000	5/28/2021	9/3/2020	0.23%	2,495,735	58	-	2,499,325
CitiGroup Global Markets 0 5/28/2021	17327ASU2	7,500,000	5/28/2021	9/3/2020	0.23%	7,487,206	58	-	7,497,975
Santander UK PLC 0 6/1/2021	80285PT10	1,000,000	6/1/2021	1/25/2021	0.19%	999,330	62	-	999,710
Santander UK PLC 0 6/1/2021	80285PT10	1,000,000	6/1/2021	1/25/2021	0.19%	999,330	62	-	999,710
Lloyds Bank PLC 0 6/14/2021	53943RTE9-2	3,710,000	6/14/2021	1/25/2021	0.17%	3,707,547	75	-	3,708,561
Lloyds Bank PLC 0 6/14/2021	53943RTE9-1	5,830,000	6/14/2021	1/25/2021	0.17%	5,826,146	75	-	5,827,960
Lloyds Bank PLC 0 6/14/2021	53943RTE9-2	6,640,000	6/14/2021	1/25/2021	0.17%	6,635,610	75	-	6,637,424
Lloyds Bank PLC 0 6/14/2021	53943RTE9-1	7,810,000	6/14/2021	1/25/2021	0.17%	7,804,837	75	-	7,807,267
Barclays Bank 0 6/15/2021	06742V4Q1	20,528,000	6/15/2021	3/12/2021	0.18%	20,518,249	76	-	20,520,815
Barclays Bank 0 6/15/2021	06742V4Q1	4,000,000	6/15/2021	3/12/2021	0.18%	3,998,100	76	-	3,998,600
Collat CP Flex Co 0 6/17/2021	19423JTH0	1,648,000	6/17/2021	1/20/2021	0.20%	1,646,645	78	-	1,647,407
Collat CP Flex Co 0 6/17/2021	19423JTH0	6,575,000	6/17/2021	1/20/2021	0.20%	6,569,594	78	-	6,572,633
Collat CP Flex Co 0 6/17/2021	19423JTH0	10,205,000	6/17/2021	1/20/2021	0.20%	10,196,609	78	-	10,201,326
Collat CP Flex Co 0 6/17/2021	19423JTH0	6,572,000	6/17/2021	1/20/2021	0.20%	6,566,596	78	-	6,569,634
Natixis Bank NY 0 6/18/2021	63873JTJ9	4,602,000	6/18/2021	11/17/2020	0.26%	4,594,921	79	-	4,600,297
Natixis Bank NY 0 6/18/2021	63873JTJ9	6,260,000	6/18/2021	11/17/2020	0.26%	6,250,370	79	-	6,257,684
Societe Generale NY 0 6/18/2021	83369BTJ5	4,147,000	6/18/2021	1/19/2021	0.21%	4,143,371	79	-	4,145,466
Sumitomo Mitsui Bank 0 6/18/2021	86562KTJ3	10,000,000	6/18/2021	1/15/2021	0.20%	9,991,658	79	-	9,996,300
Natixis Bank NY 0 6/18/2021	63873JTJ9	924,000	6/18/2021	11/17/2020	0.26%	922,579	79	-	923,658
Natixis Bank NY 0 6/18/2021	63873JTJ9	8,088,000	6/18/2021	11/17/2020	0.26%	8,075,558	79	-	8,085,007
Societe Generale NY 0 6/18/2021	83369BTJ5	2,698,000	6/18/2021	1/19/2021	0.21%	2,695,639	79	-	2,697,002
Sumitomo Mitsui Bank 0 6/18/2021	86562KTJ3	10,000,000	6/18/2021	1/15/2021	0.20%	9,991,658	79	-	9,996,300
Societe Generale NY 0 6/28/2021	83368YFM4	7,300,000	6/28/2021	1/14/2021	0.23%	7,292,305	89	-	7,296,934
Societe Generale NY 0 6/28/2021	83368YFM4	2,700,000	6/28/2021	1/14/2021	0.23%	2,697,154	89	-	2,698,866
Sumitomo Mitsu Trust NY 0 6/29/2021	86563GTV4	1,000,000	6/29/2021	1/27/2021	0.16%	999,320	90	-	999,580
Goldman Sachs International 0 6/30/2021	38150TTW4	8,575,000	6/30/2021	3/11/2021	0.16%	8,570,770	91	-	8,571,399
LMA Americas LLC 0 6/30/2021	53944QTW0	1,000,000	6/30/2021	3/11/2021	0.16%	999,507	91	-	999,580
Goldman Sachs International 0 6/30/2021	38150TTW4	9,583,000	6/30/2021	3/11/2021	0.16%	9,578,272	91	-	9,578,975
BOA Securities LLC 0 6/30/2021	06054NTW1	7,500,000	6/30/2021	3/11/2021	0.15%	7,496,531	91	-	7,496,850
Goldman Sachs International 0 6/30/2021	38150TTW4	1,842,000	6/30/2021	3/11/2021	0.16%	1,841,091	91	-	1,841,226
LMA Americas LLC 0 6/30/2021	53944QTW0	6,250,000	6/30/2021	3/11/2021	0.16%	6,246,917	91	-	6,247,375
Skandinavisk Bank 0 7/27/2021	83050TUT6	1,000,000	7/27/2021	1/26/2021	0.18%	999,090	118	-	999,420
Royal Bank of Canada 0 8/2/2021	78013VV25	735,000	8/2/2021	3/11/2021	0.16%	734,530	124	-	734,552
Cooperatieve Rabobank 0 8/3/2021	21687AV34	417,000	8/3/2021	11/17/2020	0.24%	416,280	125	-	416,741
Ridgefield Funding Co 0 9/3/2021	76582JW34	1,000,000	9/3/2021	3/11/2021	0.20%	999,022	156	-	999,180
Collat CP Co 0 9/14/2021	19424HWE6	778,000	9/14/2021	1/19/2021	0.21%	776,920	167	-	777,315
Royal Bank of Canada 0 9/14/2021	78015CWE8	945,000	9/14/2021	3/11/2021	0.17%	944,166	167	-	944,168
Collat CP Co 0 9/14/2021	19424HWE6	9,185,000	9/14/2021	1/19/2021	0.21%	9,172,248	167	-	9,176,917
Royal Bank of Canada 0 9/14/2021	78015CWE8	9,700,000	9/14/2021	3/11/2021	0.17%	9,691,434	167	-	9,691,464
LMA Americas LLC 0 10/1/2021	53944QX13	685,000	10/1/2021	3/11/2021	0.20%	684,224	184	-	684,336

