



Financial Services Audit Committee Communication

Date: February 26, 2021

To: Great Lakes Water Authority Audit Committee

From: Deirdre Henry, Treasury Manager

Re: Quarterly Investment Report through December 31, 2020 (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 December 31, 2020 (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 December 31, 2020: 0.69%
 - As of September 30, 2020: 0.91%
- Portfolio Allocation in Cash/Money Market Securities:
 - As of December 31, 2020: 51%
 - As of September 30, 2020: 36%

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 – December 2020



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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 over 97% 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 S&P.
- **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 December 31, 2020, about 51% of the funds were held in cash and money market accounts maturing overnight.
- **Return** – The overall yield at cost decreased to 0.69% as of December 31, 2020 versus 0.91% as of September 30, 2020. The lower yield is reflective of the extremely low interest rate environment. GLWA has earned over \$4.1 million (unaudited) in investment income for the first half of fiscal 2021 on a book value basis. Based on current market assumptions, we expect the investment income for GLWA for FY 2021 to be approximately \$6.9 million.

AVAILABLE FUNDS (Unaudited)

Type	Financial Institution	Book Value	Market Value	Yield @ Cost (as of 12/31/20)	Yield @ Market (as of 12/31/20)
Deposit Account	Comerica	\$10,027,143	\$10,027,143	0.01%	0.01%
Deposit Account - Retainage	First Independence	\$19,362,400	\$19,362,400	0.03%	0.03%
Deposit Account – Flint Security Deposit	Chase	\$3,813,910	\$3,813,910	0.10%	0.10%
Deposit Account	Chase	\$36,557,462	\$36,557,462	0.10%	0.10%
Trust Money Market Fund	U.S. Bank	\$404,285,018	\$404,285,018	0.03%	0.03%
Money Market Fund	JP Morgan	\$9,333,592	\$9,333,592	0.02%	0.02%
Local Government Investment Pool	GovMIC	\$9,847,298	\$9,847,298	0.05%	0.05%
Managed Funds	PFM	\$463,189,482	\$468,509,198	1.39%	0.17%
<u>DECEMBER 2020 TOTALS:</u>		<u>\$956,416,305</u>	<u>\$961,736,022</u>	<u>0.69%</u>	<u>0.10%</u>
<u>PREVIOUS QUARTER TOTALS:</u>		<u>\$890,101,099</u>	<u>\$896,868,136</u>	<u>0.91%</u>	<u>0.14%</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 12/31/2020.

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 investment 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 0.91% as of September 30, 2020 to 0.69% as of December 31, 2020. The lower yield is a result of investing in a near zero interest rate environment.
- The total portfolio had a market yield of 0.10% at the end of December. Yield at market represents what the market would provide in return if the portfolio was purchased on December 31, 2020 (vs. purchased in prior months / years)
 - The 0.10% yield at market as of 12/31/2020 is favorable compared to the 0.06% yield for the 3-Month U.S. Treasury Bill index. This index is a comparable indicator to the GLWA portfolio.

PORTFOLIO PERFORMANCE – PROJECTIONS

- GLWA earned over \$4.1 million (unaudited) in investment income for fiscal year-to-date 2021 (as of December 31, 2020) on a book value basis.
- Even though the current period earnings are above the figure for the amended budget, we anticipate a significant drop in earnings for the remainder of the year as a result of reinvesting in an extremely low interest rate environment.
- The current forecast for total interest earnings for FY 2021 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, September 30, 2020) 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 2020 calendar year was a chaotic and tragic one. The coronavirus pandemic ravaged the global economy infecting over 85 million people and killing nearly two million. Governments implemented lockdown measures and injected – alongside their central banks – unprecedented monetary and fiscal stimulus to try to immunize their pandemic-plagued economies. Fueled by monetary and fiscal support, financial markets demonstrated impressive resilience. Though the pandemic has ruptured the fabric of normalcy, optimism in the new year hinges on the success of a global vaccination program.
- The Federal Reserve ended the year by affirming its zero-rate monetary policy and its commitment that monetary policy will continue to support the economy. That support will continue until the recovery is complete and the economy achieves maximum employment and inflation is consistent with the Fed's new 2.0% average over time. Market indicators are for short-term interest rates to stay near zero for the foreseeable future.

ECONOMIC IMPACT ON PORTFOLIO

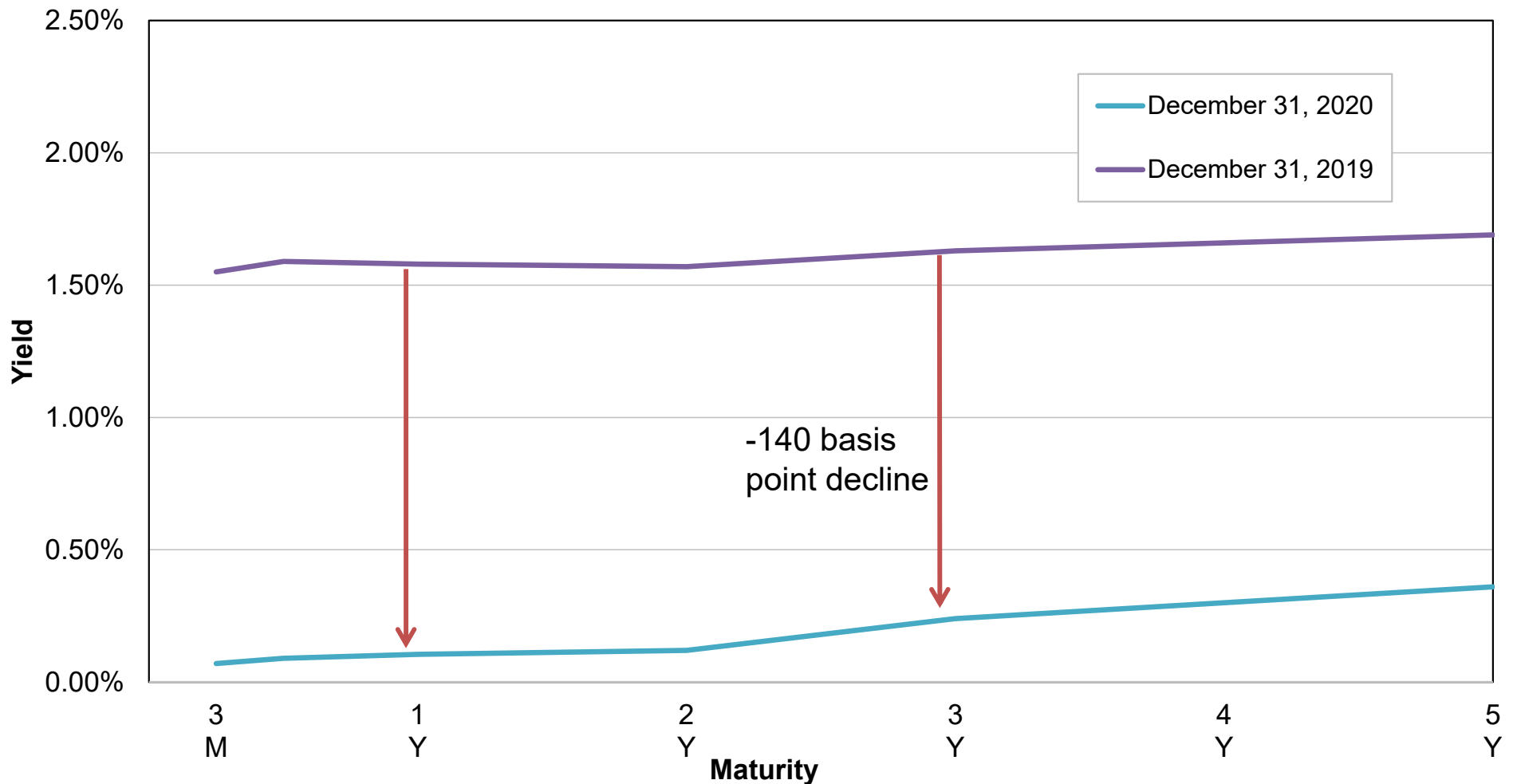
- The U.S. Treasury yield curve steepened modestly as rates on 10 and 30-year maturities rose while shorter-term rates remained anchored near zero. As a result, muted returns of shorter-maturity U.S. Treasuries exceeded the negative returns of those U.S. Treasuries with longer maturities.
- The economic outlook remains uncertain, as the pace and efficacy of the global vaccine battles a major resurgence of virus cases headlining 2021 unknowns; political turmoil in the U.S. adds to the unpredictability.
- Remarkably, the markets have largely discounted the downside. Underlying the recent low market volatility is confidence in the Fed and global central banks that have supported economic stability and expansion.
- In short-term markets, rates are expected to remain low for the next several years. In the near-term, short-term rates may be affected by the scale of Treasury issuance necessary to fund the 2021 federal budget deficit. While the deficit will require trillions of dollars of new Treasury issuance, the focus will be on longer-maturity securities and the Treasury Bill supply is likely to decline, pressuring short-term rates lower.
- Portfolio Impact: As price appreciation upside appears limited due to tight spreads, our expectations are for income to carry the brunt of the load for total returns. Maximizing portfolio income will be a focus of portfolio strategy for GLWA over the foreseeable future, similar to market conditions following the 2008 financial crisis.

