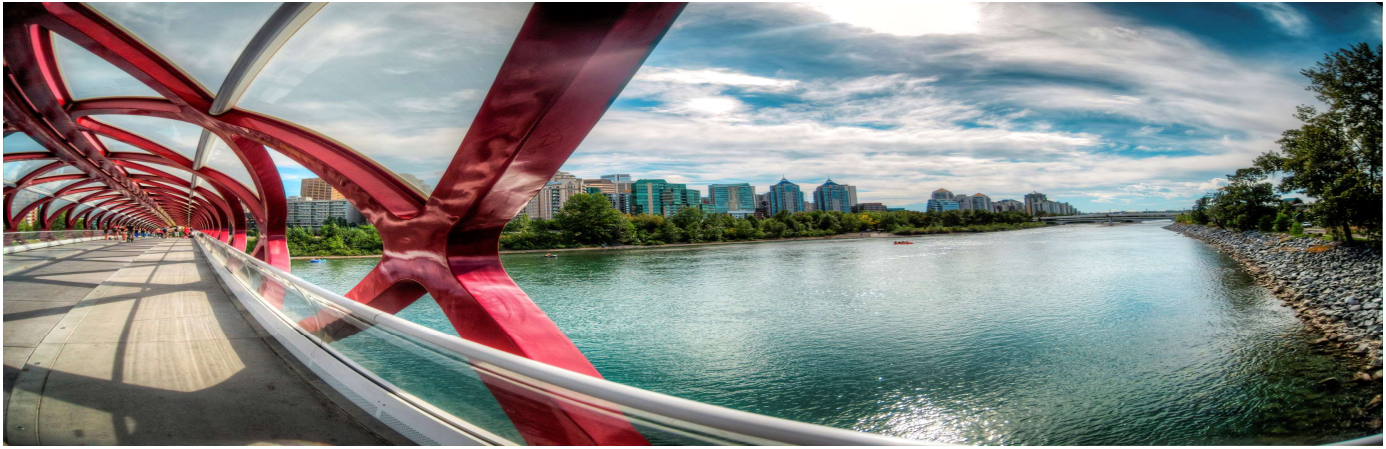




# 2020 Annual Investment Report

Chief Financial Officer's Department



# Table of Contents

<b>Capital Market Review</b>	<b>3</b>
<b>Investment Objectives</b>	<b>4</b>
<b>Sources of Investments</b>	<b>4</b>
<b>Summary of Investments</b>	<b>5</b>
<b>Investment Performance</b>	<b>6</b>
<b>Short Term Liquidity</b>	<b>8</b>
<b>Fixed Income</b>	<b>9</b>
<b>Equity</b>	<b>10</b>
<b>Infrastructure</b>	<b>11</b>
<b>Currency Overlay</b>	<b>11</b>
<b>Economic &amp; Capital Market Outlook</b>	<b>12</b>
<b>Investment Governance</b>	<b>13</b>
<b>Investment Advisory Committee Members</b>	<b>15</b>
<b>Definitions/Glossary</b>	<b>16</b>
<b>Reference Documents</b>	<b>17</b>

# Capital Market Review

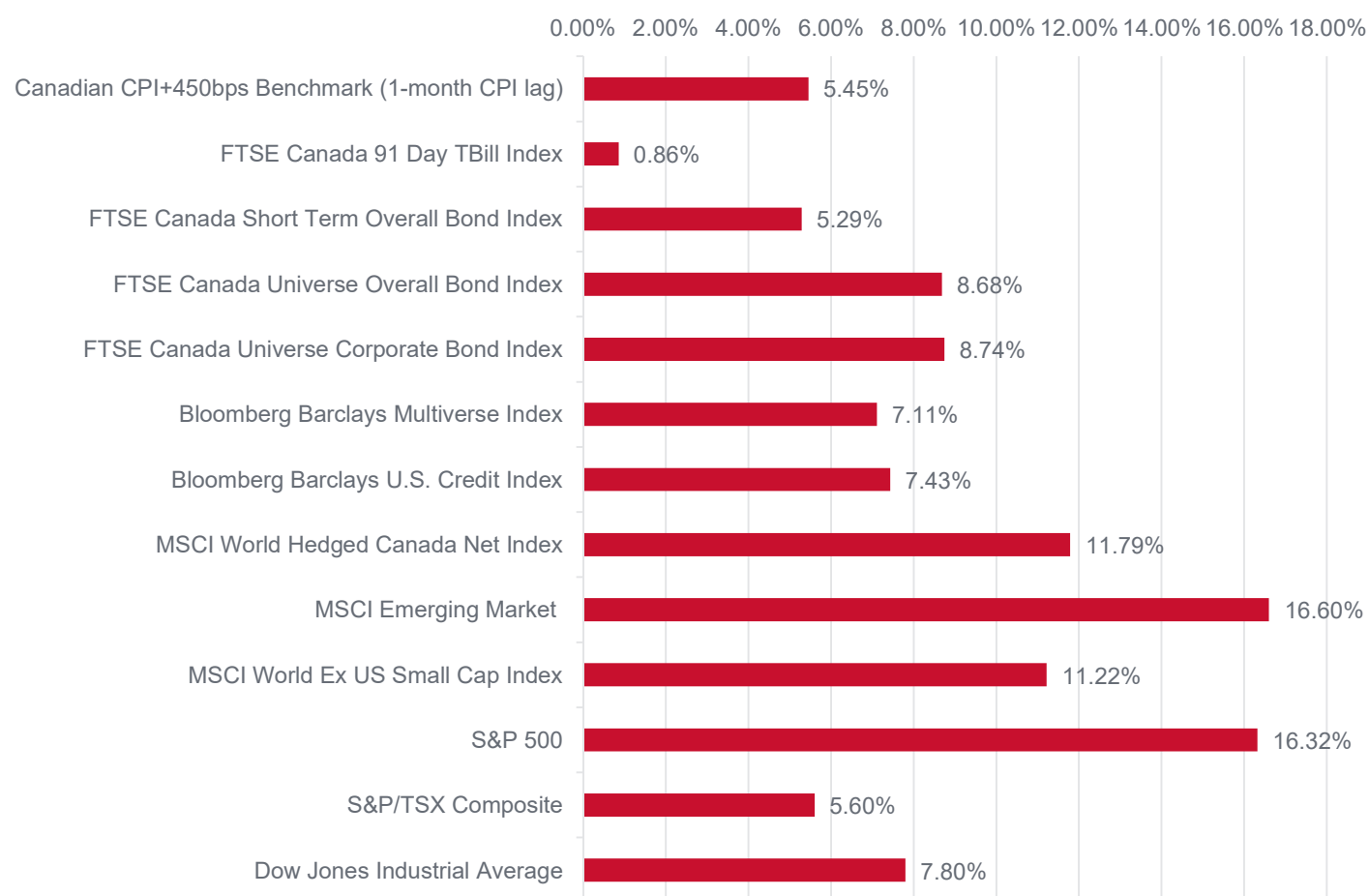
Capital markets had a turbulent and volatile year in 2020 as COVID-19 infections spread across the globe and many countries went into lockdowns to protect the health and safety of their citizens. The S&P 500 index dipped 33.8 per cent in March 2020 but markets rebounded in the second half as governments and central banks provided sizable stimulus relief along with relaxed lockdown measures. Global financial markets posted positive returns in Q4 2020, responding optimistically to the news of COVID-19 vaccine breakthroughs, the long-awaited Brexit completion, monetary and fiscal stimulus, and the U.S. election results.