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Holdings As of March 31, 2021

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Federal Agencies									
FNMA 2.5 4/13/2021	3135G0U27	\$ 3,500,000	4/13/2021	8/8/2018	2.82%	\$ 3,471,685	13	\$ 40,833	\$ 3,502,870
FNMA 2.5 4/13/2021	3135G0U27	20,000,000	4/13/2021	8/8/2018	2.82%	19,838,200	13	233,333	20,016,400
FNMA 2.5 4/13/2021	3135G0U27	250,000	4/13/2021	8/9/2018	2.81%	247,985	13	2,917	250,205
FNMA 2.5 4/13/2021	3135G0U27	3,400,000	4/13/2021	8/8/2018	2.81%	3,372,698	13	39,667	3,402,788
FNMA 2.5 4/13/2021	3135G0U27	685,000	4/13/2021	8/9/2018	2.81%	679,479	13	7,992	685,562
FNMA 2.5 4/13/2021	3135G0U27	5,750,000	4/13/2021	8/8/2018	2.81%	5,703,828	13	67,083	5,754,715
FHLB 2.25 6/11/2021	3130A1W95	10,000,000	6/11/2021	7/11/2019	1.94%	10,058,200	72	68,750	10,042,500
FHLB 2.25 6/11/2021	3130A1W95	25,000,000	6/11/2021	7/11/2019	1.94%	25,145,500	72	171,875	25,106,250
FHLB 1.875 7/7/2021	3130AGLD5	3,715,000	7/7/2021	6/10/2019	1.96%	3,708,982	98	16,253	3,733,018
FHLB 1.875 7/7/2021	3130AGLD5	3,910,000	7/7/2021	6/10/2019	1.96%	3,903,666	98	17,106	3,928,964
FHLMC 2.375 1/13/2022	3137EADB2	10,000,000	1/13/2022	7/11/2019	1.89%	10,118,700	288	51,458	10,179,900
FHLMC 2.375 1/13/2022	3137EADB2	25,000,000	1/13/2022	7/11/2019	1.89%	25,296,750	288	128,646	25,449,750
FHLB 2.125 6/10/2022	313379Q69	10,000,000	6/10/2022	7/11/2019	1.92%	10,059,200	436	65,521	10,237,800
FHLB 2.125 6/10/2022	313379Q69	25,000,000	6/10/2022	7/11/2019	1.92%	25,148,000	436	163,802	25,594,500
FHLMC 0.375 5/5/2023	3137EAER6	6,000,000	5/5/2023	6/5/2020	0.38%	6,000,060	765	9,125	6,025,560
FHLMC 0.375 5/5/2023	3137EAER6	14,650,000	5/5/2023	6/5/2020	0.38%	14,650,147	765	22,280	14,712,409
FNMA 0.25 5/22/2023	3135G04Q3	10,000,000	5/22/2023	6/5/2020	0.36%	9,968,400	782	8,958	10,012,200
FNMA 0.25 5/22/2023	3135G04Q3	25,000,000	5/22/2023	6/5/2020	0.36%	24,921,000	782	22,396	25,030,500
FNMA 0.25 5/22/2023	3135G04Q3	240,000	5/22/2023	6/5/2020	0.35%	239,292	782	215	240,293
FNMA 0.25 5/22/2023	3135G04Q3	3,400,000	5/22/2023	6/5/2020	0.35%	3,389,970	782	3,046	3,404,148
FNMA 0.25 5/22/2023	3135G04Q3	670,000	5/22/2023	6/5/2020	0.35%	668,024	782	600	670,817
FNMA 0.25 5/22/2023	3135G04Q3	5,750,000	5/22/2023	6/5/2020	0.35%	5,733,038	782	5,151	5,757,015
FHLMC 0.25 6/26/2023	3137EAES4	3,150,000	6/26/2023	7/2/2020	0.29%	3,146,189	817	2,078	3,152,489
FNMA 0.25 7/10/2023	3135G05G4	1,250,000	7/10/2023	7/16/2020	0.29%	1,248,425	831	703	1,250,900
FNMA 0.25 7/10/2023	3135G05G4	1,650,000	7/10/2023	7/16/2020	0.29%	1,647,921	831	928	1,651,188

