

TO: The Mayor and Members of City Council
Jane S. Brautigam, City Manager

FROM: Cheryl Pattelli, CFO

SUBJECT: Investment Performance as of March 31, 2020

Date: April 24, 2020

Section 1 – Background

- This report is for City Council information only and requires no action by City Council.
- The investment of City funds is guided by and this report is submitted in compliance with the City's Investment Ordinance. (Chapter 2-10, *Investment of City Funds*, Boulder Revised Code 1981).
- The investment objectives as specified in the Ordinance are:
 - The primary objective is preservation and protection of capital. This objective reduces the risk to which the portfolio can be subjected. To comply with this objective investments are diversified by type and maturity horizons.
 - The second objective is to maintain adequate liquidity to meet the daily cash needs of the City. The City's Ordinance requires that 5% of the portfolio matures within 30 days.
 - Yield is the third objective. The City strives to maximize return while minimizing the risks of the market.

Section 2 – Market Conditions, the Federal Reserve and the Yield Curve

A global ‘sudden stop’ sent shock waves through markets: The economic backdrop changed beyond recognition during the first quarter as a growing, interconnected world closed down and markets rapidly priced in the expected economic damage. Although the magnitude of market moves was comparable with previous economic shocks, the speed of the reaction was unprecedented. One positive is that the response from central banks and governments has also been rapid, with sizeable stimulus packages enacted. While these measures will do little to arrest the decline in growth given public health measures, they should lay the groundwork for a stronger recovery.

The yield curve stepped lower and steepened: The US Federal Reserve cut their target rate by 150bp and restarted quantitative easing, increasing their balance sheet by over \$1.5 trillion with more to come. This caused the Treasury yield curve to step lower and steepen. The 2-year Treasury yield declined by 132bp and the 10-year declined by 125bp this quarter.

Credit underperformed significantly: With markets experiencing volatility at levels previously seen during the global financial crisis, credit spreads moved significantly higher. Investment grade issuance remained strong as corporations were prepared to issue at higher yields to build liquidity buffers.

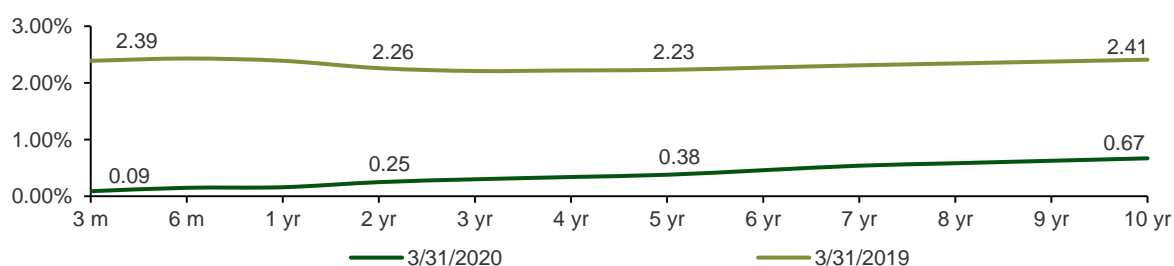
Equity markets experienced record Q1 loss: US equity markets fell sharply, with the S&P 500 Index experiencing its worst ever Q1 loss, falling by close to 20%. Volatility spiked to levels not seen since the global financial crisis.

Oil prices collapsed amid a dual shock: WTI crude oil prices plummeted 66% as lockdown policies potentially cut oil demand by 15%. Compounding this demand shock, Saudi Arabia and Russian talks broke down, resulting in their announcement of production increases in an apparent effort to crush US shale. A sustained period of sub-\$40 oil will lead to a significant number of shale bankruptcies.

Market risks include:

- The recovery takes significantly longer than expected, prolonging the economic damage at a time of policy tool exhaustion.
- US-China relations deteriorate further, due to the coronavirus, leading to further political brinksmanship with global repercussions.
- European policymakers facing a deep recession and already at the limits of their current policy toolkit, turn to more extreme measures to stimulate growth, which could have implications for global bond and asset markets.

Treasury Yield Curve: 03/31/2020 and 03/31/2019 (Source: Bloomberg)