As showcased in Figure 1.0, equities significantly outperformed fixed income assets, with the MSCI World Net Index returning 11.8 per cent and the FTSE Canada Universe Overall Bond Index returning 8.7 per cent. The bond market saw an increase in yields in Q4 across most maturities.

Crude oil prices increased more than 12 per cent in Q4 partly due to optimism over COVID vaccines and continued tightening of oil production by OPEC.

To help the economy recover from the COVID pandemic, the Federal Reserve kept rates close to zero. The Bank of Canada also reduced its overnight rate to 25 basis points (bps) to aid economic recovery and is expected to continue with its quantitative easing to support the Canadian financial market and keep yields low.

Figure 1.0 – 2020 Capital Market Returns (CAD)



# Investment Objectives

The City has three core investment objectives that drive all strategic investment decisions:

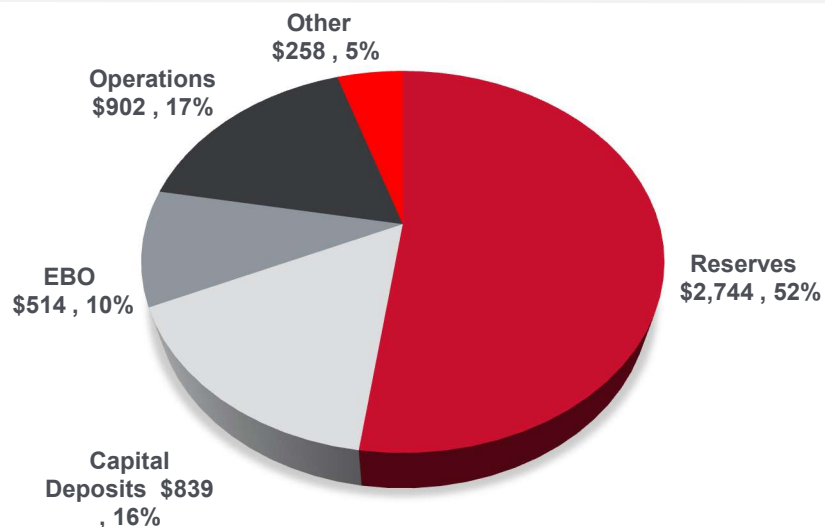
1. **Preservation of Capital**
  - a. Primary objective for total investment portfolio
2. **Risk Mitigation**
  - a. Diversification of asset classes and security holdings by sector, geography, and style
  - b. Policy constraints and limits
3. **Investment Returns**
  - a. Maximization of returns, relative to risk
  - b. Key considerations related to liquidity and investment time horizon requirements

# Sources of Investments

The City of Calgary invests funds that stem from the following sources:

- **Reserves:** operating, capital and sustainment
- **Capital Deposits:** off-site levies and government grants
- **Funded Employee Benefit Obligations (EBO)**
- **General Operations**
- **Other:** trusts and affiliated entities

Figure 2.0 – 2020 Sources of Investments (\$ millions)



The above funds are invested in a diversified portfolio of financial assets consisting of money market securities, short- and long-term government and corporate bonds, private credit, commercial mortgages, global equities, and infrastructure investments. The allocation of source funds is executed in accordance with the investment objectives of The City.

# Summary of Investments

As at December 31, 2020 the market value of The City's total investment portfolio was \$5.3 billion, up \$0.7 billion (\$0.3 billion – externally managed investment performance, \$0.4 – net contributions) from \$4.6 billion in 2019.