Summary Market Overview and Outlook

Interest Rates Remain Low

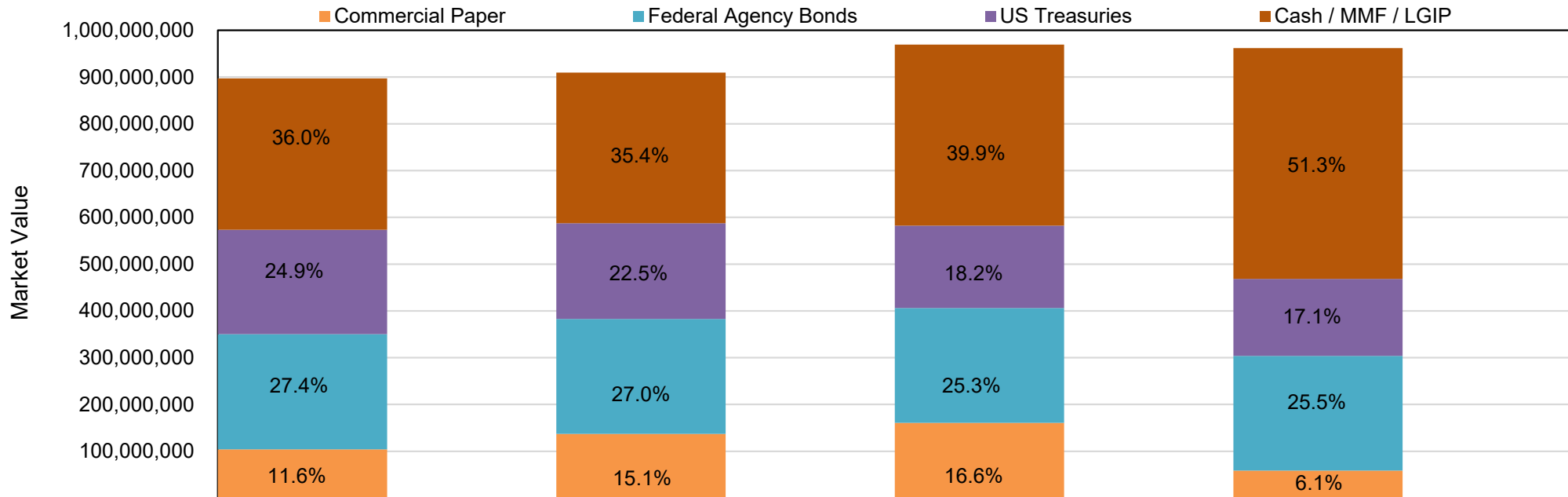
- It should be noted that as a result of the Federal Reserve's current zero interest rate policy, the markets have seen a dramatic drop in fixed-income yields over the past year.

U.S. Treasury Yield Curve



Portfolio Snapshot

Investments – By Security Type

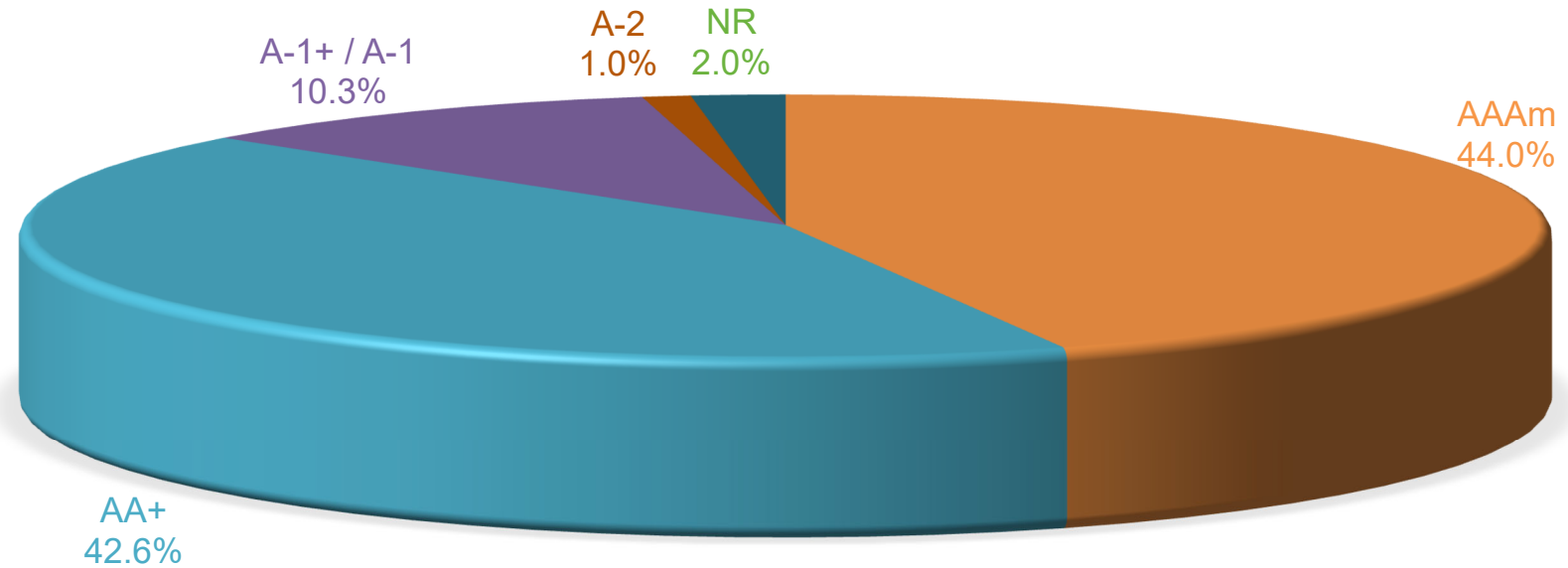


Security Type	September		October		November		December	
	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation	Market Value	Asset Allocation
Commercial Paper	104,240,180	11.6%	137,329,946	15.1%	160,893,523	16.6%	58,829,073	6.1%
Federal Agencies	245,960,276	27.4%	245,587,808	27.0%	245,343,608	25.3%	245,113,617	25.5%
U.S. Treasuries	223,386,198	24.9%	204,576,006	22.5%	176,241,330	18.2%	164,560,000	17.1%
Cash / MMF / LGIP	323,281,482	36.0%	321,731,345	35.4%	386,618,438	39.9%	493,233,332	51.3%
Total	896,868,136	100.0%	909,225,105	100.0%	969,096,899	100.0%	961,736,022	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of December 31, 2020.

Portfolio Snapshot

Investments – By Credit Quality

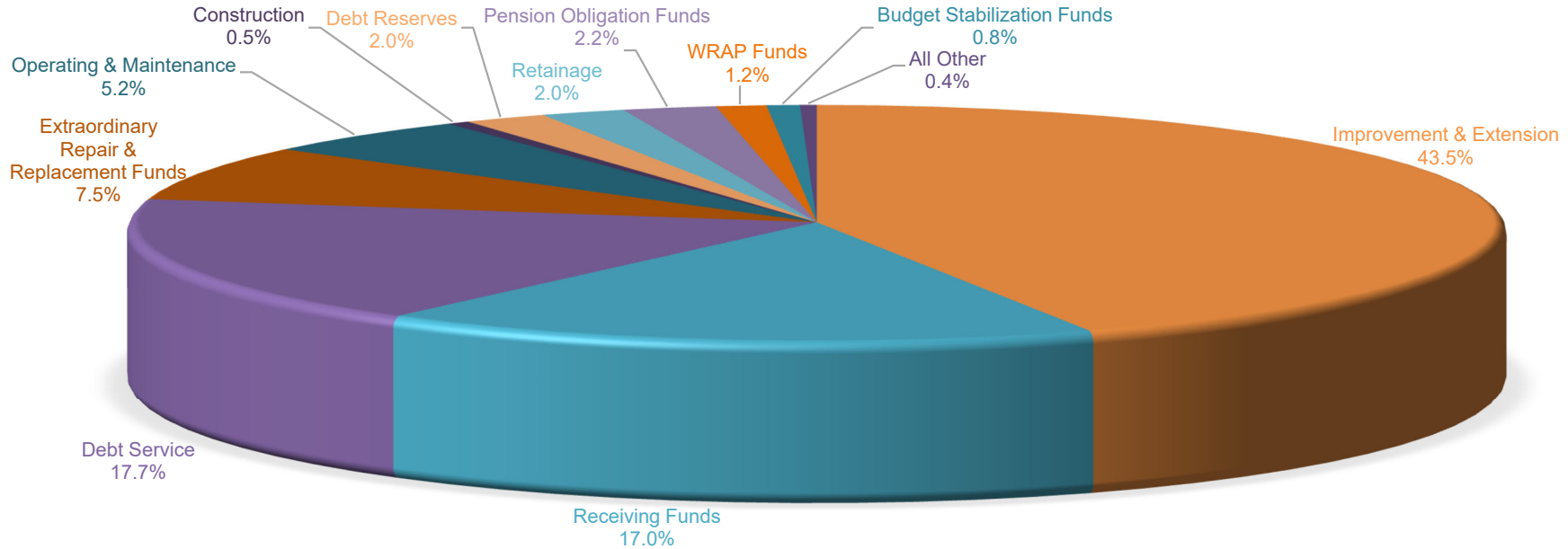


Credit Quality	Market Value	Asset Allocation
Ratings		
AAAm	423,465,908	44.0%
AA+	409,671,368	42.6%
A-1 + / A-1	99,209,202	10.3%
A-2	10,027,143	1.0%
NR	19,362,400	2.0%
Totals	961,736,022	100.0%

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of December 31, 2020.

