2018 Annual Investment Report

Calgary

Description:

The City takes a prudent investment management approach to achieve its investment objectives. The City provides value to residents by acting as an engaged and responsible institutional investor to ensure risk-adjusted performance of its investment portfolio is sustainable.

The City's investments consist of internally and externally managed portfolios. Internal portfolios are managed to provide shorter-term liquidity for City funds and as a result, 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 portfolios and invested in a diversified portfolio of bonds, equities, and alternative investments.

The City manages investment risk through a sound governance framework and a comprehensive Investment Policy (CFO007). The Investment Policy incorporates the requirements of the Alberta Municipal Government Act and establishes best practice guidelines and controls for the management of The City's investment portfolios. This includes defining investment objectives, diversification requirements, eligible asset classes and investment vehicles, and risk-based constraints. The Investment Advisory Committee (IAC) is an essential part of The City's governance. Their oversight ensures that investments are effectively managed in accordance with legislation and Council approved policies, and that there is consistency with industry best practice.

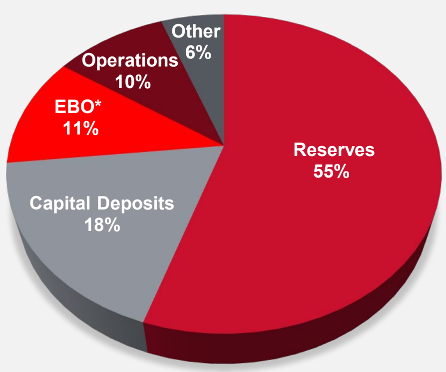
Customers:

Direct: Council, Audit Committee, Business Units
Indirect: Residents

Key Partners:

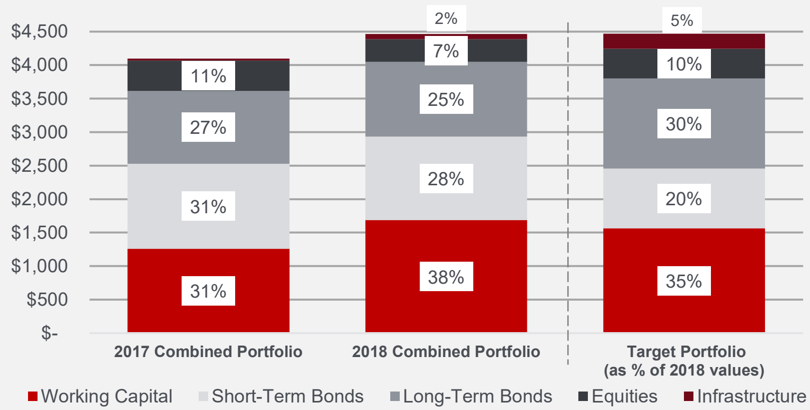
Investment Advisory Committee (IAC), **External Investment Managers** Addenda Capital (Addenda), Blackrock, BNP Paribas (BNP), Brookfield Investment Management (Brookfield), Connor Clark & Lunn Investment Management (CC&L), Crestline Investors (Crestline), EQT, Fidelity Investments Canada (Fidelity), Manulife Asset Management (MAM), Northleaf Capital Partners (Northleaf), Phillips Hager & North Investment Management (PH&N), PIMCO, Sunlife, and TD Asset Management (TDAM)

2018 Sources of Investments



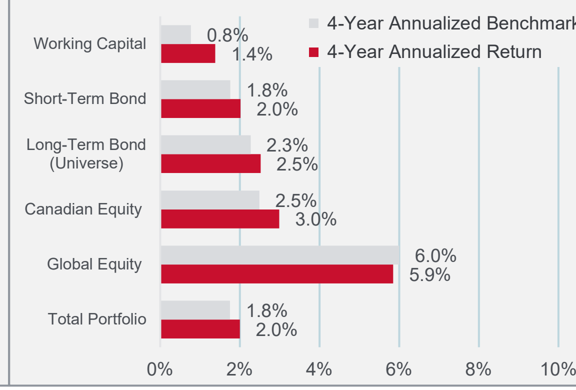
* Employee Benefit Obligations

Asset Mix as at December 31, 2018



Asset Class Returns vs Benchmark

(4-Year Annualized as at December 31, 2018)



Story Behind the Numbers:

As of December 31, 2018 the market value of total assets under management at The City was $4.3 billion, up slightly from $4.1 billion in 2017. In 2018 the City of Calgary's portfolio (including internally and externally managed portfolios), generated a total return of 1.5 per cent net of manager fees on a market value basis, slightly below the portfolio's benchmark return of 1.6 per cent. The total portfolio generated $114 million ($ 74 million in 2017) of investment income.