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

Portfolio Holdings As of March 31, 2021

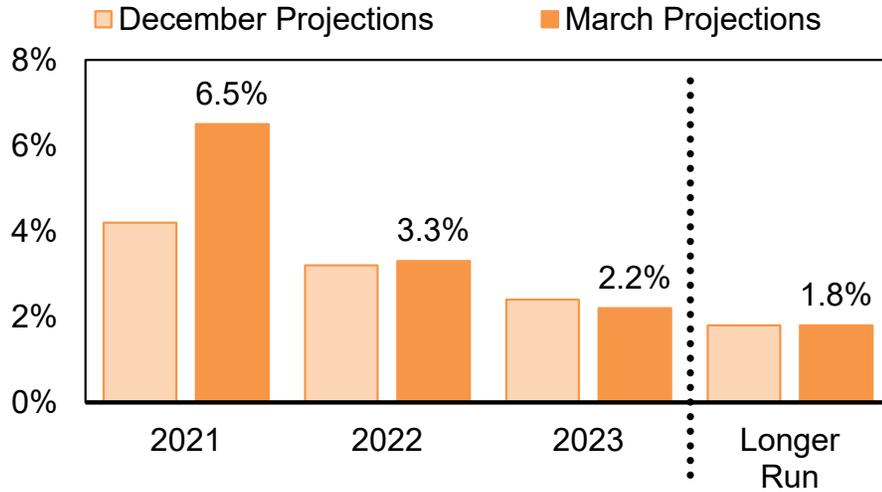
DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
U.S. Treasuries									
T-Note 2.625 5/15/2021	9128284P2	\$ 245,000	5/15/2021	2/7/2019	2.49%	\$ 245,708	45	\$ 2,416	\$ 245,760
T-Note 2.625 5/15/2021	9128284P2	3,455,000	5/15/2021	2/7/2019	2.49%	3,464,852	45	34,073	3,465,711
T-Note 2.625 5/15/2021	9128284P2	700,000	5/15/2021	2/7/2019	2.49%	702,023	45	6,903	702,170
T-Note 2.625 5/15/2021	9128284P2	5,685,000	5/15/2021	2/7/2019	2.49%	5,701,211	45	56,065	5,702,624
T-Note 1.25 10/31/2021	912828T67	10,000,000	10/31/2021	7/11/2019	1.83%	9,870,703	214	52,141	10,069,500
T-Note 1.25 10/31/2021	912828T67	2,500,000	10/31/2021	7/11/2019	1.83%	2,467,676	214	13,035	2,517,375
T-Note 1.25 10/31/2021	912828T67	17,500,000	10/31/2021	9/6/2019	1.55%	17,388,574	214	91,247	17,621,625
T-Note 1.25 10/31/2021	912828T67	270,000	10/31/2021	9/6/2019	1.55%	268,313	214	1,408	271,877
T-Note 1.25 10/31/2021	912828T67	3,405,000	10/31/2021	9/6/2019	1.55%	3,383,586	214	17,754	3,428,665
T-Note 1.25 10/31/2021	912828T67	730,000	10/31/2021	9/6/2019	1.55%	725,438	214	3,806	735,074
T-Note 1.25 10/31/2021	912828T67	5,765,000	10/31/2021	9/6/2019	1.55%	5,728,744	214	30,059	5,805,067
T-Note 2.625 12/15/2021	9128285R7	2,700,000	12/15/2021	7/10/2019	1.80%	2,752,945	259	20,639	2,748,627
T-Note 2.625 12/15/2021	9128285R7	1,500,000	12/15/2021	7/10/2019	1.80%	1,529,414	259	11,466	1,527,015
T-Note 2.625 12/15/2021	9128285R7	6,050,000	12/15/2021	7/10/2019	1.80%	6,168,637	259	46,248	6,158,961
T-Note 2.625 12/15/2021	9128285R7	10,900,000	12/15/2021	7/10/2019	1.80%	11,113,742	259	83,322	11,096,309
T-Note 1.5 1/15/2023	912828Z29	15,000,000	1/15/2023	2/7/2020	1.39%	15,045,703	655	46,616	15,359,700
T-Note 1.5 1/15/2023	912828Z29	15,000,000	1/15/2023	2/7/2020	1.39%	15,045,703	655	46,616	15,359,700
T-Note 0.5 3/15/2023	912828ZD5	10,000,000	3/15/2023	3/16/2020	0.58%	9,977,344	714	2,174	10,064,500
T-Note 0.5 3/15/2023	912828ZD5	20,000,000	3/15/2023	3/16/2020	0.58%	19,954,688	714	4,348	20,129,000
T-Note 0.5 3/15/2023	912828ZD5	250,000	3/15/2023	3/16/2020	0.59%	249,336	714	54	251,613
T-Note 0.5 3/15/2023	912828ZD5	3,410,000	3/15/2023	3/16/2020	0.59%	3,400,942	714	741	3,431,995
T-Note 0.5 3/15/2023	912828ZD5	688,000	3/15/2023	3/16/2020	0.59%	686,173	714	150	692,438
T-Note 0.5 3/15/2023	912828ZD5	5,765,000	3/15/2023	3/16/2020	0.59%	5,749,687	714	1,253	5,802,184
T-Note 0 8/15/2023	912833LM0	10,500,000	8/15/2023	2/7/2020	1.41%	9,992,745	867	-	10,446,555
T-Note 0 8/15/2023	912833LM0	10,500,000	8/15/2023	2/7/2020	1.41%	9,992,745	867	-	10,446,555
T-Note 0.125 1/15/2024	91282CBE0	260,000	1/15/2024	1/25/2021	0.18%	259,563	1,020	67	258,658
T-Note 0.125 1/15/2024	91282CBE0	3,420,000	1/15/2024	1/25/2021	0.18%	3,414,255	1,020	886	3,402,353
T-Note 0.125 1/15/2024	91282CBE0	695,000	1/15/2024	1/25/2021	0.18%	693,833	1,020	180	691,414
T-Note 0.125 1/15/2024	91282CBE0	5,790,000	1/15/2024	1/25/2021	0.18%	5,780,275	1,020	1,499	5,760,124
T-Note 0.25 3/15/2024	91282CBR1	125,000	3/15/2024	3/15/2021	0.33%	124,712	1,080	14	124,659
T-Note 0.25 3/15/2024	91282CBR1	340,000	3/15/2024	3/15/2021	0.33%	339,216	1,080	37	339,072
T-Note 0.375 4/30/2025	912828ZL7	125,000	4/30/2025	3/11/2021	0.61%	123,789	1,491	196	123,384
T-Note 0.375 4/30/2025	912828ZL7	350,000	4/30/2025	3/11/2021	0.61%	346,609	1,491	547	345,475
T-Note 0.375 12/31/2025	91282CBC4	250,000	12/31/2025	1/25/2021	0.43%	249,287	1,736	233	244,033
T-Note 0.375 12/31/2025	91282CBC4	3,400,000	12/31/2025	1/25/2021	0.43%	3,390,305	1,736	3,170	3,318,842
T-Note 0.375 12/31/2025	91282CBC4	685,000	12/31/2025	1/25/2021	0.43%	683,047	1,736	639	668,649
T-Note 0.375 12/31/2025	91282CBC4	5,750,000	12/31/2025	1/25/2021	0.43%	5,733,604	1,736	5,361	5,612,748