Portfolio Snapshot

Investments – By Account Purpose



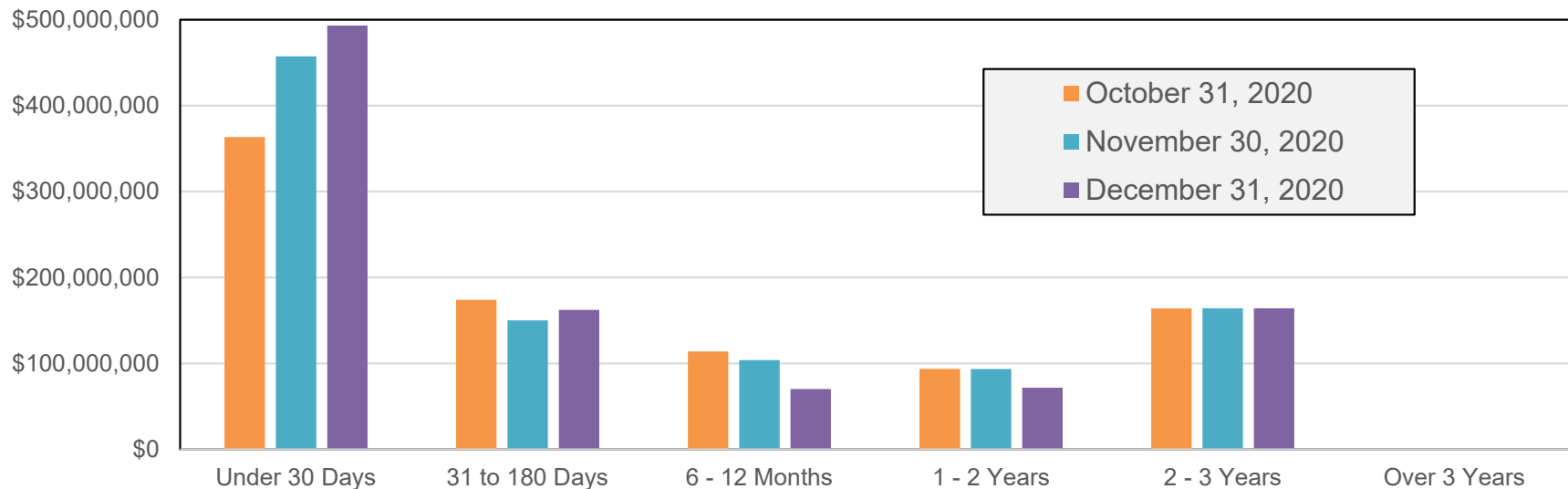
Account Purpose	Value Market	Allocation %	Cost Yield at	Market Yield at	Duration
Improvement & Extension	\$ 417,891,130	43.5%	1.19%	0.13%	1.102 Years
Debt Service	\$ 169,829,238	17.7%	0.18%	0.10%	0.159 Years
Receiving Funds (includes lockbox account)	\$ 163,936,351	17.0%	0.02%	0.02%	0.003 Years
Extraordinary Repair & Replacement Funds	\$ 72,135,164	7.5%	1.21%	0.12%	0.829 Years
Operating & Maintenance	\$ 49,903,027	5.2%	0.05%	0.05%	0.003 Years
Pension Obligation Funds	\$ 21,510,992	2.2%	0.05%	0.05%	0.012 Years
Retainage	\$ 19,362,400	2.0%	0.03%	0.03%	0.003 Years
Debt Reserves	\$ 19,020,101	2.0%	1.51%	0.14%	1.186 Years
WRAP Funds	\$ 11,496,823	1.2%	0.05%	0.04%	0.011 Years
Budget Stabilization Funds	\$ 7,589,851	0.8%	1.33%	0.14%	0.767 Years
Construction	\$ 5,247,033	0.5%	0.10%	0.10%	0.003 Years
Flint Security Deposit Account	\$ 3,813,910	0.4%	0.10%	0.10%	0.003 Years
Total	\$ 961,736,022	100.0%	0.69%	0.10%	0.600 Years

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of December 31, 2020.

Portfolio Snapshot

Investments – By Maturity

Maturity Distribution	October 31, 2020		November 30, 2020		December 31, 2020	
		%		%		%
Under 30 Days	\$ 363,472,131	40.0%	\$ 457,466,831	47.2%	\$ 493,233,332	51.3%
31 to 180 Days	174,018,814	19.1%	150,030,721	15.5%	162,225,195	16.9%
6 - 12 Months	113,968,027	12.5%	103,940,378	10.7%	70,309,207	7.3%
1 - 2 Years	93,756,249	10.3%	93,609,473	9.7%	71,808,205	7.5%
2 - 3 Years	164,009,884	18.0%	164,049,496	16.9%	164,160,083	17.1%
Over 3 Years	-	0.0%	-	0.0%	-	0.0%
Totals	\$ 909,225,105	100.0%	\$ 969,096,899	100.0%	\$ 961,736,022	100.0%



In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of December 31, 2020.

Portfolio Snapshot

Investment Accounts – Yield at Cost & Market

	As of December 31, 2020		As of September 30, 2020	
	YTM @ Cost	YTM @ Market	YTM @ Cost	YTM @ Market
Bank Deposits				
Comerica	0.01%	0.01%	0.01%	0.01%
First Independence	0.03%	0.03%	0.05%	0.05%
Flint Deposit Account	0.10%	0.10%	0.15%	0.15%
JP Morgan Chase	0.10%	0.10%	0.15%	0.15%
Sub-Total Bank Deposits	0.07%	0.07%	0.10%	0.10%
Money Market Funds / LGIPs				
GovMIC	0.05%	0.05%	0.19%	0.19%
U.S. Bank - First American MMF	0.03%	0.03%	0.05%	0.05%
JP Morgan Securities - Blackrock MMF	0.02%	0.02%	0.01%	0.01%
Sub-Total MMF / LGIPs	0.03%	0.03%	0.07%	0.07%
Investment Portfolios				
Sewage SR Debt Serv 5403	0.25%	0.25%	0.23%	0.20%
Sewage SR Res 5400	1.46%	0.15%	1.47%	0.17%
Sew 2nd Debt Serv 5403	0.24%	0.27%	0.23%	0.19%
Sewage 2nd Res 5481	1.80%	0.14%	1.80%	0.15%
Sew SRF Debt Serv 5410	0.21%	0.19%	0.21%	0.25%
Sewage ER & R	1.61%	0.15%	1.79%	0.16%
Sewer Improvement & Extension	1.44%	0.15%	1.50%	0.17%
Sewer Pension Obligation	0.33%	0.17%	0.33%	0.23%
Sewer Wrap Fund	0.24%	0.18%	0.26%	0.18%
Sewer Budget Stabilization Fund	1.77%	0.18%	1.90%	0.16%
Water SR Debt Ser 5503	0.24%	0.26%	0.23%	0.19%
Water SR Reserve 5500	1.80%	0.14%	1.80%	0.15%
Water 2nd Debt Serv 5503	0.25%	0.25%	0.23%	0.20%
Water 2nd Res 5581	1.80%	0.14%	1.80%	0.15%
Water SRF Debt Serv 5575	0.20%	0.21%	0.21%	0.25%
Water ER & R	1.63%	0.15%	1.80%	0.16%
Water Improvement & Extension	1.58%	0.16%	1.67%	0.17%
Water Pension Obligation	0.33%	0.17%	0.33%	0.23%
Water Wrap Fund	0.00%	0.00%	0.25%	0.16%
Water Budget Stabilization Fund	1.77%	0.18%	1.90%	0.16%
Sub-Total Investment Portfolios	1.39%	0.17%	1.39%	0.17%
Grand Total	0.69%	0.10%	0.91%	0.14%

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 extremely low-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 December 31, 2020				
	Market Value	YTM @ Market	Effective Duration	Weighted Average Maturity
GLWA				
Great Lakes Water Authority	\$961,736,022	0.10%	0.60 Years	220 Days
Short/Intermediate-Term Indices				
S&P Rated Government Investment Pool Index		0.03%	0.08 Years	30 Days
BoA / ML 3-Month Treasury Index		0.06%	0.15 Years	55 Days
BoA / ML 6-Month Treasury Index		0.08%	0.40 Years	146 Days
BoA / ML 1-Year Treasury Index		0.12%	0.91 Years	332 Days
BoA / ML 1-3 Year Treasury Index		0.13%	1.83 Years	668 Days
BoA / ML 1-5 Year Treasury Index		0.18%	2.59 Years	945 Days
Peer Analysis (Water Entities / Utilities)				
District of Columbia Water & Sewer Authority, DC	\$295,931,791	0.22%	1.00 Years	388 Days
DuPage Water Commission, IL	\$159,843,186	0.56%	2.39 Years	1,246 Days
Fairfax County Water Authority, VA	\$171,916,807	0.28%	1.99 Years	763 Days
Metro Wastewater Reclamation District, CO	\$300,884,626	0.27%	2.29 Years	891 Days
Metropolitan Water District of Southern California, CA	\$569,369,563	0.42%	0.53 Years	258 Days
Philadelphia Water Department, PA	\$195,087,926	0.22%	0.90 Years	345 Days
San Bernardino Valley Municipal Water District, CA	\$370,810,351	0.24%	1.86 Years	689 Days
Tohopekaliga Water Authority, FL	\$157,247,800	0.63%	1.86 Years	943 Days
Truckee Meadows Water Authority, NV	\$105,646,238	0.24%	2.07 Years	787 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)

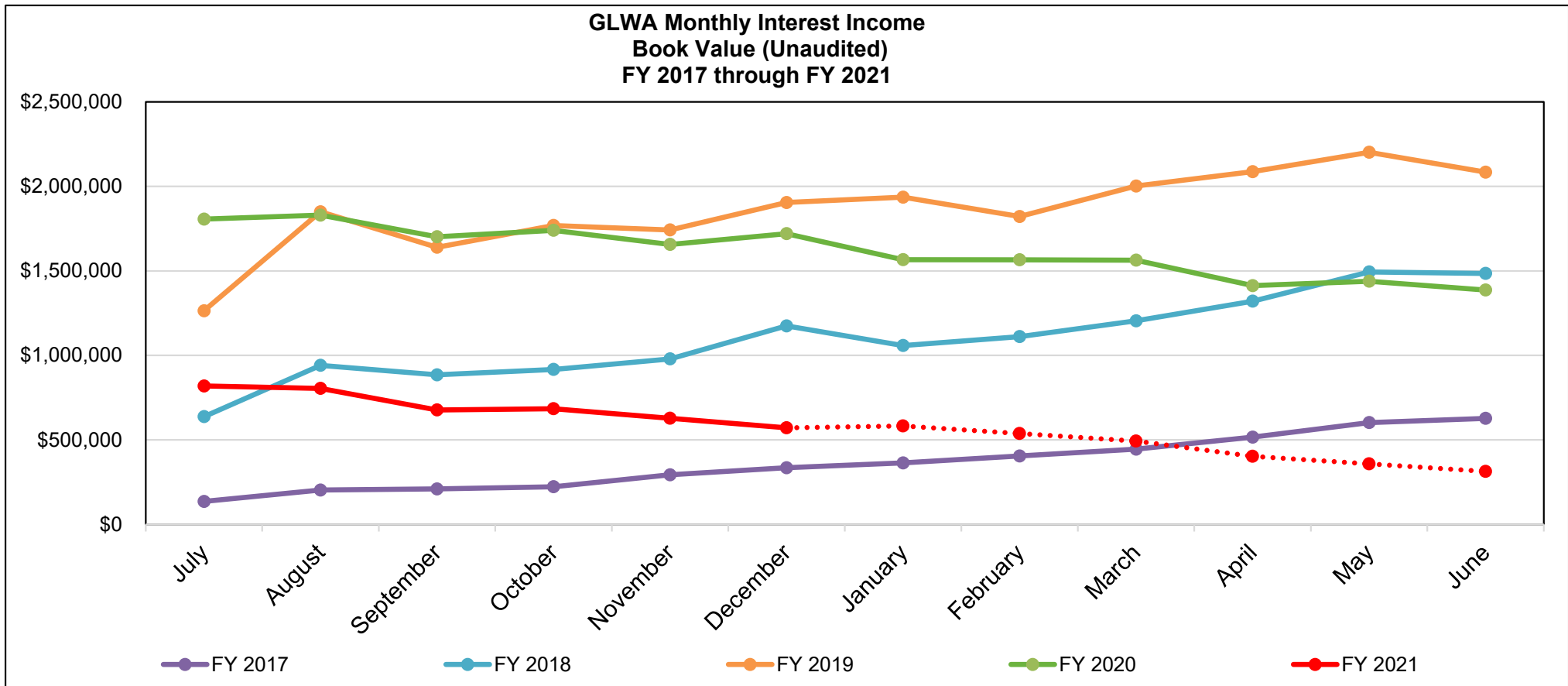
Month	Interest Earned During Period	Realized Gain / Loss	Investment Income
July 2020	\$819,118.39	\$0.00	\$819,118.39
August 2020	\$804,779.94	\$0.00	\$804,779.94
September 2020	\$677,008.40	\$0.00	\$677,008.40
October 2020	\$684,428.35	\$0.00	\$684,428.35
November 2020	\$628,192.58	\$0.00	\$628,192.58
December 2020	\$571,545.59	\$0.00	\$571,545.59
<u>FY 2021 Y-T-D</u>	<u>\$4,185,073.25</u>	<u>\$0.00</u>	<u>\$4,185,073.25</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. 7