Figure 3.1 – Market Value of Assets Under Management (AUM) as at December 31, 2020 (\$ millions)

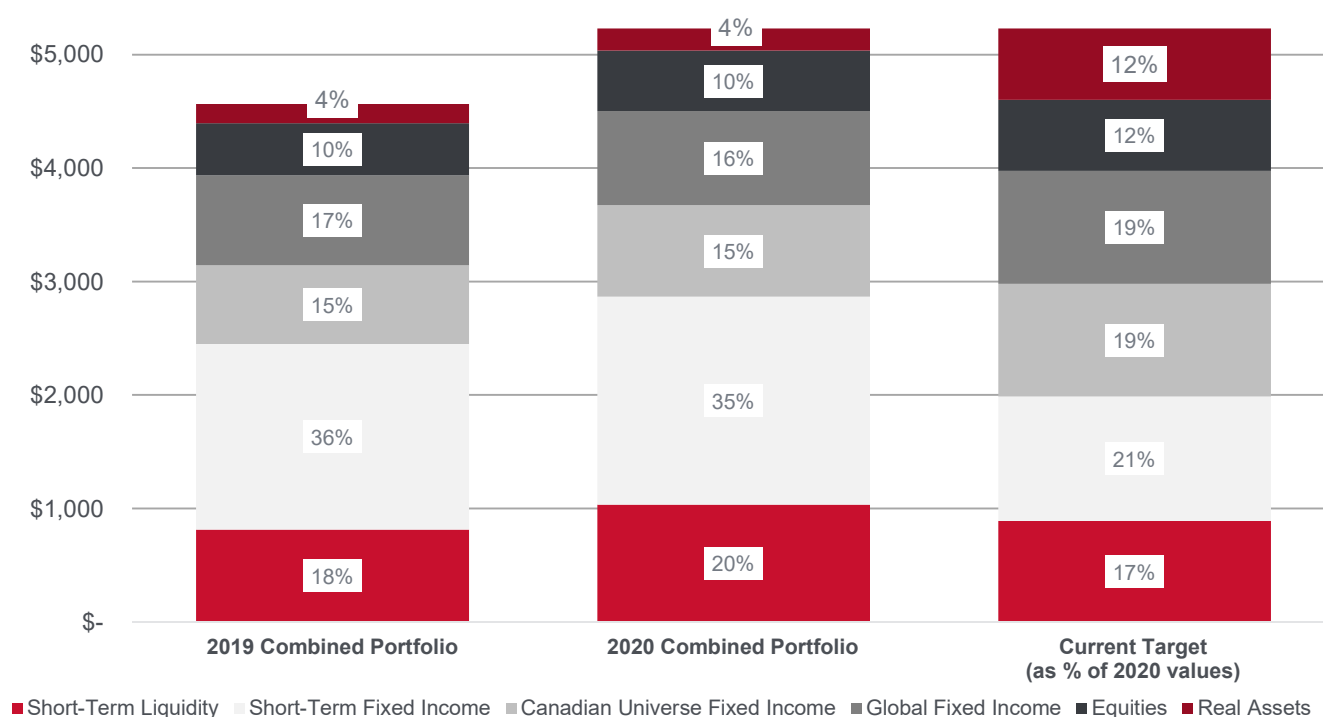
	2020	2019
<b>Internal Management</b>	<b>1,034</b>	<b>815</b>
Short-Term Liquidity*	1,034	815
<b>External Management</b>	<b>4,222</b>	<b>3,769</b>
Short-Term Fixed Income	1,833	1,634
Canadian Universe/Global Fixed Income	1,635	1,487
Equities	533	459
Real Assets	195	171
FX Overlay	26	18
<b>Total Assets Under Management*</b>	<b>5,256</b>	<b>4,584</b>

\*Short-Term Liquidity balance is inclusive of \$159 million outstanding commercial paper.

The City's investment structure consists of internally and externally managed portfolios. Internal portfolios are managed to provide short-term liquidity for City funds, and as such, are invested primarily in money market securities, term deposits and short-term bonds.

Funds that are suitable for longer-term investment horizons are allocated to the externally managed Short-term Bond, Long-term Bond, Equity, and Infrastructure (Real Assets) portfolios.

Figure 4.0 – Asset Mix as at December 31, 2020 (\$ millions)



## Investment Performance

In 2020, The City of Calgary's total portfolio (including internally and externally managed portfolios), returned 6.5 per cent after fees on a market value basis. The 2020 net portfolio return outperformed the benchmark by 4bps, and the annual inflation rate for Canada of 0.73 per cent.

Figure 5.1 – Portfolio versus Benchmark Return as at December 31, 2020

Investment Performance	2020 Return		4-Year Annualized Return	
	Portfolio	Benchmark	Portfolio	Benchmark
Infrastructure	6.4%	-0.6%	7.5%	6.4%
Equity	6.0%	13.9%	8.2%	10.5%
Private Credit	8.8%	8.6%		
Long-Term Bond (Global)	7.4%	7.4%		
Long-Term Bond (Universe)	9.6%	8.7%	5.1%	4.8%
Short-Term Bond	5.9%	5.2%	3.1%	2.9%
Total External Portfolio	7.0%	7.1%	4.9%	4.8%
Short-Term Liquidity	1.8%	0.9%	1.9%	1.1%
Total Portfolio	6.5%	6.5%	4.2%	4.0%

Note: 4-year data was not available for Global Long-Term bonds, Private Credit asset classes as mandates within the classification have inception dates in 2019.

## Investment Policy Limits & Ranges

Figure 5.2 – Investment Policy Limits, Ranges and allocation as at December 31, 2020

Internal Investment Policy <sup>1</sup>		
Constraint	Ranges	Current Allocation
Short Term Liquidity	7 - 27%	19.7%
Short Term Fixed Income	16 - 26%	34.9%
Canadian Universe Fixed Income	14 - 24%	15.4%
Global Fixed Income	14 - 24%	15.8%
Real Assets	10 - 14%	3.7%
Equities	7 - 17%	10.1%

<sup>1</sup> Recommended constraints per Funds Policy approved by Investment Advisory committee (Effective July 1, 2020).