The City's internally managed Working Capital portfolio posted an average return of 1.9 per cent. With interest rate increases through the year, Canadian Long-Term and Short-Term bonds met each of their respective benchmarks in 2018 with Canadian Long-Term bonds returning 1.4 per cent and Short-Term bonds returning 2.8 per cent.

The City's Global Equity and Canadian Equity portfolios generated a loss in 2018 with negative returns of 5.1 per cent and 7.7 per cent. The City engages defensive equity portfolio strategies intended to outperform in weak equity markets by providing downside protection during market correction. Both Global and Canadian Equity asset classes outperformed their respective benchmarks which showed losses in 2018 of 7.8 per cent and 8.9 per cent.

What We Plan to Do:

In accordance with the Investment Policy, forward looking strategic direction is driven primarily by the following investment objectives:

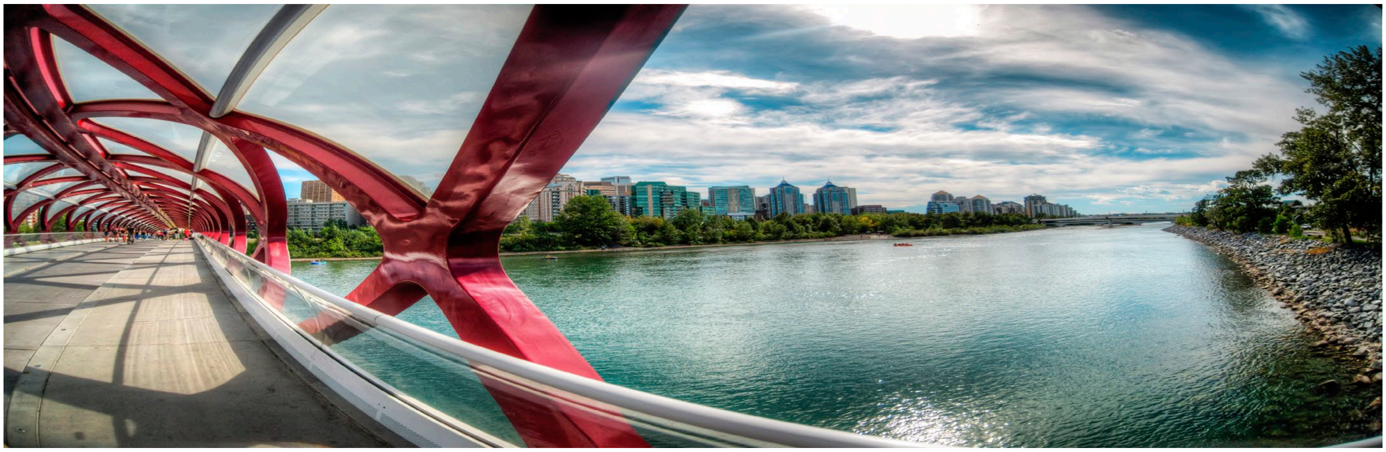
- **Preservation of Capital:** Primary objective for total investment portfolio.
- **Risk Mitigation:** Diversification (asset class and security holdings by sectors, geography and style), policy constraints and limits.
- **Investment Returns:** Maximize returns relative to risk, liquidity and investment time horizon considerations.

Strategic direction is assessed on a continual basis to optimize risk-adjusted return through strategic asset. The 2016 amendment to the Investment Policy provided additional opportunity to achieve increased investment income, while increasing diversification of the portfolio through the ongoing evaluation of new asset classes. Implementation of the updated asset mix is ongoing as new mandates are funded methodically with periodic funding of committed capital.