Portfolio Snapshot

Year-Over-Year Investment Income

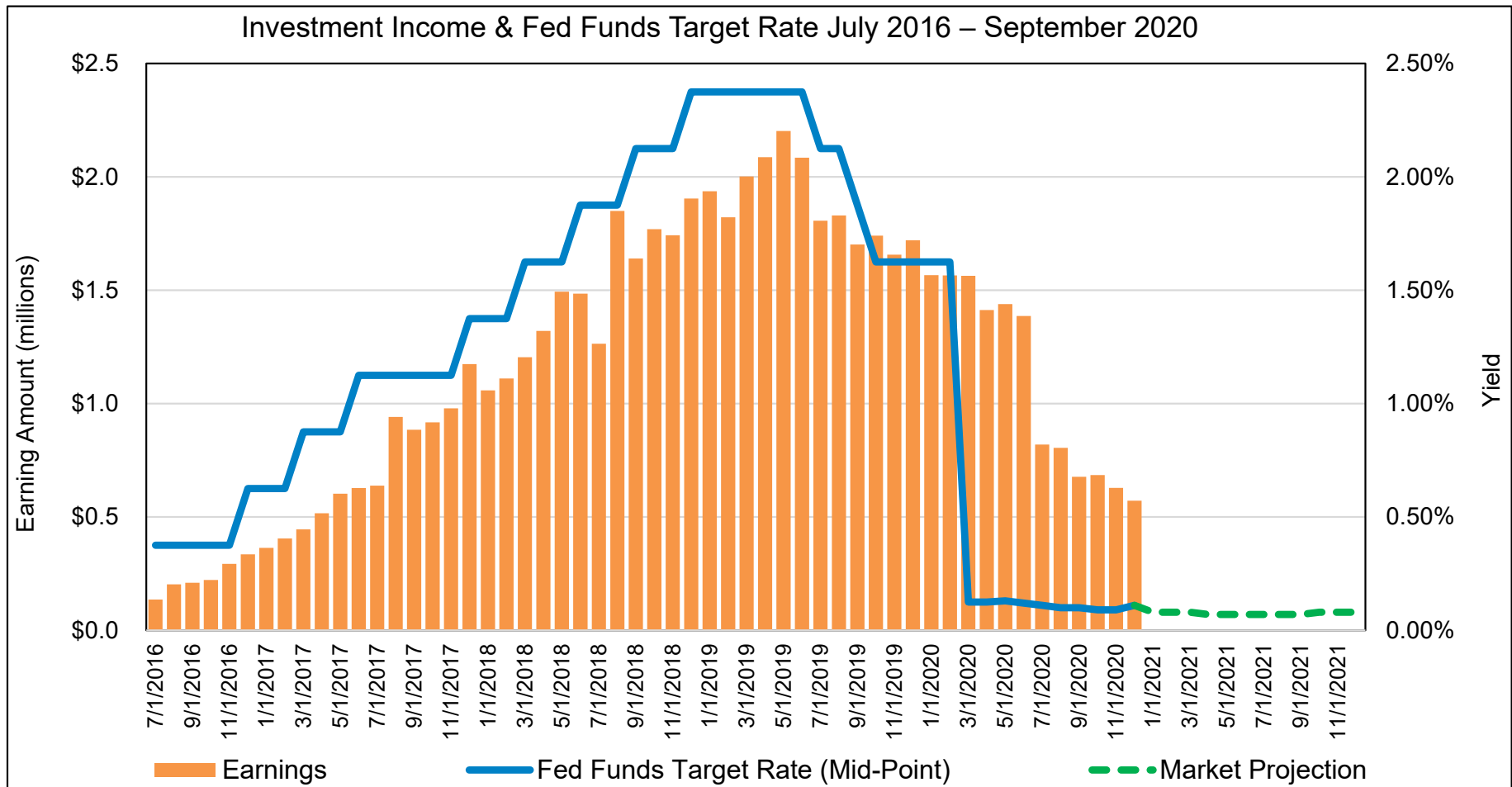
- GLWA earned \$4,185,073 in investment income for the 2021 fiscal year-to-date on a book value basis compared to \$10,456,107 for the first six months of fiscal year 2020.
- Projected total investment income for fiscal year 2021 is expected to be approximately \$6.9 million, which is below than what was seen in previous years as the market anticipates the Fed Funds target rate to be near zero through 2023.



Portfolio Snapshot

Monthly Investment Income Compared to Fed Funds Rate

- Due to 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.
- As a result of many investment-grade fixed income sectors trading at or near pre-pandemic lows and the consensus that the Fed's zero interest rate policy will remain intact for the foreseeable future, investment income expectations for 2021 are tempered relative to the exceptional interest earned in prior years.



Appendix I: Portfolio Holdings

Portfolio Holdings As of December 31, 2020

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
<u>Short-Term Bank Deposits / MMF / LGIP</u>									
COMERICA BANK		\$ 10,027,143	1/1/2021	12/31/2020	0.01%	\$ 10,027,143	1	\$ -	\$ 10,027,143
FIRST INDEPENDENCE BANK		19,362,400	1/1/2021	12/31/2020	0.03%	19,362,400	1	-	19,362,400
FLINT DEPOSIT ACCOUNT		3,813,910	1/1/2021	12/31/2020	0.10%	3,813,910	1	-	3,813,910
JP MORGAN CHASE		36,557,462	1/1/2021	12/31/2020	0.10%	36,557,462	1	-	36,557,462
GovMIC		9,847,298	1/1/2021	12/31/2020	0.05%	9,847,298	1	-	9,847,298
U.S. BANK - FIRST AMERICAN MMF		404,285,018	1/1/2021	12/31/2020	0.03%	404,285,018	1	-	404,285,018
JP MORGAN SECURITIES - BLACKROCK MMF		9,333,592	1/1/2021	12/31/2020	0.02%	9,333,592	1	-	9,333,592

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of September 30, 2020.

Portfolio Holdings As of December 31, 2020

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Commercial Paper									
MUFG Bank LTD NY 0 2/1/2021	62479LP17	\$ 1,000,000	2/1/2021	8/10/2020	0.24%	\$ 998,833	32	\$ -	\$ 999,940
ABN AMRO Funding LLC 0 3/2/2021	00084BQ23	394,000	3/2/2021	9/4/2020	0.21%	393,589	61	-	393,925
ABN AMRO Funding LLC 0 3/2/2021	00084BQ23	4,924,000	3/2/2021	9/4/2020	0.21%	4,918,859	61	-	4,923,064
Toyota Motor Credit 0 3/12/2021	89233GQC3	400,000	3/12/2021	7/16/2020	0.33%	399,124	71	-	399,888
Toyota Motor Credit 0 3/12/2021	89233GQC3	650,000	3/12/2021	7/16/2020	0.33%	648,576	71	-	649,818
MUFG Bank LTD NY 0 3/19/2021	62479LQK4	603,000	3/19/2021	10/6/2020	0.17%	602,533	78	-	602,813
BNP Paribas NY 0 3/19/2021	09659BQK9	5,337,000	3/19/2021	10/6/2020	0.19%	5,332,381	78	-	5,335,346
Natixis Bank NY 0 3/19/2021	63873JQK9	5,282,000	3/19/2021	11/17/2020	0.23%	5,277,883	78	-	5,280,363
CitiGroup Global Markets 0 5/28/2021	17327ASU2	2,500,000	5/28/2021	9/3/2020	0.23%	2,495,735	148	-	2,497,900
CitiGroup Global Markets 0 5/28/2021	17327ASU2	7,500,000	5/28/2021	9/3/2020	0.23%	7,487,206	148	-	7,493,700
CitiGroup Global Markets 0 5/28/2021	17327ASU2	2,500,000	5/28/2021	9/3/2020	0.23%	2,495,735	148	-	2,497,900
CitiGroup Global Markets 0 5/28/2021	17327ASU2	7,500,000	5/28/2021	9/3/2020	0.23%	7,487,206	148	-	7,493,700
Natixis Bank NY 0 6/18/2021	63873JTT9	4,602,000	6/18/2021	11/17/2020	0.26%	4,594,921	169	-	4,597,168
Natixis Bank NY 0 6/18/2021	63873JTT9	6,260,000	6/18/2021	11/17/2020	0.26%	6,250,370	169	-	6,253,427
Natixis Bank NY 0 6/18/2021	63873JTT9	924,000	6/18/2021	11/17/2020	0.26%	922,579	169	-	923,030
Natixis Bank NY 0 6/18/2021	63873JTT9	8,088,000	6/18/2021	11/17/2020	0.26%	8,075,558	169	-	8,079,508
Cooperatieve Rabobank 0 8/3/2021	21687AV34	417,000	8/3/2021	11/17/2020	0.24%	416,280	215	-	416,341

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Portfolio Holdings As of December 31, 2020

DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
Federal Agencies									
FHLMC 2.375 2/16/2021	3137EAE9	\$ 3,500,000	2/16/2021	8/8/2018	2.79%	\$ 3,465,210	47	\$ 31,172	\$ 3,509,380
FHLMC 2.375 2/16/2021	3137EAE9	20,000,000	2/16/2021	8/8/2018	2.79%	19,801,200	47	178,125	20,053,600
FHLMC 2.375 2/16/2021	3137EAE9	250,000	2/16/2021	8/9/2018	2.78%	247,563	47	2,227	250,670
FHLMC 2.375 2/16/2021	3137EAE9	685,000	2/16/2021	8/9/2018	2.78%	678,321	47	6,101	686,836
FNMA 2.5 4/13/2021	3135G0U27	3,500,000	4/13/2021	8/8/2018	2.82%	3,471,685	103	18,958	3,523,205
FNMA 2.5 4/13/2021	3135G0U27	20,000,000	4/13/2021	8/8/2018	2.82%	19,838,200	103	108,333	20,132,600
FNMA 2.5 4/13/2021	3135G0U27	250,000	4/13/2021	8/9/2018	2.81%	247,985	103	1,354	251,658
FNMA 2.5 4/13/2021	3135G0U27	3,400,000	4/13/2021	8/8/2018	2.81%	3,372,698	103	18,417	3,422,542
FNMA 2.5 4/13/2021	3135G0U27	685,000	4/13/2021	8/9/2018	2.81%	679,479	103	3,710	689,542
FNMA 2.5 4/13/2021	3135G0U27	5,750,000	4/13/2021	8/8/2018	2.81%	5,703,828	103	31,146	5,788,123
FHLB 2.25 6/11/2021	3130A1W95	10,000,000	6/11/2021	7/11/2019	1.94%	10,058,200	162	12,500	10,091,300
FHLB 2.25 6/11/2021	3130A1W95	25,000,000	6/11/2021	7/11/2019	1.94%	25,145,500	162	31,250	25,228,250
FHLB 1.875 7/7/2021	3130AGLD5	3,715,000	7/7/2021	6/10/2019	1.96%	3,708,982	188	33,667	3,748,621
FHLB 1.875 7/7/2021	3130AGLD5	3,910,000	7/7/2021	6/10/2019	1.96%	3,903,666	188	35,434	3,945,386
FHLMC 2.375 1/13/2022	3137EADB2	10,000,000	1/13/2022	7/11/2019	1.89%	10,118,700	378	110,833	10,231,200
FHLMC 2.375 1/13/2022	3137EADB2	25,000,000	1/13/2022	7/11/2019	1.89%	25,296,750	378	277,083	25,578,000
FHLB 2.125 6/10/2022	313379Q69	10,000,000	6/10/2022	7/11/2019	1.92%	10,059,200	526	12,396	10,288,600
FHLB 2.125 6/10/2022	313379Q69	25,000,000	6/10/2022	7/11/2019	1.92%	25,148,000	526	30,990	25,721,500
FHLMC 0.375 5/5/2023	3137EAER6	6,000,000	5/5/2023	6/5/2020	0.38%	6,000,060	855	3,500	6,030,780
FHLMC 0.375 5/5/2023	3137EAER6	14,650,000	5/5/2023	6/5/2020	0.38%	14,650,147	855	8,546	14,725,155
FNMA 0.25 5/22/2023	3135G04Q3	10,000,000	5/22/2023	6/5/2020	0.36%	9,968,400	872	2,708	10,023,600
FNMA 0.25 5/22/2023	3135G04Q3	25,000,000	5/22/2023	6/5/2020	0.36%	24,921,000	872	6,771	25,059,000
FNMA 0.25 5/22/2023	3135G04Q3	240,000	5/22/2023	6/5/2020	0.35%	239,292	872	65	240,566
FNMA 0.25 5/22/2023	3135G04Q3	3,400,000	5/22/2023	6/5/2020	0.35%	3,389,970	872	921	3,408,024
FNMA 0.25 5/22/2023	3135G04Q3	670,000	5/22/2023	6/5/2020	0.35%	668,024	872	181	671,581
FNMA 0.25 5/22/2023	3135G04Q3	5,750,000	5/22/2023	6/5/2020	0.35%	5,733,038	872	1,557	5,763,570
FHLMC 0.25 6/26/2023	3137EAE54	3,150,000	6/26/2023	7/2/2020	0.29%	3,146,189	907	109	3,156,836
FNMA 0.25 7/10/2023	3135G05G4	1,250,000	7/10/2023	7/16/2020	0.29%	1,248,425	921	1,484	1,252,988
FNMA 0.25 7/10/2023	3135G05G4	1,650,000	7/10/2023	7/16/2020	0.29%	1,647,921	921	1,959	1,653,944

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of September 30, 2020.

Portfolio Holdings As of December 31, 2020

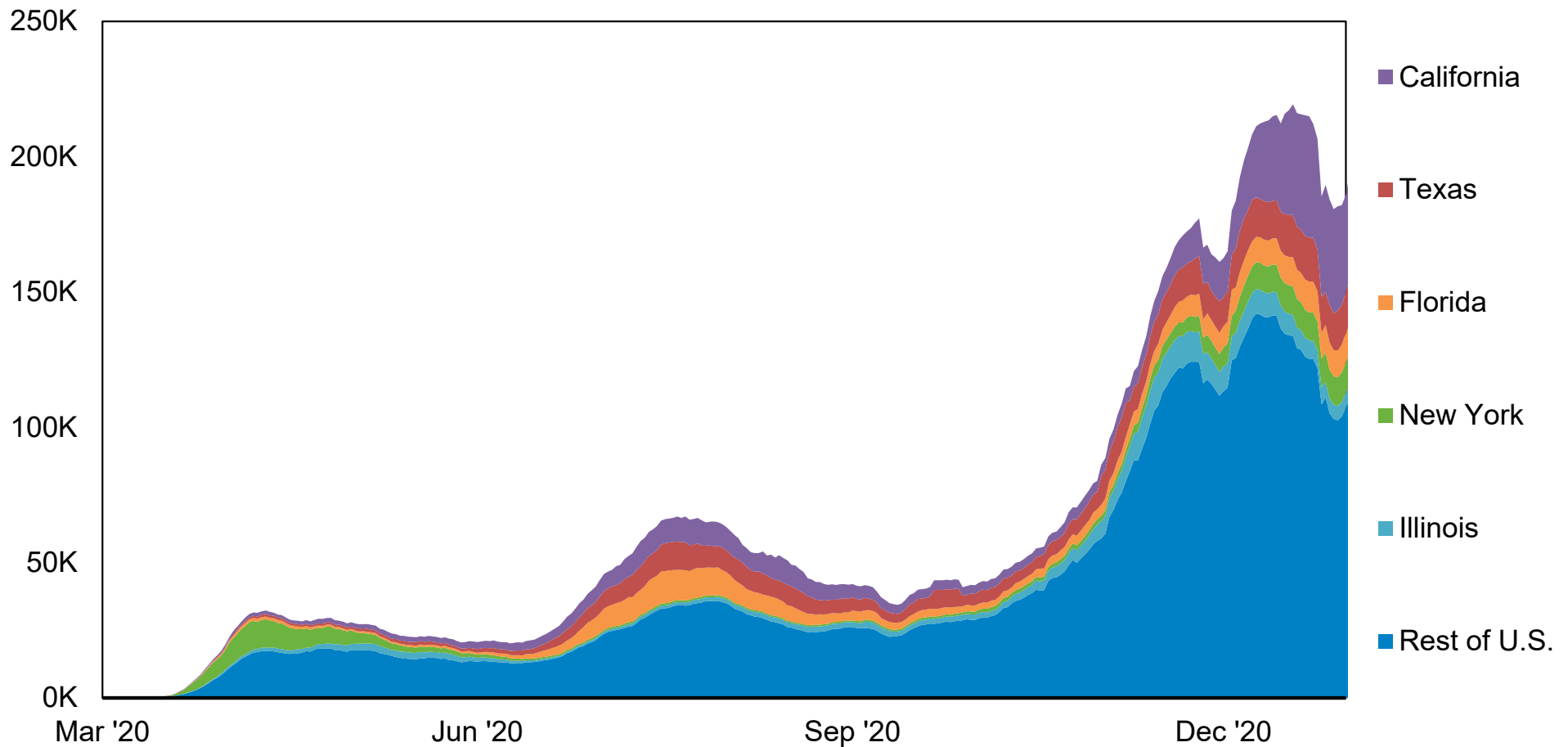
DESCRIPTION	CUSIP	PAR AMOUNT	MATURITY DATE	SETTLEMENT DATE	YTM AT COST	ORIGINAL COST	DAYS TO MATURITY	ACCRUED INTEREST	TOTAL VALUE
U.S. Treasuries									
T-Note 2.625 5/15/2021	9128284P2	\$ 245,000	5/15/2021	2/7/2019	2.49%	\$ 245,708	135	\$ 817	\$ 247,239
T-Note 2.625 5/15/2021	9128284P2	3,455,000	5/15/2021	2/7/2019	2.49%	3,464,852	135	11,525	3,486,579
T-Note 2.625 5/15/2021	9128284P2	700,000	5/15/2021	2/7/2019	2.49%	702,023	135	2,335	706,398
T-Note 2.625 5/15/2021	9128284P2	5,685,000	5/15/2021	2/7/2019	2.49%	5,701,211	135	18,963	5,736,961
T-Note 1.25 10/31/2021	912828T67	10,000,000	10/31/2021	7/11/2019	1.83%	9,870,703	304	21,064	10,093,000
T-Note 1.25 10/31/2021	912828T67	2,500,000	10/31/2021	7/11/2019	1.83%	2,467,676	304	5,266	2,523,250
T-Note 1.25 10/31/2021	912828T67	17,500,000	10/31/2021	9/6/2019	1.55%	17,388,574	304	36,861	17,662,750
T-Note 1.25 10/31/2021	912828T67	270,000	10/31/2021	9/6/2019	1.55%	268,313	304	569	272,511
T-Note 1.25 10/31/2021	912828T67	3,405,000	10/31/2021	9/6/2019	1.55%	3,383,586	304	7,172	3,436,667
T-Note 1.25 10/31/2021	912828T67	730,000	10/31/2021	9/6/2019	1.55%	725,438	304	1,538	736,789
T-Note 1.25 10/31/2021	912828T67	5,765,000	10/31/2021	9/6/2019	1.55%	5,728,744	304	12,143	5,818,615
T-Note 2.625 12/15/2021	9128285R7	2,700,000	12/15/2021	7/10/2019	1.80%	2,752,945	349	3,115	2,764,233
T-Note 2.625 12/15/2021	9128285R7	1,500,000	12/15/2021	7/10/2019	1.80%	1,529,414	349	1,731	1,535,685
T-Note 2.625 12/15/2021	9128285R7	6,050,000	12/15/2021	7/10/2019	1.80%	6,168,637	349	6,981	6,193,930
T-Note 2.625 12/15/2021	9128285R7	10,900,000	12/15/2021	7/10/2019	1.80%	11,113,742	349	12,577	11,159,311
T-Note 1.5 1/15/2023	912828Z29	15,000,000	1/15/2023	2/7/2020	1.39%	15,045,703	745	103,329	15,418,350
T-Note 1.5 1/15/2023	912828Z29	15,000,000	1/15/2023	2/7/2020	1.39%	15,045,703	745	103,329	15,418,350
T-Note 0.5 3/15/2023	912828ZD5	10,000,000	3/15/2023	3/16/2020	0.58%	9,977,344	804	14,779	10,081,300
T-Note 0.5 3/15/2023	912828ZD5	20,000,000	3/15/2023	3/16/2020	0.58%	19,954,688	804	29,558	20,162,600
T-Note 0.5 3/15/2023	912828ZD5	250,000	3/15/2023	3/16/2020	0.59%	249,336	804	369	252,033
T-Note 0.5 3/15/2023	912828ZD5	3,410,000	3/15/2023	3/16/2020	0.59%	3,400,942	804	5,040	3,437,723
T-Note 0.5 3/15/2023	912828ZD5	688,000	3/15/2023	3/16/2020	0.59%	686,173	804	1,017	693,593
T-Note 0.5 3/15/2023	912828ZD5	5,765,000	3/15/2023	3/16/2020	0.59%	5,749,687	804	8,520	5,811,869
T-Note 0 8/15/2023	912833LM0	10,500,000	8/15/2023	2/7/2020	1.41%	9,992,745	957	-	10,447,290
T-Note 0 8/15/2023	912833LM0	10,500,000	8/15/2023	2/7/2020	1.41%	9,992,745	957	-	10,447,290