The total portfolio is transitioning to the new asset mix and allocations are being made to new mandates out of Short term fixed income. Once portfolio transition is complete, actual allocations will be in within ranges outlined in the investment policy statement.

# Performance Measurement Benchmarks

The investment performance of all funds is reported to the Investment Advisory Committee on a quarterly basis and presented annually to The City's Audit Committee. Investment benchmarks are used for comparison purposes to assess the actual performance of The City's investment managers versus their respective performance benchmarks. Investment managers are expected to generate higher returns than the benchmark measure over a business cycle.

## Short Term Fixed Income Portfolio

- FTSE TMX Canada Short Term Bond Index (Addenda, Connor, Clark & Lunn (CC&L), Phillips, Hager & North (PH&N), Sun Life)
- ICE BofAML US Treasury Bills 0-3 Months Index (BlackRock)

## Canadian Universe Fixed Income Portfolio

- FTSE TMX Canada Universe Bond Index (BlackRock, PH&N, CC&L)

## Global Fixed Income Portfolio

- Bloomberg Barclays US Credit Index (PIMCO)
- Bloomberg Barclays Capital Multiverse Index Unhedged (\$ CAD) (Manulife)
- Bloomberg Barclays Global Aggregate Bond Index (BlackRock)
- FTSE TMX Canada Universe Corporate Bond Index (Sun Life)
- S&P/LSTA Leveraged Loan Index (LLI) + 200 bps (Crestline)
- S&P European Leveraged Loan Index + 200 bps (Bridgepoint)

## Equity Portfolio

- MSCI ACWI ex-US (CC&L)
- S&P 500 (Vanguard VOO)
- MSCI EM (Ashmore)
- MSCI World Small Cap (Wasatch)
- MSCI World for Global Low Volatility Equity (TDAM)

## Infrastructure Portfolio

- CPI + 450 bps (Northleaf)
- Dow Jones Brookfield Global Infrastructure Net Comp Index (Brookfield)

## Investment Income

In 2020, The City of Calgary's total portfolio generated \$165.4 million of investment income before allocations and fees. Investment income is based on realized gains/losses, interest and dividends and excludes unrealized gains/losses.

Annual Investment Income (\$ '000s) as at December 31	2019	2020
Allocations to Self-Supporting Business Units and Capital Deposits	43,097	51,954
Transfers to Reserves from Operations	41,019	46,991
Expenditures (net of receivables)	6,957	11,152
General Investment Income	120,389	57,622**
<b>Corporate Total Investment Income</b>	<b>211,462</b>	<b>167,720</b>

\*\*In 2020, overall investment portfolio generated general investment income of \$57.6 million versus budgeted income target of \$36 million and excess income of \$21.6 million was allocated to the Established Area Growth Change Strategy Reserve. Fidelity equity mandate was liquidated in 2019 and it led to realization of previously unrealized gains of approximately \$60 million, resulting in higher investment income in 2019 versus 2020.

# Short Term Liquidity

The Short Term Liquidity portfolio is invested in a combination of corporate and bank paper, term deposits, and short-term government and corporate bonds. All investments in the Short Term Liquidity portfolio mature in less than two years. 2020 overnight cash balances were significantly higher than usual due to better bank rates compared to high credit quality short term instruments available in the market.

**Manager:** The City of Calgary, Treasury

**Mandate:** To generate investment income while preserving capital and providing liquidity for the cash flow requirements of all City funds.

## Cash Flow Management Strategy

Forecasting of short and long-term cash flows is a critical input in the investment management process. In order to meet The City’s investment objectives, the cash flow forecast is utilized for liquidity management purposes and investment decision making. The cash management strategy is largely influenced by the interest rate environment. Treasury continuously assesses the benefits of holding overnight balances with the bank against returns available through short-term investment vehicles, while also taking into account liquidity requirements. With high overnight cash balances, The City is able to access the top tier overnight interest rate offered by the banks, while also maintaining certainty of cash availability.

## Short Term Liquidity Portfolio Returns

The internally managed portfolio returned 1.8 per cent in 2020, outperforming the benchmark return of 0.9 per cent. This is in line with the annualized 4-year return of 1.9 per cent.

The excess return achieved by the internal portfolio is largely attributed to a longer term to maturity versus benchmark, credit exposure, and the illiquidity premium received on the term deposits held.

Figure 6.2 – 2020 Annual Portfolio Return vs Benchmark\*  
(\* Performance shown in figure 6.2 excludes return on cash; realized return with cash is 1.3 per cent)