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of March 31, 2021.

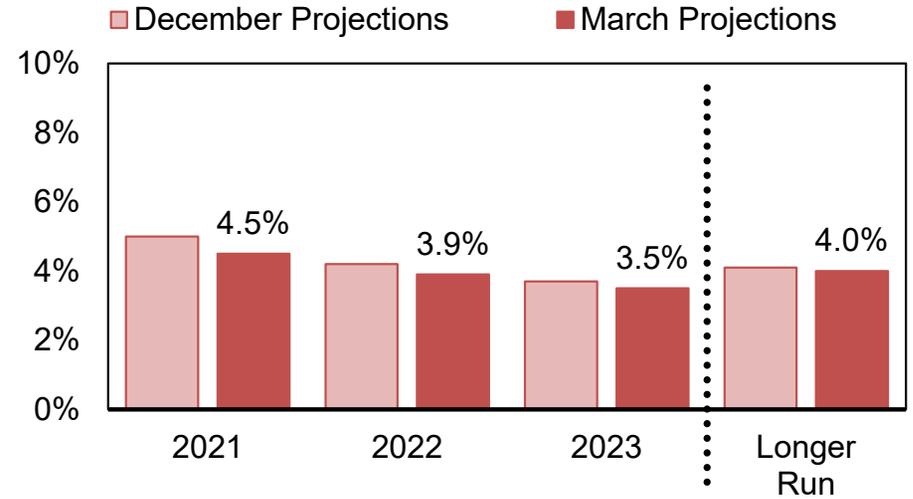
Appendix II: Economic Update

Fed's March Projections Show Improved Near-Term Outlook

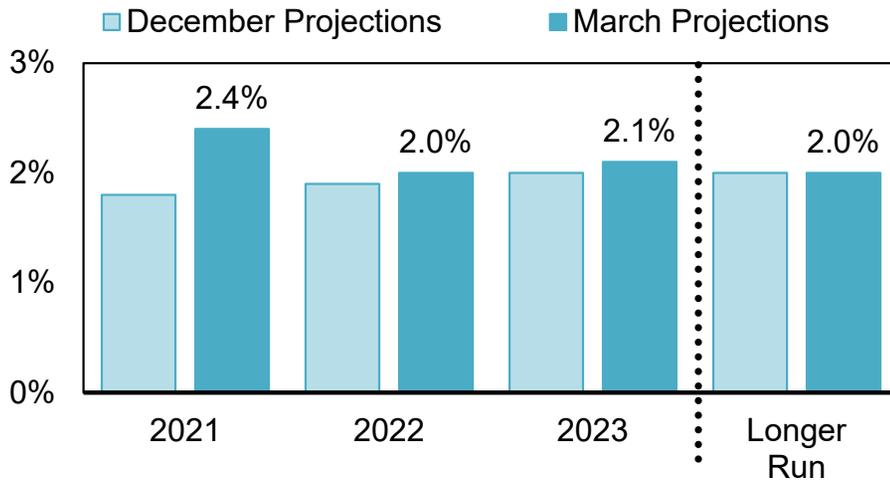
Change in Real GDP



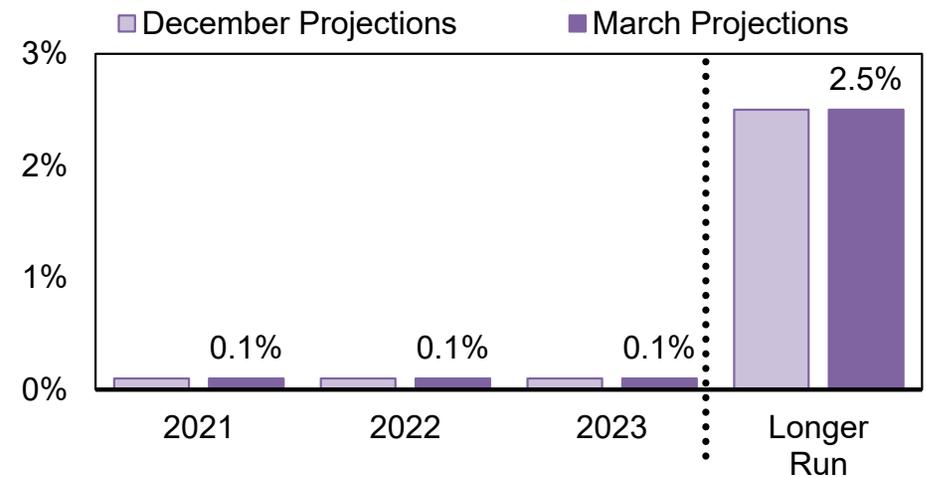
Unemployment Rate



PCE Inflation



Federal Funds Rate



Source: Federal Reserve, economic projections as of 3/31/2021.

“We are strongly committed . . . as long as it takes”

March

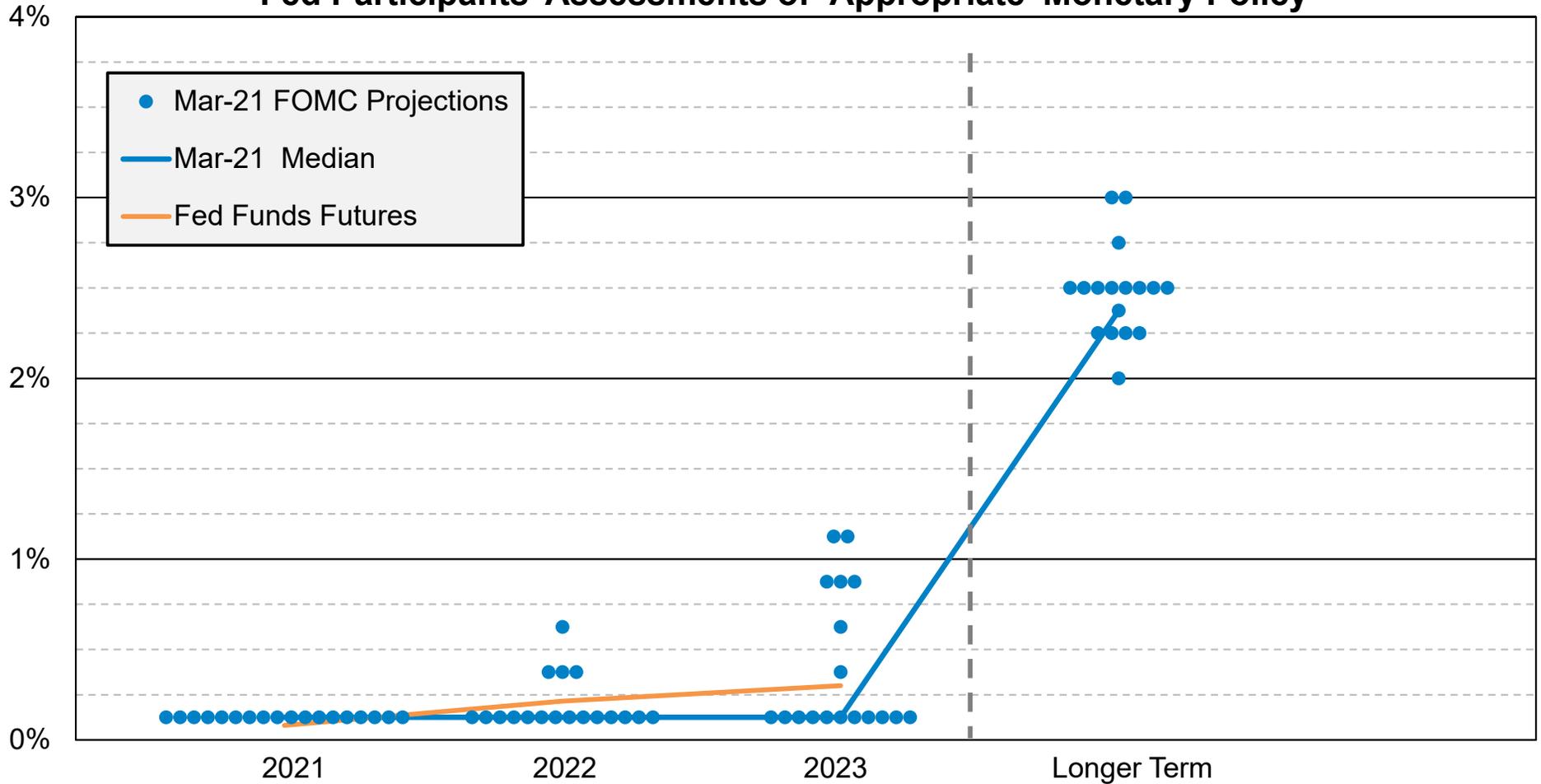
17

- Following a moderation in the pace of the recovery, **economic activity and employment have turned up recently**, although the sectors most adversely affected by the pandemic remain weak.
 - **Inflation continues to run below 2.0%**. Overall financial conditions remain accommodative, in part reflecting policy measures to support the economy and the flow of credit to U.S. households and businesses.
 - The path of the economy **will depend significantly on the course of the virus, including progress on vaccinations**. The ongoing public health crisis continues to weigh on economic activity, employment, and inflation, and poses **considerable risks to the economic outlook**.
-
- With inflation running persistently below this longer-run goal, the Committee will aim to achieve inflation moderately above 2.0% for some time so that inflation averages 2.0% over time and longer-term inflation expectations remain well anchored at 2.0%. **The Committee expects to maintain an accommodative stance of monetary policy until these outcomes are achieved**. The Committee decided to keep the target range for the Federal Funds rate at 0.00% to 0.25%.
 - In addition, the Federal Reserve will **continue** to increase its holdings of U.S. **Treasury securities by at least \$80 billion per month and of Federal Agency mortgage-backed securities by at least \$40 billion per month** until substantial further progress has been made toward the Committee's maximum employment and price stability goals.