In addition to the totals listed above, there also exists surety bonds in the amount of \$324,809,258 as of September 30, 2020.

Appendix II: Economic Update

U.S. Surpasses 20 Million Confirmed Coronavirus Cases

**New Cases Reported Daily
7-Day Moving Average**



Source: John Hopkins University Coronavirus Resource Center, PFM calculations; as of 12/31/2020.

Fed Reaffirms Commitment to Support the Economy

December

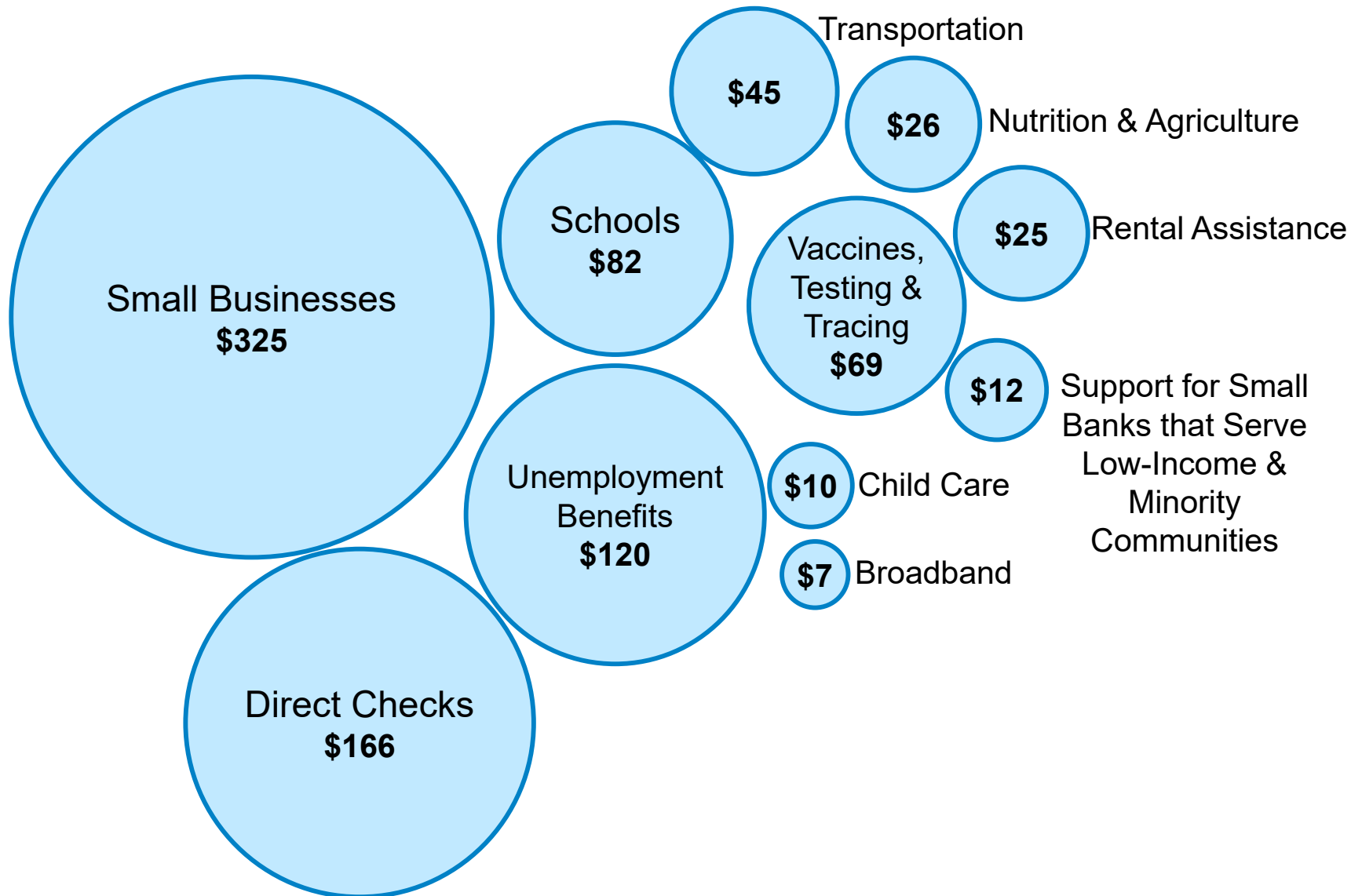
16

- ***Economic activity and employment have continued to recover but remain well below their levels at the beginning of the year...*** 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***. The ongoing public health crisis will continue to weigh on economic activity, employment, and inflation in the near term, and poses ***considerable risks to the economic outlook*** over the medium term.
- 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.***
- 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.

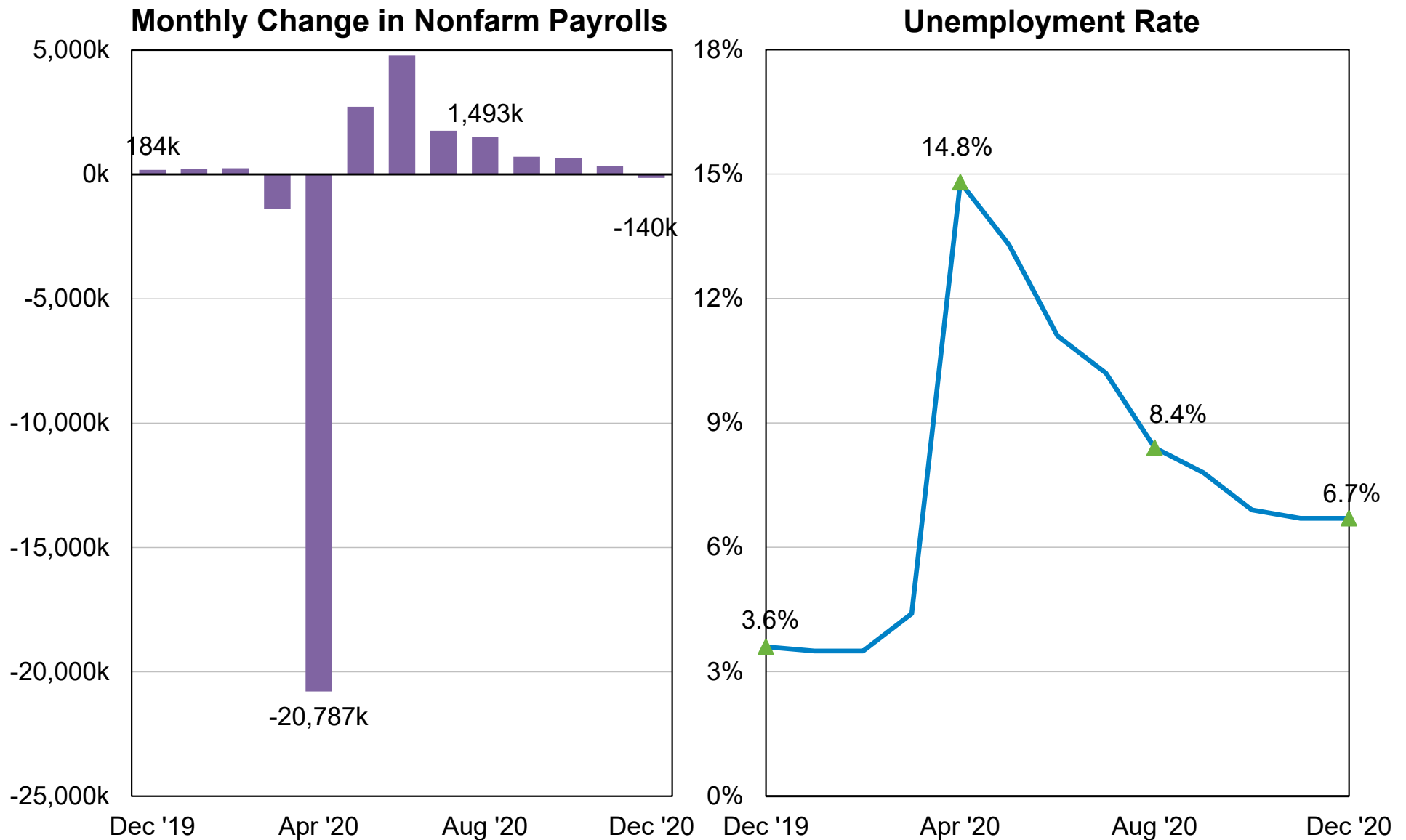
Congress Passes a \$900 Billion Pandemic Relief Package

Emergency Relief Package, in billions



Source: WSJ and Congressional aides, as of 12/21/2020.