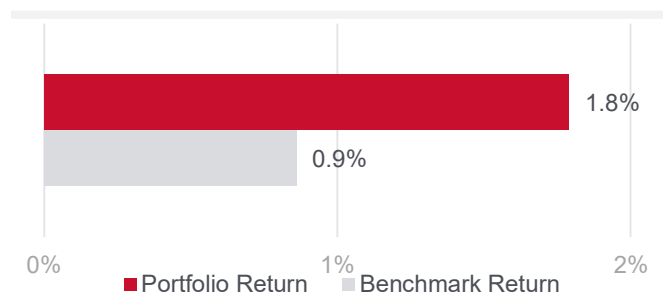


Figure 6.3 – Portfolio Asset Type as at December 31, 2020

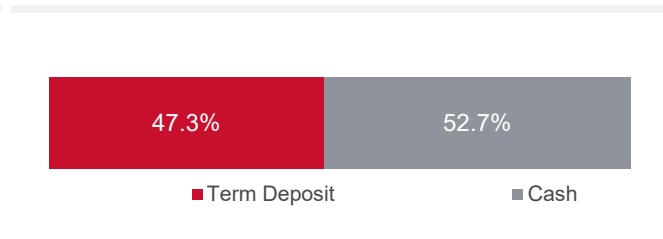


Figure 6.4 – Credit Quality of Assets in Portfolio as at December 31, 2020

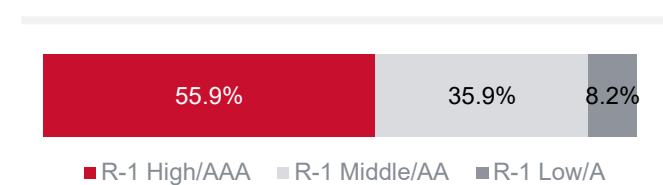
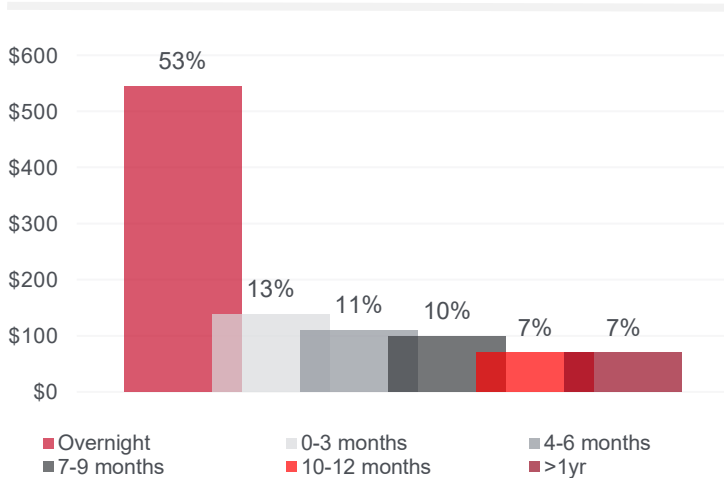


Figure 6.1 – Maturity Ladder as at December 31, 2020





# Fixed Income

Global Long Term bonds returned 7.4 per cent, slightly exceeding the benchmark return by 1 basis point. Canadian Universe & Short Term bonds beat their benchmarks, returning 9.6 per cent and 5.9 per cent respectively (Figure 7.1). Private Credit returned 8.8 per cent and outperformed the benchmark return by 23 bps. Portfolio saw gains from price appreciation as yields fell and credit spread compression.

## Short Term Bond Portfolio

**Mandate:** Investment in a diversified portfolio of short-term fixed income securities with an average term to maturity of three to five years. This portfolio includes commercial mortgage mandates.

Figure 7.1 – 2020 Annual Portfolio Return vs Benchmark

Short-Term Bond Portfolio			
Manager	AUM (millions)	Portfolio Return	Benchmark Return
<b>Total Short Term Bonds</b>	<b>1,833.2</b>	<b>5.9%</b>	<b>5.2%</b>
Addenda	121.7	5.8%	5.3%
BlackRock	28.3	-0.2%	-1.2%
Connor Clark & Lunn	667.7	6.0%	5.3%
Phillips, Hager & North	542.8	6.4%	5.3%
Phillips, Hager & North - MPT	361.7	5.6%	5.3%
Sun Life	111.0	7.3%	5.3%

## Long Term Bond Portfolio

**Mandate:** Investment in a diversified portfolio of fixed income securities with an average term to maturity of seven to ten years. This portfolio includes private credit mandates (3-year terms; longer lock-up period).

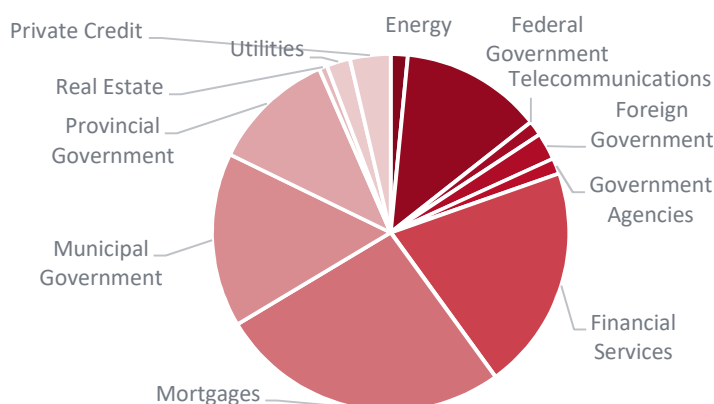
### Private Credit Portfolio Average Credit Ratings<sup>1</sup>:

Crestline: Ba/B  
Bridgepoint: B/B-  
Sun Life: A

<sup>1</sup> Estimated average portfolio credit rating

Long-Term Bond Portfolio			
Manager	AUM (millions)	Portfolio Return	Benchmark Return
<b>Total Universe</b>	<b>690.1</b>	<b>9.6%</b>	<b>8.7%</b>
Phillips, Hager & North	259.8	10.4%	8.7%
Connor Clark & Lunn	255.0	9.6%	8.7%
BlackRock	175.3	8.6%	8.7%
<b>Total Global</b>	<b>706.7</b>	<b>7.4%</b>	<b>7.4%</b>
PIMCO	402.3	7.6%	7.4%
Manulife	166.7	8.3%	7.1%
BlackRock FIGO	137.7	5.6%	7.3%
<b>Total Private Debt</b>	<b>238.1</b>	<b>8.8%</b>	<b>8.6%</b>
Sun Life	167.0	8.7%	8.7%
Crestline	35.9	7.5%	3.3%
Bridgepoint (former EQT)	35.2	12.4%	11.6%

Figure 7.2 – Industry Exposure of Top 20 Fixed Income Names by Market Value



Note: All figures reflect values as at December 31, 2020 unless otherwise specified