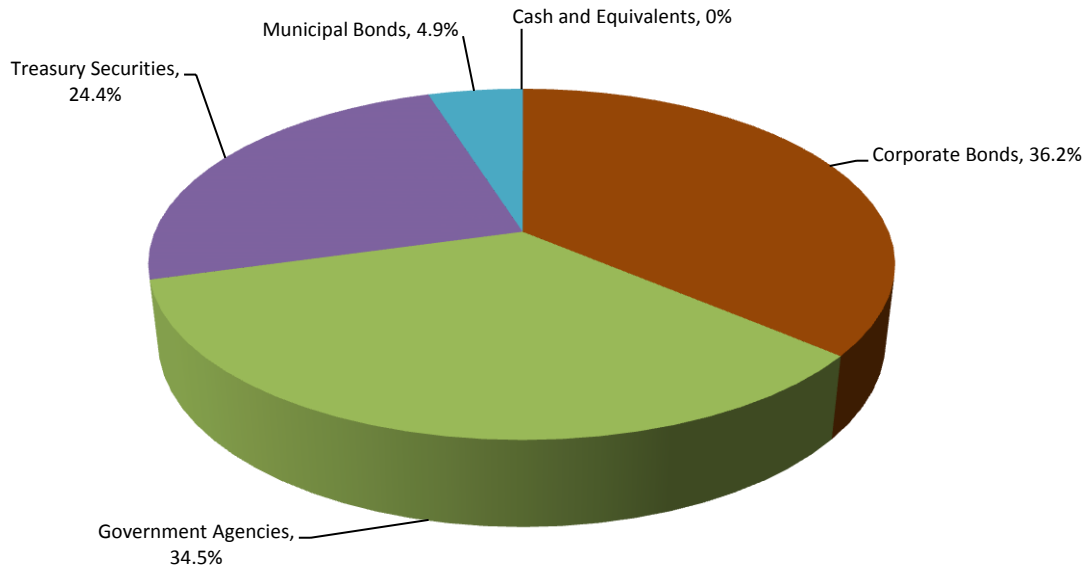


Section 3 – The City’s Portfolios

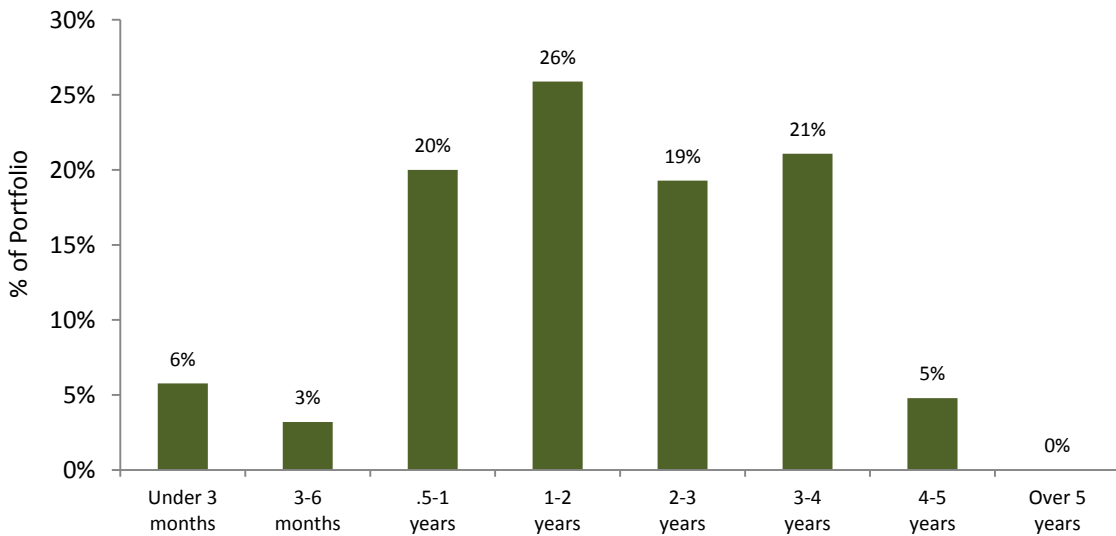
- Portfolio strategies implemented this quarter and the investments held in the portfolios comply with the City’s investment objectives and the Ordinance that specifies allowable investments.
 - The objective of safety is achieved through a well-diversified portfolio invested primarily in US Treasury and Agency securities of various maturities. In March, 2017 the City Council approved amendments to the Investment Policy proposed by finance staff expanding opportunities to further diversify the portfolios. Pursuit of further diversification through the revised policies will progress strategically relative to market conditions. Market risk is managed by maintaining a low weighted average maturity (WAM) in the City’s portfolios. As of March 31, 2020 the WAM of the operating portfolio was 2.03 years while the Ordinance allows for up to a 5-year WAM.
 - The City maintains sufficient liquidity. As of March 31, 2020, 2.4% of the term securities in the operating portfolio, or 8 million par value, will mature within 30 days. Continuing cash balances fund the remaining liquidity requirement.
 - As of March 31, 2020 the gross yield on the operating portfolio was 2.12%. The yield benchmark is currently the six-month trailing average of the yield on the 2-year Treasury note, which was 1.34% as of March 31, 2020. The yield on the operating portfolio as of March 31 exceeded the benchmark yield by 0.78%.
 - For the first quarter 2020, the gross fair value periodic return on the operating portfolio was 1.58%. The 1-3 Treasury Index return for the period was 2.81%. The return on the operating portfolio for the first quarter was 1.23% lower than the 1-3 Treasury Index return.
 - The City’s portfolios do not hold any investments in the following: fossil fuels inclusive of pipeline construction and extraction; firearms or weapons not used in national defense; tobacco companies; and firms related to mass incarceration/private prisons/detention centers.
 - In the first quarter 2020 the City’s investment advisor invested approximately \$51 million in securities for the operating portfolio at a weighted average yield of 1.32%. Investments were made in Treasury bills and notes, Instrumentality securities and corporate bonds. The weighted average maturity at the time of purchases for these investments was 1.4 years. The security purchases were funded by maturing investments and sales of portfolio holdings.
 - The portfolio duration maintains exposure to longer-term interest rates and the portfolio is well diversified to various market sectors which may enhance the portfolio’s return.
 - Investments executed for the bond proceeds portfolio for the quarter had maturities of less than 90 days.
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City of Boulder Operating Portfolio Profile As of March 31, 2020