We continue to evaluate asset mix against a long-term target intended to optimally allocate investments based on market factors, risk reduction, desired level of diversification, and time horizon of funds.

2018 Annual Investment Report

Chief Financial Officer's Department



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Capital Market Review

For the global economy, 2018 proved to be an interesting year characterized by market volatility. After two years of steady growth in asset prices, investor outlook declined as financial markets around the globe experienced a climate of political and trade uncertainty, crude oil pricing instability, and the slowdown of earnings growth.

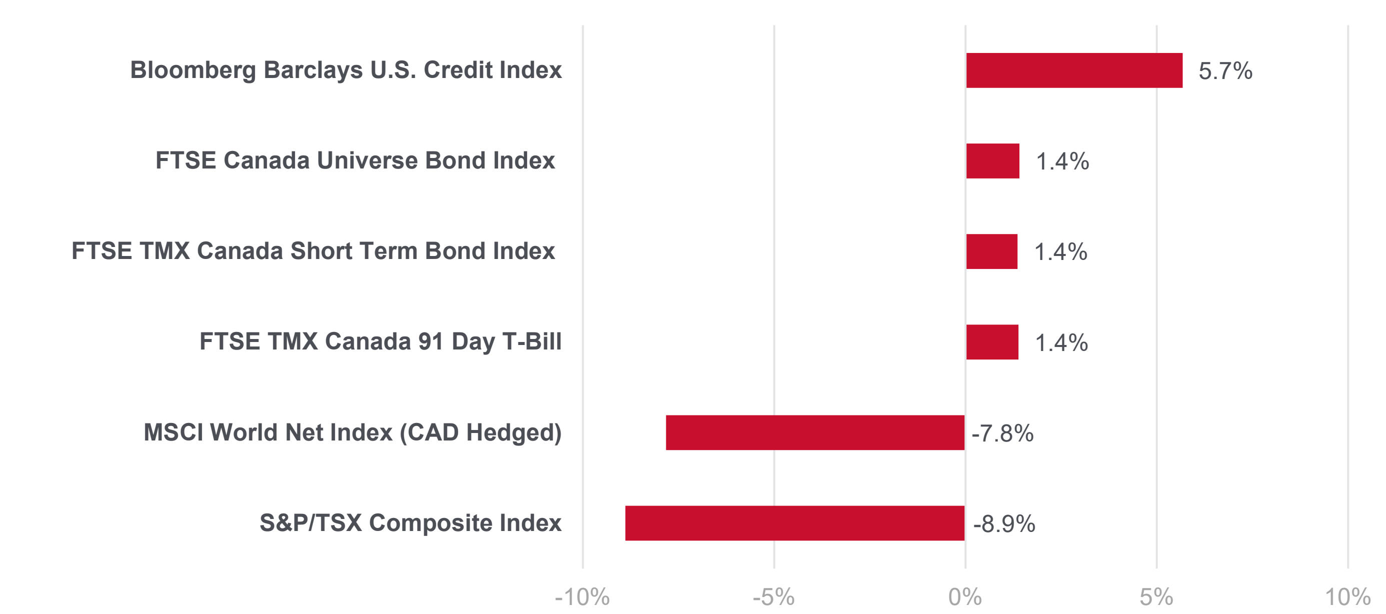
Equity markets trended downward as global stock prices declined on an annual basis for the first time since 2015. The impacts of rising interest rates and concerns surrounding the global trade environment led to a fourth quarter sell-off, stopping one of the longest-running bull markets in history.

As showcased in Figure 1.0, equities significantly underperformed fixed income assets, with the S&P/TSX at a loss of nine per cent and the MSCI World Net Index losing eight per cent. Equity market performance in the fourth quarter of 2018 marked a seven-year low, erasing gains seen in the first nine months of 2018. Similarly, crude oil prices fell once again in late 2018, driven down by rising oil inventories as growth in global supply continued to outpace demand. This saw West Texas Intermediate (WTI) prices reach a low of $42.57 in December before finally closing at $45.24 at the end of the year.