### Geographic Exposure – Top Five (\$millions)

1. Canada	2,605.0
2. United States	737.0
3. Europe	30.8
4. Japan	12.1
5. United Kingdom	11.6

### Name Exposure – Top Five (\$millions)

1. Province of Ontario	305.5
2. Government of Canada	227.3
3. Province of Quebec	120.0
4. Royal Bank of Canada	103.3
5. Bank of Montreal	91.1

# Equity

The City's Total Equity portfolio generated returns of 6.0 per cent versus the benchmark return of 13.9 per cent in (Figure 8.1). Most of the strategies either exceeded their benchmark return or were not too far behind it with the exception of TDAM's Global Low Volatility strategy. TDAM accounted for 23 per cent of the total investment in equities at the end of Q4 2020. This strategy underperformed its benchmark due to a large underweight in consumer discretionary and information technology sectors which posted very positive returns in 2020. This mandate was terminated in March 2021 as it did not fit in the revised equity structure implemented in 2019-20. The most significant driver of underperformance for Ashmore was the allocation to Chinese equities which detracted 463 bps vs benchmark.

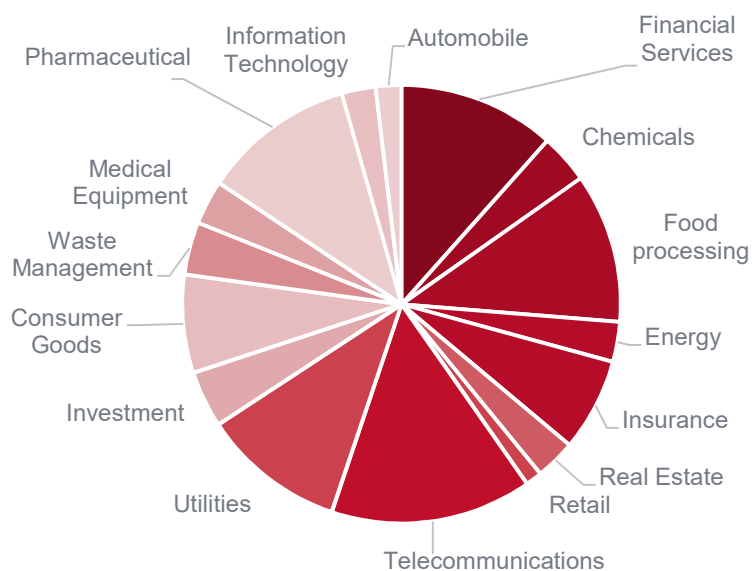
## Equity Portfolio

**Mandate:** Investment in a diversified portfolio of Global equities located in developed and emerging markets to achieve long-term capital appreciation and inflation protection.

Figure 8.1 – 2020 Annual Portfolio Return vs Benchmark

Equity Portfolio			
Manager	AUM (millions)	Portfolio Return	Benchmark Return
<b>Total Equity Portfolio</b>	<b>533.0</b>	<b>6.0%</b>	<b>13.9%</b>
Ashmore EM	87.0	12.2%	16.6%
Connor Clark & Lunn Intl.	127.0	12.0%	9.2%
TD Asset Management Global	121.5	-8.7%	13.9%
Vanguard VOO U.S.	115.8	16.3%	16.3%
Wasatch	81.8	22.8%	18.6%

Figure 8.2 – Industry Exposure of Top 20 Equity Names by Market Value



### Geographic Exposure – Top Five (\$millions)

1. United States	95.2
2. Japan	23.6
3. Canada	21.4
4. Europe	13.7
5. Switzerland	12.5

### Name Exposure – Top Five (\$millions)

1. Taiwan Semiconductor	11.1
2. Samsung Electronics	8.9
3. Alibaba Group	8.3
4. Apple Inc	7.9
5. Microsoft Corp	7.3

Note: All figures reflect values as at December 31, 2020 unless otherwise specified

## Infrastructure

As of December 31, 2020, Northleaf had called over 87 per cent of The City's \$125 million committed capital and generated positive returns of 12.8 per cent, exceeding the benchmark return of 5.5 per cent in 2020. Brookfield exceeded its benchmark return of -11.1 per cent but ended the year with a negative return of -4.7 per cent. COVID lockdowns adversely impacted the volume-linked assets in Brookfield's mandate.

Figure 9.0 – 2020 Annual Portfolio Return vs Benchmark

**Mandate:** Investment in core infrastructure assets to provide inflation protection and diversification in risk-seeking assets.

Infrastructure Portfolio			
Manager	AUM (millions)	Portfolio Return	Benchmark Return
<b>Total Infrastructure</b>	<b>194.5</b>	<b>6.4%</b>	<b>-0.6%</b>
Brookfield IM	62.0	-4.7%	-11.1%
Northleaf Capital Partners	132.5	12.8%	5.5%

## Currency Overlay

The notional value to which BNP Paribas AM manages the portfolio is based on the foreign currency exposures of The City's underlying portfolio, excluding all non-CAD exposures that represent less than one per cent of the NAV of the portfolio. BNPP AM reviews net foreign currency exposures for The City's portfolio on a monthly basis, and at their discretion, implements a hedge of between 0 and 100 per cent for each underlying currency exposure. The portfolio outperformed the prior 90% passive hedge benchmark by 97 bps.

**Manager:** BNP Paribas Asset Management

**Mandate:** To reduce the occurrence of negative returns due to foreign currency exposure in externally managed accounts.