Source: Federal Reserve.

The Fed Anticipates Near-Zero Rates Through 2023

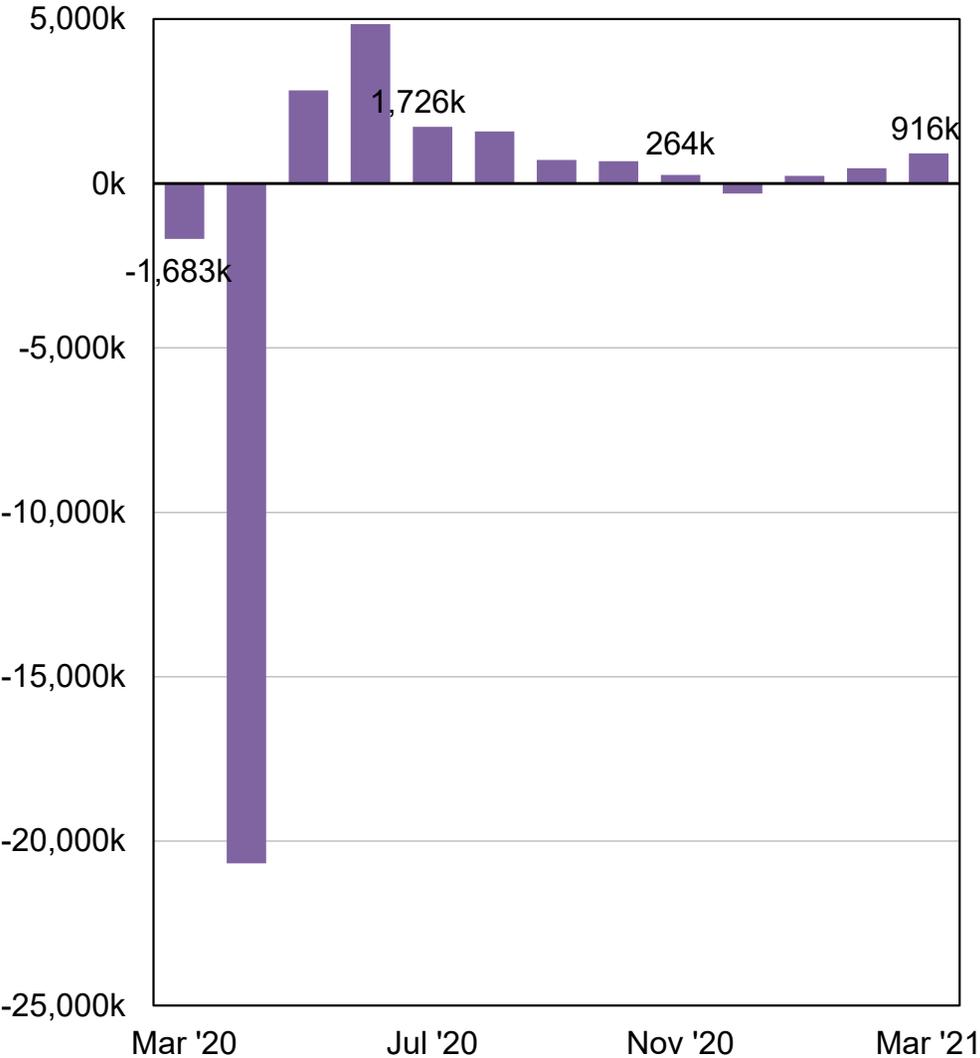
Fed Participants' Assessments of 'Appropriate' Monetary Policy