Through 2018, The Bank of Canada continued to increase borrowing costs, raising the benchmark overnight interest rate three times. Over the course of the year, The Bank of Canada raised rates a total of 75 basis points, closing at a ten-year high with a benchmark overnight interest rate of 1.75 per cent. Pressure on household spending created through raising interest rates shifted focus to business investment as a source of economic growth.

Similarly, The US Federal Reserve raised its target range for the federal funds rate four times through 2018, closing the year with a final increase by a quarter point to 2.50 per cent at the year end.

Figure 1.0 – 2018 Capital Market Returns (CAD)



Investment Objectives

The City of Calgary's investment objectives are outlined in the *Investment Policy (CFO007)*. The City has three core investment objectives that drive all strategic investment decisions:

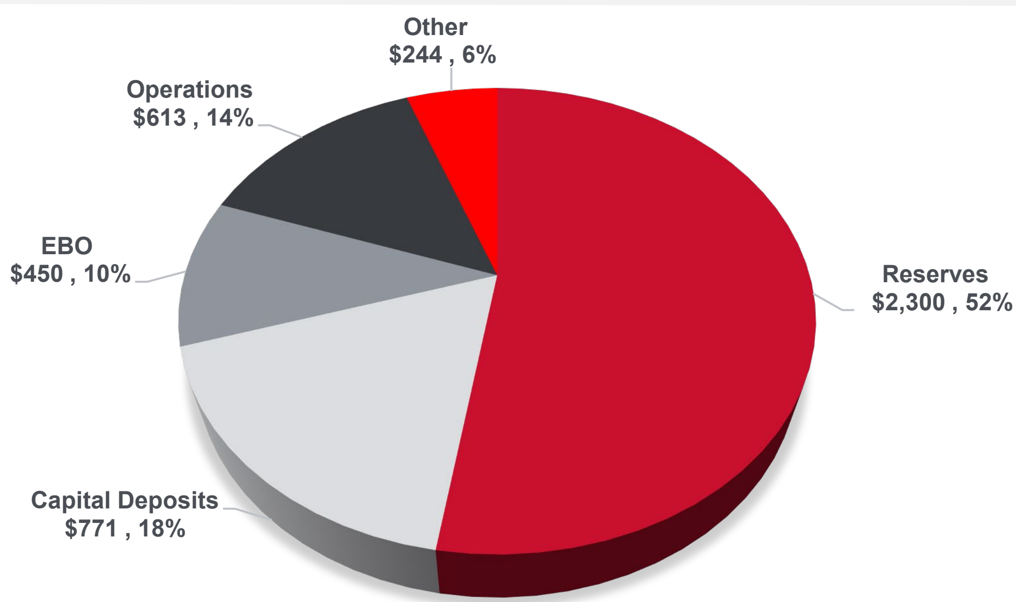
1. **Preservation of Capital**
   a. Primary objective for total investment portfolio
2. **Risk Mitigation**
   a. Diversification of asset class and security holdings by sectors, geography, and style.
   b. Policy constraints and limits
3. **Investment Returns**
   a. Maximization of returns, relative 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 – 2018 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, global and Canadian equities, and infrastructure investments. The allocation of source funds is executed in accordance with the investment objectives of The City.

Investment Governance

The City's *Investment Governance Policy (CFO001)* articulates the governance framework for the management of City investments. It sets out the accountability, reporting, and disclosure requirements for all investment activity. The Governance Policy establishes the roles and responsibilities of Council, the Investment Advisory Committee (IAC), Administration, and investment managers regarding 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 2016, The City completed a comprehensive investment strategy review which resulted in a new *Investment Policy,* approved by City Council in July 2016. The review entailed a major examination of City funds and obligations including operating and capital requirements, capital deposits, and working capital, in order to fully understand characteristics including risk tolerance, time horizon, and liquidity requirements of these funds. The new policy provides an opportunity to diversify and gain exposure to additional asset classes and portfolio investments including global bonds, direct infrastructure, and active foreign currency management. This change in policy has the potential to increase sector and global diversification of assets to mitigate investment risks and increase risk-adjusted returns.

Environmental, Social, and Governance (ESG) Considerations

ESG refers to three keys 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, one important consideration is how these managers evaluate companies for good governance. Most City 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 a comprehensive *Investment Policy (CFO007).* The *Investment Policy* defines 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 regions. 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. As well, 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 were in compliance with the Municipal Government Act and The City of Calgary Investment Policy.