**Benchmark:** Zero Benchmark (passive)

Figure 10.0 – 2020 Annual Portfolio Return vs Benchmark

% Return	Q4 2020	YTD (%)
<b>Portfolio</b>	1.2	0.8
<b>Benchmark</b>	0.0	0.0
<b>Excess Return</b>	1.2	0.8

Portfolio Currency Exposures (CAD \$ millions)					
As Of Date	31-Mar-21		31-Dec-20		
Currency	Market Value	% Exposure	Market Value	% Exposure	% Average Hedge Ratio
CAD	149.0	12%	140.4	16%	
USD	792.4	66%	614.6	68%	11.0
AUD	29.2	2%	24.5	3%	72.9
EUR	102.2	8%	75.3	8%	49.6
JPY	40.7	3%	17.3	2%	41.3
CHF	16.5	1%	11.9	1%	63.5
GBP	23.1	2%	16.5	2%	30.6
HKD	37.1	3%	0.0	0%	
KRW	14.2	1%	0.0	0%	
<b>Total Notional Value</b>	<b>1204.4</b>	<b>100%</b>	<b>900.4</b>	<b>100%</b>	

## 2021 Economic & Capital Market Outlook

The global economy is forecasted by Capital Economics to grow by 6.8 per cent in 2021 following a contraction of 3.9 per cent last year. The economic recovery is expected to be rapid throughout most of the world with emerging Asia leading the way and advanced economies bouncing back strong. The recovery will be driven by a number of factors, including the expansion of vaccination efforts, loosening of lockdowns, resumption of travel, increased business investment and consumer spending. World trade should grow by more than 8 per cent, recouping much of what was lost in 2020 (-9.6%). Debt levels are at record highs in many countries and will continue to increase as governments continue to provide ample stimulus and corporations take advantage of low borrowing rates. Household debt levels have been reduced in many developed economies as consumers spent less in 2020 and received generous government benefits. Central banks throughout all major economies are expected to hold off on raising their policy interest rates until 2022 at the earliest, more likely 2023 (or later). This will be possible because inflation rates remain subdued globally. Current central bank policy rates are as follows: USA (0-0.25%); Canada (0.25%); Eurozone (-0.50%); Japan (-0.10%); UK (0.10%).

The Canadian economy is forecasted to expand by 5.3 per cent in 2021 following the worst year on record in which the country posted gross domestic product (GDP) growth of -5.4 per cent. This expansion will be driven by household consumption, private fixed investment and growth in exports. The energy sector should see improved performance as current oil prices are already significantly higher than the forecasted average price of \$57.24 per barrel provided by the U.S. Energy Information Administration. Canada's debt level will continue to be a concern as it reached 294 per cent of GDP in 2020 and is significantly higher than America's 250 per cent. Canadian equities are expected to outperform and return 15 per cent for the year as the economy gathers pace. Canadian Universe fixed income (longer-term bonds) returns will likely only be approximately 1 per cent as mid-to-long-term yields continue to rise, putting downward pressure on bond prices.

The United States economy is expected expand by more than 5 per cent following a comparatively moderate contraction of 3.6 per cent last year. This growth will be accelerated by the massive \$1.9 trillion stimulus passed in March 2021 as well as a very successful, and rapidly expanding, vaccination effort. American equities are expected to produce total returns of 11 per cent for the year while aggregate fixed income returns should be approximately 1.5 per cent. The Euro Zone is forecasted to post GDP growth of 5.0 per cent which is welcome news following last year's recession where GDP contracted by 7.5 per cent. Emerging market economies are expected to see overall growth of more than 7.5 per cent led by China's 10.0 per cent forecasted growth rate. The Chinese economy will be driven by consumer spending and continued government intervention while the issue of unsustainable debt levels, similar to Canada's, remains unresolved.

The outlook for global growth is very positive with most economies expected to experience rapid expansions and recover much of last year's losses. This should lead to double-digit equity returns in most developed countries and emerging market returns in excess of 15 per cent. This will contrast with lower fixed income returns as yields are near record lows and bond prices will gradually decline as yields rise. Alternative investments should continue to outperform in 2021, especially real assets, private equity and private debt.

# Investment Governance

The City's *Investment & Governance Policy (CP2020-02)* articulates the governance framework for the management of City investments. It sets out the accountability, reporting, and disclosure requirements for all investment activity. This policy establishes the roles and responsibilities of Council, the Investment Advisory Committee (IAC), Administration, and external investment managers regarding the management of portfolio investments.

The IAC oversees The City's investment program to ensure that investments are effectively managed in accordance with legislation, Council-approved policies, and industry best practices. In 2020, The City completed a comprehensive investment strategy review which resulted in a new *Investment & Governance Policy*, approved by Council in June 2020. The review entailed a major examination of City funds and obligations including operating and capital requirements, capital deposits, and short-term liquidity to fully understand the characteristics, including risk tolerance, time horizon, and liquidity requirements of these funds. A new internal Funds Policy established objectives and asset mixes for each source of funds under management. The internal Investment Portfolios Policy provides detail on how each asset class portfolio is managed. The revised aggregate asset mix has the potential to increase sector and geographic diversification of assets to mitigate investment risks and increase risk-adjusted returns.

## Environmental, Social, and Governance (ESG) Considerations

ESG refers to three key factors in the investment process that can impact the financial value and sustainability of an investment. These factors are environmental, social, and corporate governance.

Factoring good governance and sustainable business practices into the investment process is becoming common practice in the institutional investment industry. Studies of stock returns indicate a positive correlation between stock price performance and a company's rating on an ESG index. More recent studies show that as ESG factor screens become more prevalent in the industry, companies with poor governance do not attract wide-scale investment and returns may suffer as a result.

Good governance takes many forms. It includes following local environmental regulations, labour and safety standards, as well as sound corporate board and executive management structures. An important component of ESG and sustainable investing is engagement with company management. Institutional investors can exercise influence over companies by engaging in dialogue with them and taking an active role in proxy voting. Shareholders can use their influence and voting authority to modify a company's ESG practices to enhance long-term value.