Jobs Decline for the First Time Since April

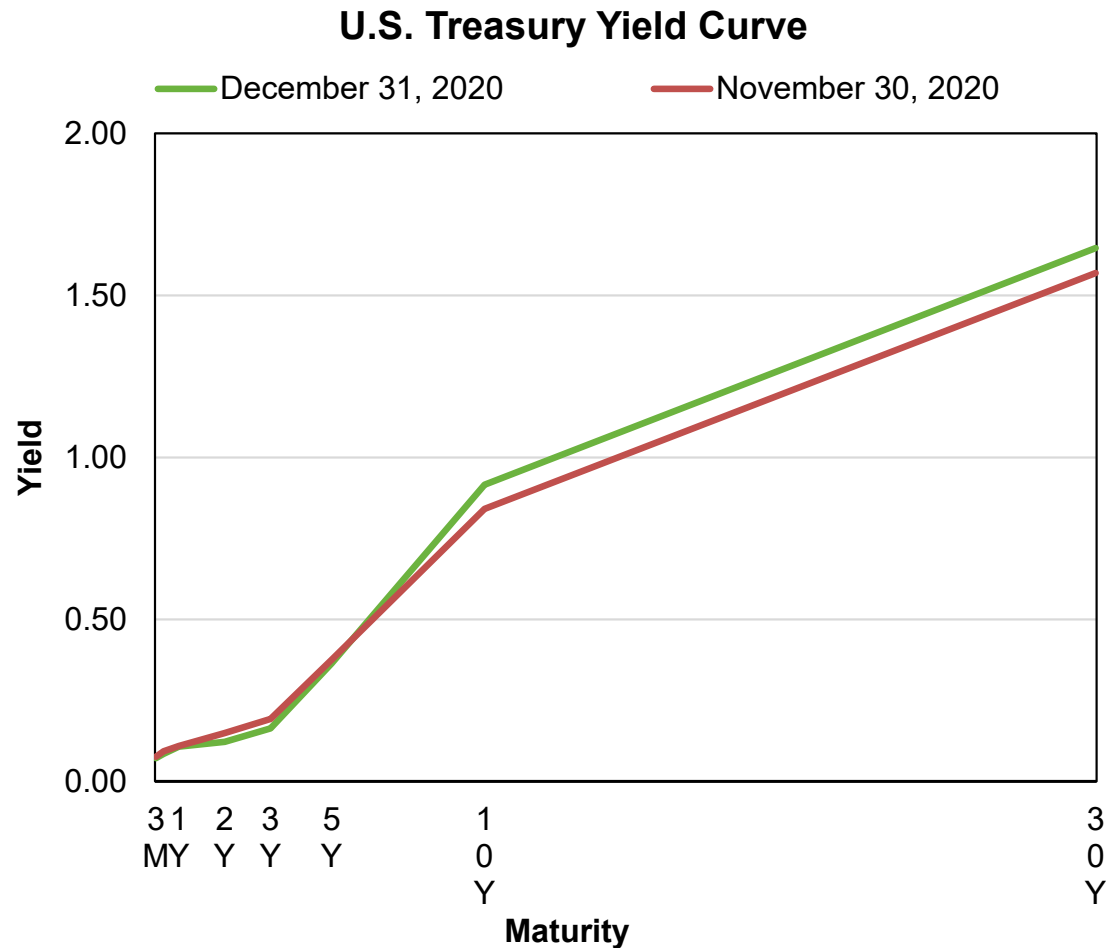


Source: Bloomberg, as of December 31, 2020.

Yield Curve Steepens in December

- U.S. Treasuries advanced modestly across the curve in December, erasing the slight decline from the prior month
- Treasuries traded in a very narrow range for most of December

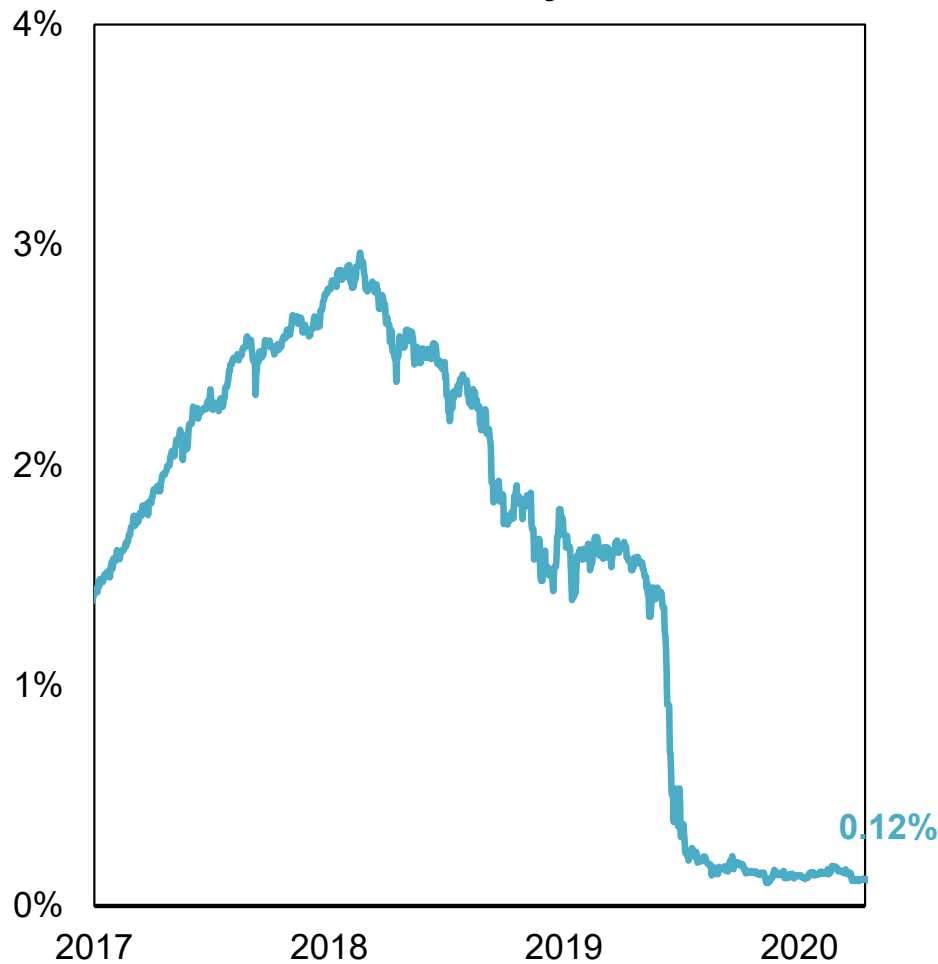
	11/30/2020	12/31/2020	Change
3 month	0.08%	0.07%	0.00%
6 month	0.09%	0.09%	-0.01%
1 year	0.11%	0.11%	0.00%
2 year	0.15%	0.12%	-0.03%
3 year	0.19%	0.16%	-0.03%
5 year	0.38%	0.36%	-0.01%
10 year	0.84%	0.92%	0.08%
30 year	1.57%	1.65%	0.08%



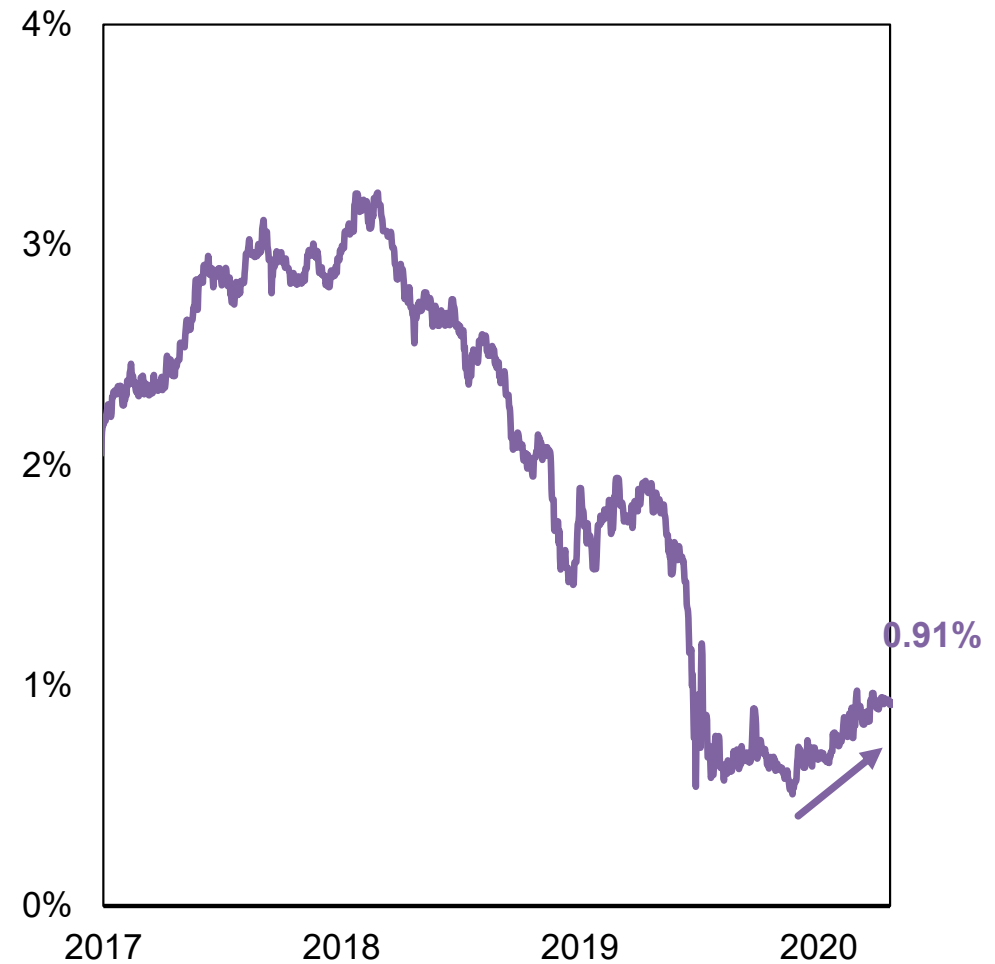
Source: Bloomberg, as of 11/30/2020 and 12/31/2020, as indicated.