Expense Management

The City strives to keep investment management costs low, as lower costs equate to higher investment income. As part of the governance framework, cost effectiveness is assessed through annual participation in surveys conducted by CEM Benchmarking and Municipal Benchmarking Network (MBN) Canada. Participation in cost benchmarking services provide The City with a global comparison of investment management costs against the average comparably-sized fund on an asset class equivalent basis.

In 2017[1], external investment manager costs were 24.6 basis points (bps), 0.9 bps lower than the benchmark cost of 25.5 bps.

[1] *CEM Benchmarking data for 2018 will become available in Q3 of 2019.*

Summary of Investments

As at December 31, 2018 the market value of The City's total investment portfolio was $4.3 billion, up slightly from $4.1 billion in 2017.

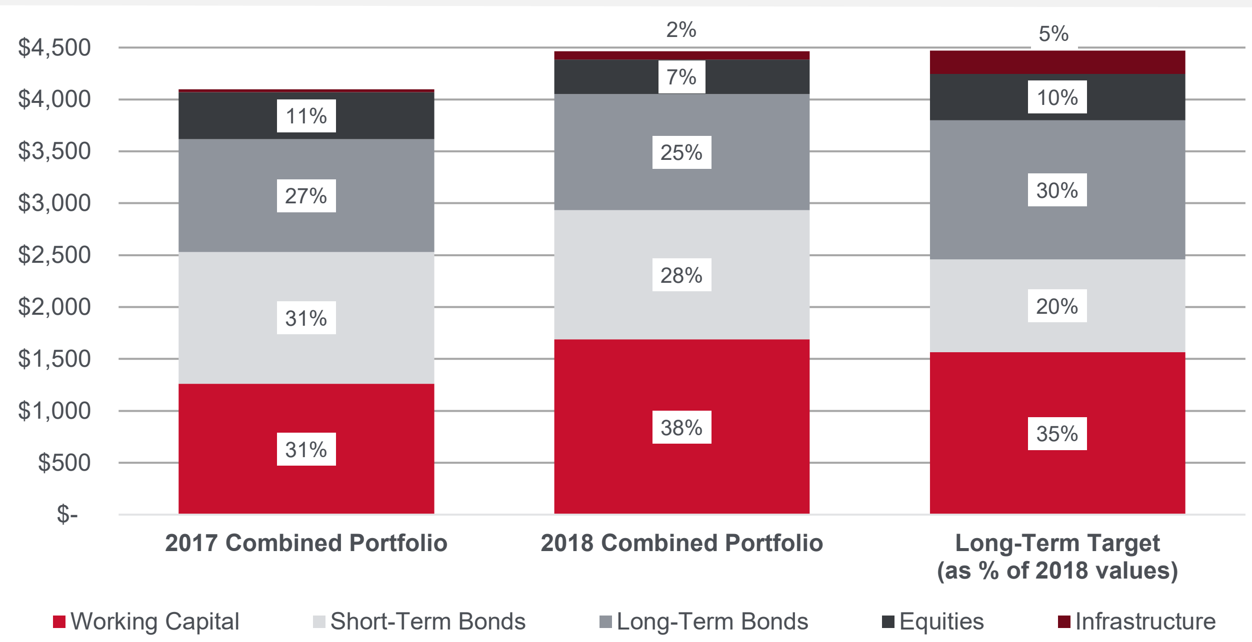
Figure 3.0 – Market Value of Assets Under Management as at December 31, 2018 ($ millions)

	2018	2017
Internal Management	**1,611**	**1,306**
Working Capital	1,611	1,260
Short-Term Bonds	-	46
External Management	**2,712**	**2,790**
Short-Term Bonds	1,113	1,223
Long-Term Bonds	1,198	1,088
Equities	312	452
Infrastructure	87	27
FX Overlay	2	-
Total Assets Under Management	**4,323**	**4,096**

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

Figure 4.0 – Asset Mix as at December 31, 2018 ($ millions)



Note: All performance measures included in this report are after fees

Investment Policy Constraints

Investment policy constraints ensure that risk levels do not exceed a pre-determined risk tolerance.