When The City of Calgary is selecting or reviewing an external investment manager The City monitors how ESG is implemented not only in the execution of investment management decisions but also how the investment manager implements ESG in its own operations. Most of The City's investment mandates include fundamental analysis where The City's managers meet directly with external investment managers to gain a thorough understanding of their structure and business practices. By partnering with like-minded investment managers, The City can ensure its corporate values are reflected in its investment holdings.

## Risk Management and Compliance

The City manages investment risk through a sound governance framework and comprehensive investment policies. These policies define investment objectives, appropriate diversification requirements, eligible asset classes and security instruments, investment strategies, and quality and quantity constraints.

The City's primary risk management tool is effective governance of funds with strategic implementation and diversification at both the security and portfolio level. Investment managers apply rigorous investment analysis and practices to select securities and construct portfolios that are diversified among security types, maturity dates, issuers, industry sectors, and geographically by country and region. Additionally, The City constructs a total portfolio of diverse strategies, asset classes, and investment manager styles. A prudently diversified portfolio should reduce the overall impact if performance from any one security, asset class, or investment manager underperforms.

When investing in the capital markets some risk is inevitable. This includes liquidity, market, credit, and interest rate risk from inflation and rising interest rates. The key is to identify and understand the risks being accepted. The City monitors advanced risk metrics at both the manager and total portfolio level to ensure that the level of risk taken is in line with The City's risk tolerance and that The City is meeting its investment objectives.

The City's investments are held electronically at a securities custodian. One control the custodian provides is independent, third-party settling and reporting of all trades which protects The City's investable assets. The custodian provides independent verification of all accounting information and security holdings. The City also receives third-party performance measurement and reporting. Return performance reported by The City's investment managers is verified and compared against both market benchmarks and peers which allows The City to effectively evaluate manager performance.

Compliance statements from investment managers are received quarterly. Compliance statements are verified and maintained by Treasury. During the year, all investments complied with the Municipal Government Act, the Major Cities Investment Regulation and The City of Calgary's investment policies.

## Expense Management

The City uses external investment managers to manage much of its investments. These managers are carefully selected and monitored by its own team of internal investment managers. External managers can provide expertise in more specialized asset classes and have a great deal of resources in terms of investment personnel, other professionals, and systems. The size of The City's portfolio and allocations is such that it can receive very favourable pricing when investing in these funds. In 2020, The City spent approximately \$9 million on external manager fees.

As part of the governance framework, cost effectiveness is assessed through annual participation in surveys conducted by CEM Benchmarking and Municipal Benchmarking Network Canada. Participation in cost benchmarking services provides The City with a comparison of investment management costs against other municipalities.

In 2019<sup>1</sup>, external investment manager costs were 32.4 bps, 6.6 bps higher than the benchmark cost of 25.8 bps but 16.5 bps lower than Canadian median of funds that participated in the CEM benchmarking survey. The City's investment portfolio has a significantly different asset mix than other cities.

<sup>1</sup> CEM Benchmarking data for 2020 will become available in Q4 of 2021.

# Investment Advisory Committee Members

The Investment Advisory Committee provides advice and risk oversight on The City's investments including the investment structure, implementation strategies, monitoring of performance, and compliance.

## Internal Members *(as at December 31, 2020)*

- Carla Male (Chair), CPA, CA - Chief Financial Officer
- David Duckworth, P. Eng, MBA – City Manager
- Les Tochor, CPA, CA – City Treasurer and Director of Finance
- Katie Black, MSW – Acting General Manager, Community Services

## External Members *(as at December 31, 2020)*

- Dr. Michael Robinson, MBA, Ph.D., CFA, ICD.D - *Haskayne School of Business*, Professor of Entrepreneurial Finance
- Ian Bourne, B.Comm, ICD.D - Corporate Director
- Delicia Teo, CFA – Portfolio Manager, City of Edmonton

# Definitions/Glossary

<b>Term</b>	<b>Description</b>
Benchmark	A standard against which the performance of an investment manager can be measured. Generally, broad market stock and bond indexes are used for this purpose.
Diversification	<p>A risk-management technique that mixes a wide variety of investments within a portfolio. The rationale behind this technique contends that a portfolio of different kinds of investments will, on average, yield higher returns and result in lower price volatility than individual investments found within the portfolio.</p> <p>Diversification strives to smooth unsystematic risk events in a portfolio so that the positive performance of some investments will neutralize the negative performance of others. Therefore, the benefits of diversification will hold if the securities in the portfolio are not perfectly correlated.</p>
Infrastructure Investments	Investments in Canadian and global businesses that focus on a variety of public sponsored and private quality infrastructure assets such as toll roads, utilities, renewable energy, communications, and transportation and healthcare facilities.
Investment Managers	Those firms or individuals appointed by the Chief Financial Officer for the investment of each Fund's assets. Includes both internal and external managers.
Market Value	The price at which a security is trading in the open market.
Portfolio	Collection of assets held by an investor.
Rate of Return	The gain or loss of an investment over a specified period, expressed as a percentage increase over the initial investment cost. Gains on investments include any income received from the security, plus realized and unrealized capital gains.
Risk-Adjusted Return	A standardized measure of investment return based on an adjustment for the level of risk involved in generating that return.



# Reference Documents

<b>Document Name</b>	<b>Approved By</b>	<b>Updated/Approved</b>
<i>Investment &amp; Governance Policy (CP2020-02)</i>	Council	June 2020
<i>Funds Policy</i>	Chief Financial Officer	June 2020
<i>Investment Portfolios Policy</i>	Chief Financial Officer	June 2020