Treasury Yields Continue to Trade in a Narrow Range

2-Year Treasury Yield



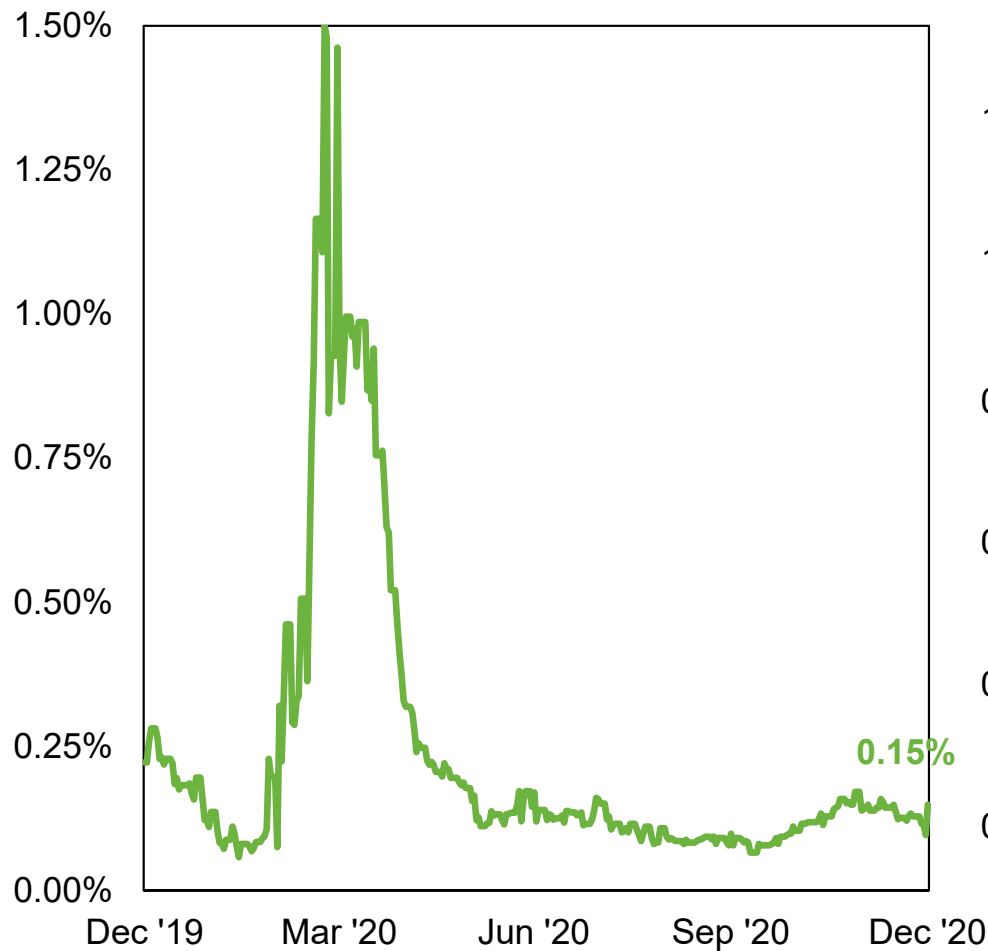
10-Year Treasury Yield



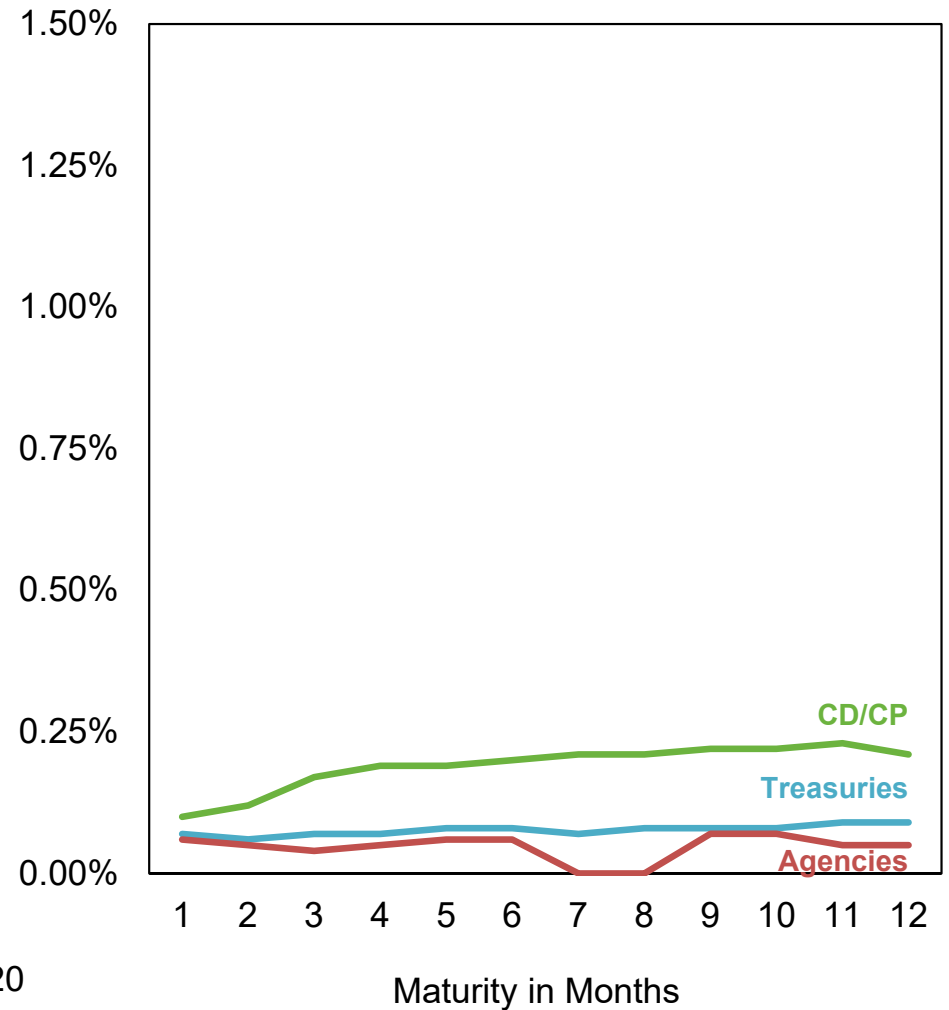
Source: Bloomberg, as of 12/31/2020.

Yield Spreads Remain Near Historic Lows

Yield Spread on 6-month Commercial Paper over T-Bill



Money Market Yield Curves



Source (left): Federal Reserve Bank of St. Louis FRED Database, as of 12/31/2020. Source (right): PFM Trading Desk, as of 12/31/2020.

Fixed Income

Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- Economic conditions during the fourth quarter of 2020 were characterized by the following:
 - Concern around resurgence of global coronavirus cases was met with approval and commencement of a worldwide vaccination implementation initiative.
 - After a contentious presidential election, Joe Biden is set to take office in 2021.
 - Multi-month contested fiscal stimulus efforts came to fruition near year-end as the President signed a second round of aid.
 - Federal Reserve zero interest rate policy expected for the foreseeable future.
 - U.S. GDP growth bounced off the COVID-induced second quarter slowdown of -31.4% to the tune of +33.4%.
 - While the labor market improved from record detraction in the year, the pace of improvement has slowed, as job growth, the unemployment rate, and new jobless claims point to stagnation.

- Changes in U.S. Treasury yields over the quarter took on a tale of two curves. The front-end of the yield curve (maturities less than five years) was essentially unchanged over the quarter, as the Fed's zero interest rate policy anchored short-maturity yields. Meanwhile, yields on maturities beyond five years increased by 10 to 25 basis points (0.10% to 0.25%), resulting in a steeper curve – the spread between the 10 and 2-year Treasury yield reached a 3-year high near year-end.
 - As a result, short to intermediate-term U.S. Treasury index returns were only slightly positive, while longer-duration indexes were notably negative. Despite the steeper curve over the final quarter of 2020, calendar year returns for U.S. Treasuries were firmly positive and strong from a historical perspective.
 - Diversification away from U.S. Treasuries was again additive to performance in the fourth quarter. Following two consecutive quarters of significant spread retracement in the second and third quarters, most sectors continued to inch tighter as investors sought all outlets to additional yield. As a result, most investment-grade fixed income sectors generated positive excess returns relative to similar duration Treasuries.

Fixed Income

Market Overview and Outlook

FIXED INCOME MARKET – ECONOMIC HIGHLIGHTS

- Our strategy for the fourth quarter encompassed the following:
 - Considering the widespread retracement of most spread products back to pre-pandemic levels and the swath of concern regarding global economic conditions, many strategic themes remained consistent from the third quarter: maintain core allocations in most sectors, match benchmark duration extensions, and limit undue credit risk from issuers subject to broader headwinds in the face of global uncertainty.
 - As a result of many sector allocations being maintained over the quarter amid light seasonal supply and in some instances, opportunistic selling, U.S. Treasury allocations generally inched higher. We preferred this natural increase during the fourth quarter as portfolios build up buying power heading into the new year and the expectation for supply to pick back up as 2021 funding cycles commence.
 - After months of consistent supply and attractive cross-sector relative value, the river began to run dry in the Federal Agency sector. Limited new issuance towards year-end slowed new purchases in the sector. However, meaningful additions in prior periods helped boost portfolio returns, as non-callable Agency securities provided positive excess returns relative to similar-duration U.S. Treasury securities in the fourth quarter.
 - Following several consecutive summer months of near single-digit yield spreads, short-term credit (commercial paper) bounced in value during the fourth quarter, as issuers opted to finance longer-term debt at such low borrowing rates and investors turned their focus to extending durations out the curve. As a result, attractive opportunities became available to increase allocations to CP in portfolios and boost interest earnings potential

- As 2020 finds its way to the rearview mirror, the uncertainties of 2021 come into focus. The significant fiscal and central bank intervention to maintain the smooth functioning of the financial markets was critical in 2020; however, the “how” and the “when” of the unwinding of these programs as well as the rollout and efficacy of a global vaccine implementation initiative will most certainly shape 2021’s global economic growth trajectory and recovery progress.
 - Considering the economic uncertainties that remain, we plan on structuring portfolios to have neutral durations relative to their respective benchmarks.

Disclosure

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