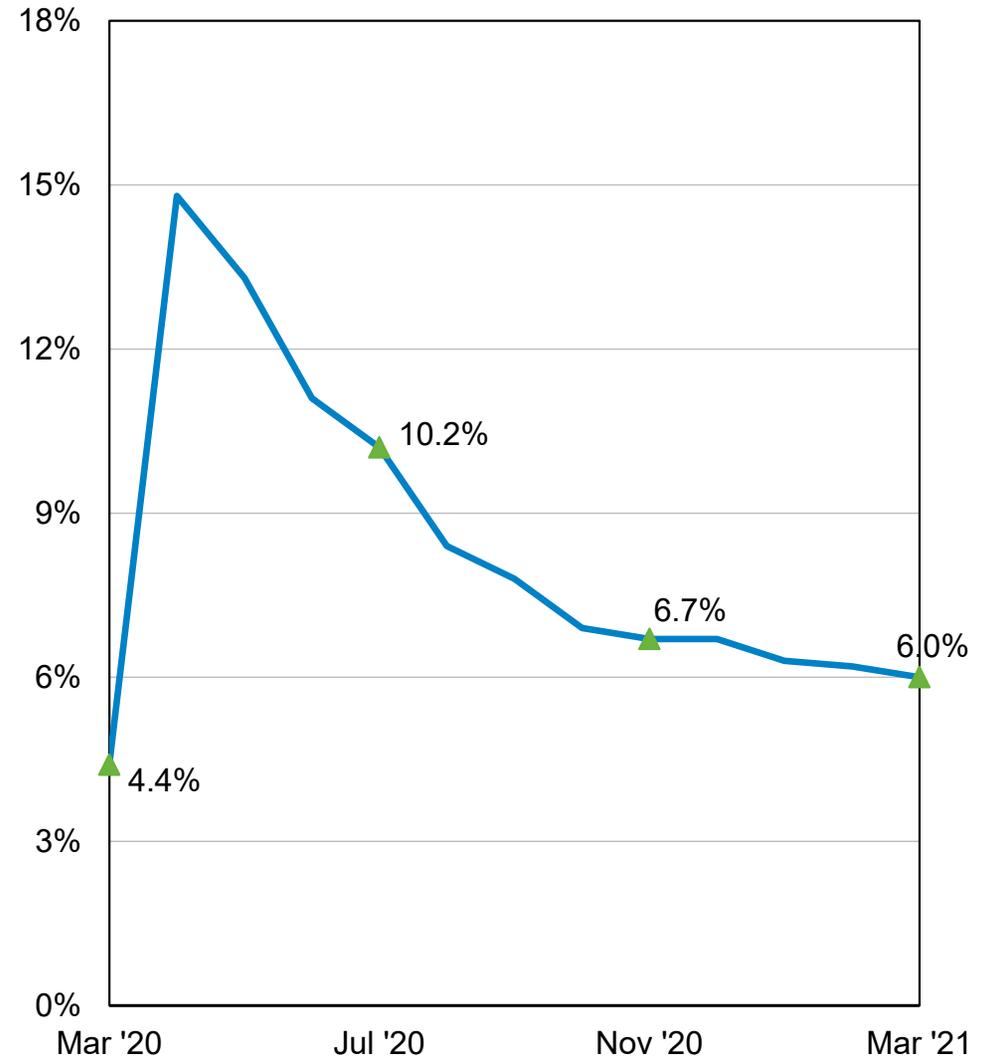
Source: Federal Reserve and Bloomberg. Individual dots represent each Fed members' judgement of the midpoint of the appropriate target range for the Federal Funds rate at each year-end. Fed Funds futures as of 3/31/2021.

Strong Jobs Gains in March

Monthly Change in Nonfarm Payrolls



Unemployment Rate

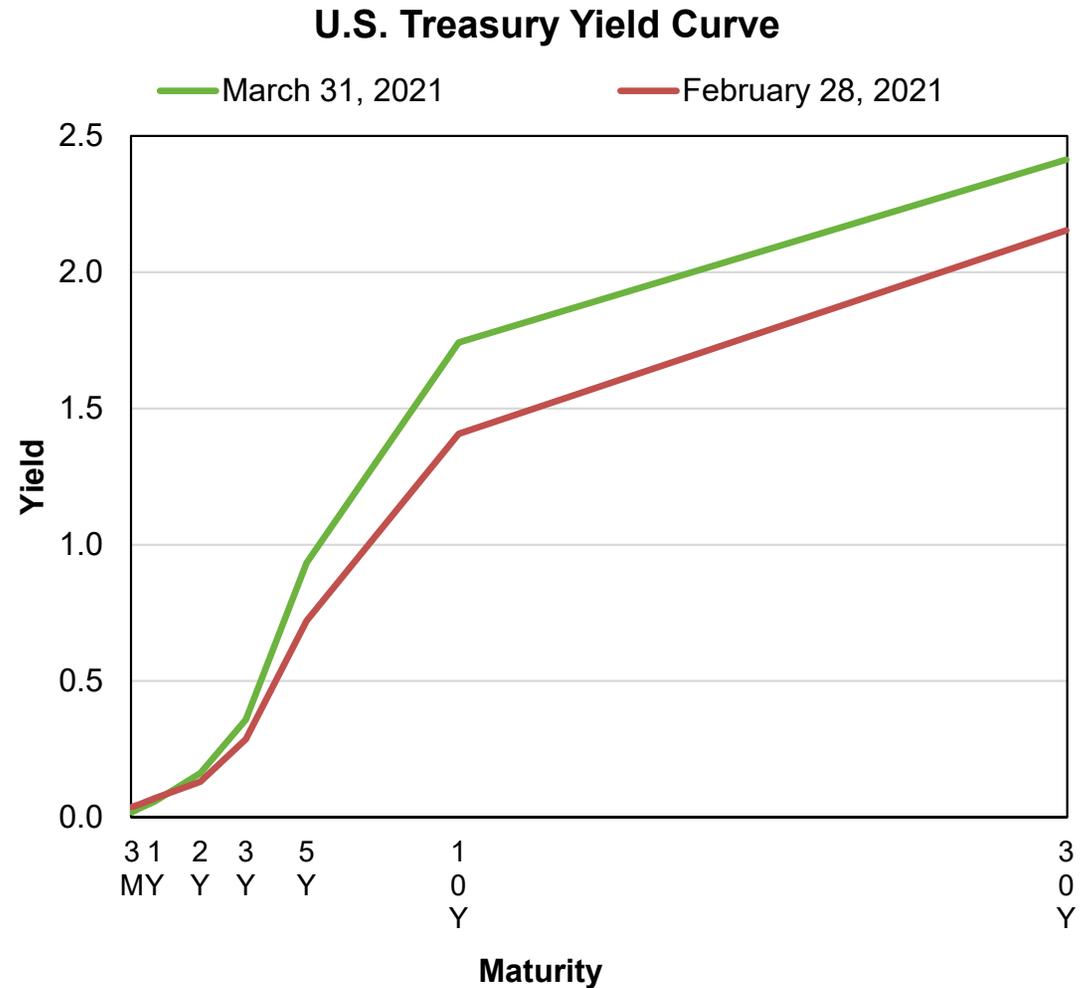


Source: Bloomberg, as of 3/31/2021.