Asset Allocation - Historical Cost



Final Maturity Distribution - Historical Cost



Summary of Operating Portfolio Characteristics

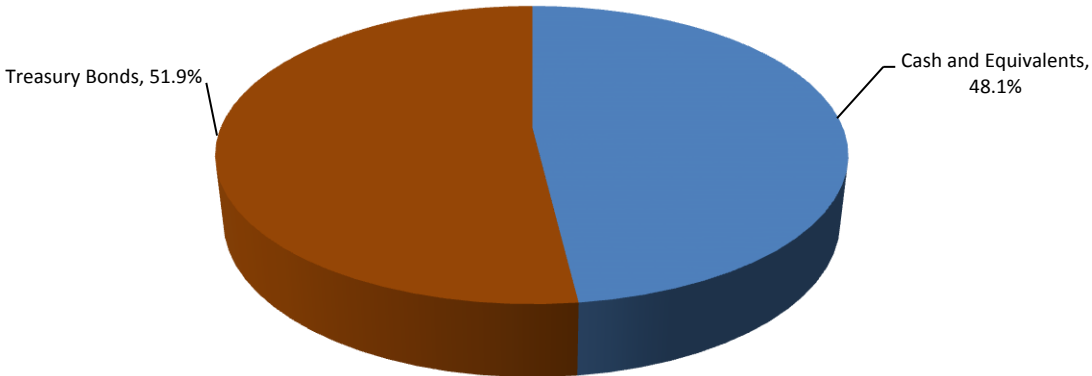
	March 31, 2020	December 31, 2019
Average Final Maturity (years)	2.03	2.04
Modified Duration (years)	1.88	1.90
Average Purchase Yield	2.12%	2.17%
Average Market Yield	0.94%	1.66%
Average Credit Quality (S&P/Moody's)	AA/Aa1	AA+/Aa1
Total Market Value (\$)	334,203,735	337,721,482

Securities Held as of March 31, 2020

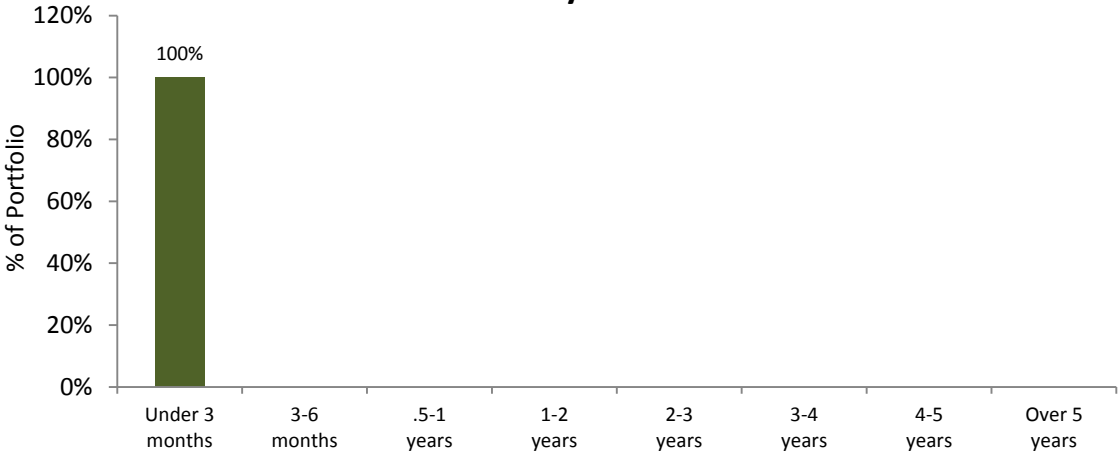
Issuer	Historical Cost	% of Portfolio
US Treasury	80,145,491	24.44%
Federal Home Loan Bank	46,824,263	14.28%
Federal National Mortgage Association	31,249,910	9.53%
Federal Farm Credit Bank	20,335,318	6.20%
Federal Home Loan Mortgage Corp	14,697,455	4.48%
Microsoft Corp	11,736,902	3.58%
State Street Corp	10,832,747	3.30%
American Honda Finance Corp	10,545,614	3.22%
Apple	10,457,935	3.19%
Toyota Motor Credit Corp	10,317,940	3.15%
Wal-Mart	10,033,900	3.06%
City of New York, New York	8,478,013	2.59%
Cisco Systems Inc	7,971,070	2.43%
Caterpillar Financial Services Corp	7,714,253	2.35%
Metro Oregon	7,550,720	2.30%
Coca-Cola Company	7,007,940	2.14%
TWDC Enterprises (Disney)	5,722,720	1.75%
Johnson & Johnson	4,401,352	1.34%
Intel Corp	3,634,578	1.11%
Bank of New York Mellon Corp	2,912,725	0.89%
Oracle Corp	2,895,060	0.88%
United Parcel Service	2,519,450	0.77%
PepsiCo Inc	2,472,525	0.75%
Chubb INA Holdings Inc	2,462,300	0.75%
IBM Credit LLC	2,461,975	0.75%
Praxair Inc	2,456,740	0.75%
Cash	73,739	0.02%
Total Historical Cost	327,912,633	100.00%