Council Approved Investment Policy [1]			
Constraint	**Approved Maximum (% of total portfolio)**	**Current Allocation**	**Compliance Check**
Equities	10%	7.2%	YES
Infrastructure	5%	2.0%	YES
Fixed Income - Mortgages and mortgage-backed securities	20%	14.3%	YES
Fixed Income - Global foreign denominated issuers	20%	10.7%	YES

[1] *Required constraints per Approved Council Policy CFO007 (Investment Policy) and CFO001 (Investment Governance Policy)*

Internal Investment Policy [2]			
Constraint	**Policy Mix Range**	**Current Allocation**	**Long-Term Target**
Working Capital	30 - 50%	37.5%	35%
Short-Term Bonds	0 - 30%	26.6%	20%
Long-Term Bonds	25 - 40%	25.6%	30%
Equities	5 - 10%	8.1%	10%
Private Infrastructure	0 - 5%	2.0%	5%

[2] *Recommended constraints per Investment Advisory Committee reviewed Internal Policy (Implementation and Rebalancing Policy)*

Investment Performance

In 2018, The City of Calgary's total portfolio (including internally and externally managed portfolios), returned 1.5 per cent after fees on a market value basis. The 2018 net portfolio return fell short of the benchmark return of 1.6 per cent, and the 2018 the annual inflation rate for Canada of 2.0 per cent.

Figure 5.1 – 2018 Annualized Returns

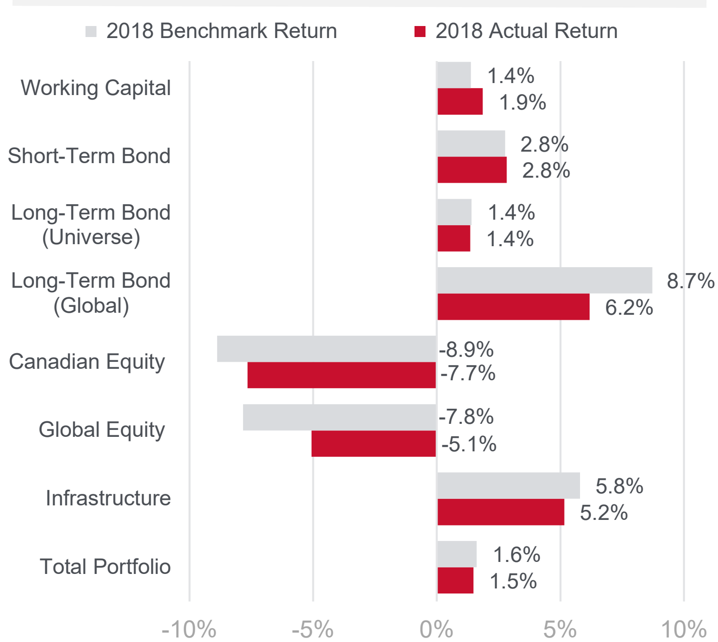
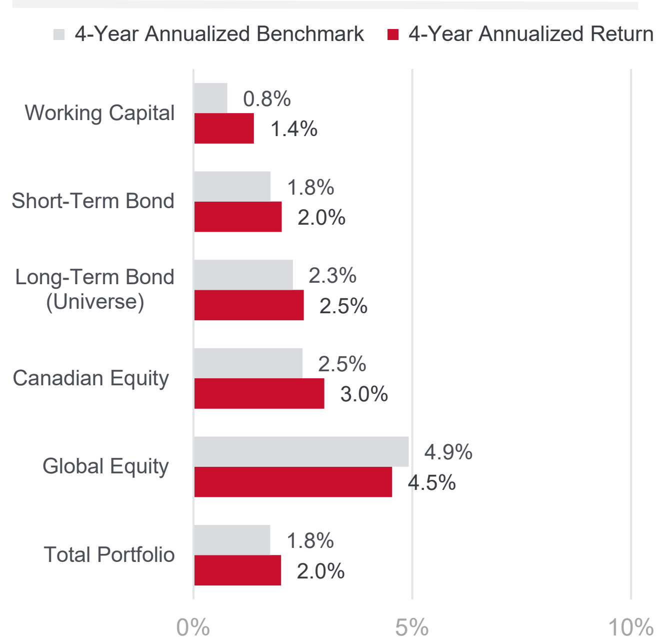


Figure 5.2 – 4-Year Annualized Returns



Note: 4-year data was not available for Global Long-Term bonds and Infrastructure asset classes as mandates within the classification have inception dates in 2018.