Yield Curve Steepens Further in March

- The yield curve continued to steepen in March amid the sooner-than-expected distribution of vaccines across the U.S.

	2/28/2021	3/31/2021	Change
3 month	0.04%	0.02%	-0.02%
6 month	0.05%	0.03%	-0.02%
1 year	0.07%	0.06%	-0.01%
2 year	0.13%	0.16%	0.03%
3 year	0.29%	0.36%	0.07%
5 year	0.72%	0.93%	0.21%
10 year	1.41%	1.74%	0.33%
30 year	2.15%	2.41%	0.26%



Source: Bloomberg, as of 2/28/2021 and 3/31/2021, as indicated.

Fixed Income Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- Economic conditions during the first quarter of calendar year 2021 were characterized by the following:
 - Dramatically lower COVID-19 caseload as vaccine inoculations ramped up despite initial logistical challenges.
 - A new administration in Washington pushing new policies and priorities.
 - Improving economic data supported by additional \$1.9 trillion in relief funds from the American Rescue Plan Act.
 - Increasing inflation expectations fueled by a combination of stronger recovery and additional stimulus.
 - A surge in long-term Treasury yields to pre-pandemic levels.
 - Reaffirmed commitment by the Federal Reserve to keep short-term rates near zero and their asset purchase program in place until the economy is more fully recovered.

- The U.S. Treasury yield curve steepened dramatically during the quarter. Yields on very short-term maturities under a year remained anchored to the Fed’s near zero rate policy. Yields on 2 – 3-year maturities hovered near record lows, while yields on maturities five years and longer increased by 50 to 90 basis points (0.50% to 0.90%). This pushed the spread between the yield on 2-year and 10-year Treasuries to a five year high of 158 basis points (1.58%) by quarter-end.
 - As a result, short-term U.S. Treasury index returns were only slightly positive for the quarter, while longer-duration indices were notably negative.
 - The historic steepening of the U.S. Treasury yield curve over the quarter resulted in the worst quarterly performance on record for 10 and 30-year U.S. Treasury constant maturity indexes, which generated returns of -7.1% and -16.2%, respectively.
 - Following three consecutive quarters of significant spread narrowing in the second, third, and fourth quarters of calendar year 2020, most sectors simply held at tight levels. One notable exceptions was the mortgage-backed security (“MBS”) sector, where slowing prepayments caused durations to extend materially. On balance, diversification remained a net positive relative to Treasuries.

Fixed Income Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- Our strategy for the first quarter of calendar year 2021 encompassed the following:
 - Maintained core allocations in most sectors, while modestly trimming allocations to Agencies due to unattractive yield spreads, and mortgage-backed securities due to heightened risks associated with elevated prepayments.
 - We shifted from a neutral duration stance in the fourth quarter of calendar year 2020 to a modestly conservative and shorter duration posture in the first quarter of calendar year 2021, especially on longer duration mandates, due to the emergence of rising rates. This defensive bias added notable value to performance relative to these longer benchmarks, as the steeper yield curve resulted in significant underperformance of the longer end of the curve.
 - The Federal Agency sector offered record low yield spreads, especially on maturities inside of five years. New issue supply was very light. The combination of light issuance and historically tight spreads led to our preference to reduce Agency allocations.
 - Short-term credit (commercial paper) spreads stabilized, with some widening in the latter half of the quarter due to increased issuance. As a result, better opportunities became available to increase allocations and pick up incremental yield over short-term Treasuries and Agencies.

- The vaccine rollout, accommodative monetary policy, and the new \$1.9 trillion of fiscal stimulus all point to continued improvement in U.S. economic fundamentals. Calendar year 2021 GDP has been revised up several times, with current forecasts pointing to GDP growth of 6% or more this calendar year. That optimism, however, has translated into increased inflation expectations, particularly in the short-term, which is likely to pressure longer-term rates higher.
 - Given the substantial increase in long-term yields that has already occurred, we have reduced our defensive duration position somewhat and find some value in maturity extensions along today's steeper yield curve. But we will likely maintain an underweight to the 10-year portion of the curve. On the short end of the yield curve, our view is that rates will remain anchored by the Fed's near zero rate policy for the foreseeable future.

Disclosure

This material is based on information obtained from sources generally believed to be reliable and available to the public, however PFM Asset Management LLC cannot guarantee its accuracy, completeness or suitability. This material is for general information purposes only and is not intended to provide specific advice or a specific recommendation. All statements as to what will or may happen under certain circumstances are based on assumptions, some but not all of which are noted in the presentation. Assumptions may or may not be proven correct as actual events occur, and results may depend on events outside of your or our control. Changes in assumptions may have a material effect on results. Past performance does not necessarily reflect and is not a guaranty of future results. The information contained in this presentation is not an offer to purchase or sell any securities.