City of Boulder Bond Proceeds Portfolio Profile As of March, 2020

Asset Allocation - Historical Cost



Final Maturity Distribution



Summary of Bond Proceeds Portfolio Characteristics

	March 31, 2020	December 31, 2019
Modified Duration (years)	0.04	0.03
Average Final Maturity (years)	0.04	0.03
Average Purchase Yield	0.80	1.58
Average Credit Quality (S&P/Moody's)	AA+/Aaa	AA+/Aaa
Total Market Value (\$)	2,561,749	2,563,125

Securities Held as of March 31, 2020

Issuer	Historical Cost	% of Portfolio
US Treasury	1,329,377	51.93%
Cash	1,230,377	48.07%
Total Historical Cost	2,559,754	100.00%

Section 4 - The City's Socially Responsible Investment (SRI) Initiative

The City's investment framework includes considering socially responsible investment factors. The City's SRI program intends to allow the City to better achieve its sustainability and resilience goals, remain financially strong and better align community values. The program incorporates the strategies described below.

Exclusionary Screening. Exclusionary screening, or negative screening, is the process of excluding from investment certain sectors or companies involved in activities which are unacceptable or controversial. Investments for the City's portfolio exclude the following sectors:

- Fossil fuels inclusive of pipeline construction and extraction
- Firearms or weapons not used in national defense
- Tobacco companies
- Firms related to mass incarceration/private prisons/detention center

Included in these negative screens is the prohibition of financial firms associated with pipeline construction. The City has further applied this limitation on financial firms to the group of broker/dealers through which investments may be transacted and the City has taken steps to remove any money market funds or cash pools that invest in the above sectors.

Positive Screening and Impact Investing. Positive screening and impact investing consider the impact that an investment is making. Implementation of this strategy is illustrated by the investment in a municipal bond issued for the construction and management of affordable housing. Other potential impact investing opportunities include investing in securities issued by the World Bank, which is an approved asset class per the City's investment policy.

Environmental, Social and Governance (ESG) Integration. The City's goal is to bring ESG integration to the heart of the investment decision process. The City monitors the ESG ratings provided by MSCI for the corporate bonds in the portfolio. The MSCI ratings are provided on a scale of 1 to 10 with ten being the highest. At this time, the weighted average Industry-Adjusted Score from MSCI for the corporate bond holdings is 6.6 which maps to a letter rated of "A" on a scale of triple-C to triple-A.

The City also monitors the unadjusted Pillar Scores from MSCI for the corporate holdings. At this time, the weighted average Pillar Scores for the corporate bond holdings are as follows:

- MSCI Environmental Pillar Score: 7.0
- MSCI Social Pillar Score: 4.8
- MSCI Governance Pillar Score: 5.3

The City's ESG model can be refined to reflect the issues that matter most to the citizens of Boulder by applying customized weights to the MSCI Pillar Scores, thus creating ESG scores that better reflect the City's values, goals and policies.

Active Ownership/Corporate Engagement. Corporate engagement involves discussions with issuers about ESG risks and opportunities. The City is partnering with Insight Investment to seek the benefits of this goal. Insight requests and participates in meetings with management to understand key risks and potentially influence outcomes. Company engagement is critical to Insight's credit process and their analysts meet with issuers to address ESG factors as well as other credit-related concerns or questions.

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