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.

The City uses the below indices as points of reference by which the investment performance of each fund is evaluated:

Working Capital: FTSE TMX Canada 91-Day Government of Canada Treasury Bills

Short-Term Bonds: FTSE TMX Canada Short-Term Bond Index (PH&N, CC&L, Addenda)
ICE BofAML US Treasury Bills 0-3 Months Index (Blackrock)

Long-Term Bonds: Bloomberg Barclays US Credit Index (PIMCO)
Bloomberg Barclays Capital Multiverse Index Unhedged ($ CAD) (MAM)
FTSE TMX Canada Bond Universe Index (Blackrock PH&N, CCL, Sunlife)
S&P/LSTA Leveraged Loan Index (LLI) + 200 bps (Crestline)
S&P European Leveraged Loan Index + 200 bps (EQT)

Equity: S&P/TSX Composite Index (Canadian Equity)
MSCI World (hedged to CAD) (Global Equity)

Infrastructure: CPI + 450 bps (Northleaf)
Dow Jones Brookfield Global Infrastructure Total Return Index (CAD) (Brookfield)

Investment Income

In 2018, The City of Calgary's total portfolio generated $113.6 million of investment income.

Investment Income ($ '000s) as at December 31, 2018	Budget	Actual
Allocations to Self-Supporting Business Units and Capital Deposits	22,029	35,768
Transfers to Reserves from Operations	18,955	25,885
Expenditures (net of receivables)	2,403	6,395
General Investment Income	30,200	45,567
Corporate Total Investment Income	73,587	113,615

Working Capital

The Working Capital portfolio is invested in a combination of corporate and bank paper, term deposits, and short-term government and corporate bonds. The majority of investments in the Working Capital portfolio mature in less than two years.

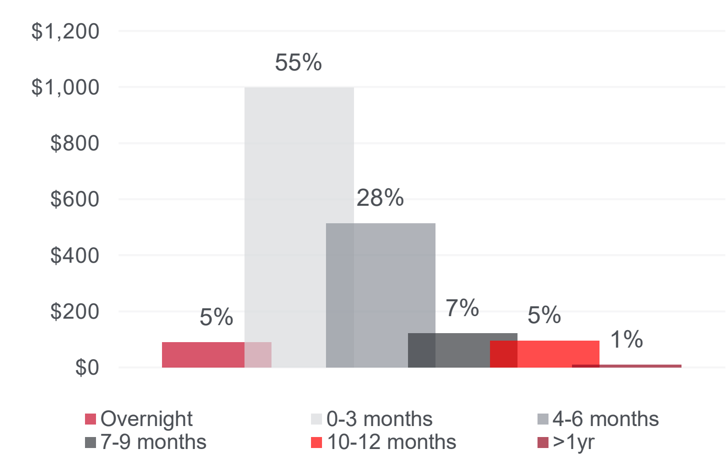
Manager: The City of Calgary, Finance (Treasury)

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 flow 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 interest rate environments. Treasury continuously assesses the benefit of holding overnight balances with the bank against returns available through short-term investment vehicles, while also taking into account liquidity requirements. By maintaining high overnight cash balances, The City can take advantage of favorable interest rates offered by our bank. With overnight cash balances between $25 million and $150 million, The City is able to access the top tier overnight interest rate, while also maintaining certainty of cash availability.

Figure 6.1 – Maturity Ladder as at December 31, 2018 ($ millions)



Working Capital Portfolio Returns

The internally managed portfolio returned an average yield of 1.9 per cent in 2018, outperforming the benchmark of 0.5 per cent, and showing slight improvement over the 1.4 per cent return in 2017 (Figure 6.2).

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

Figure 6.2 – 2018 Annualized Portfolio Return vs Benchmark

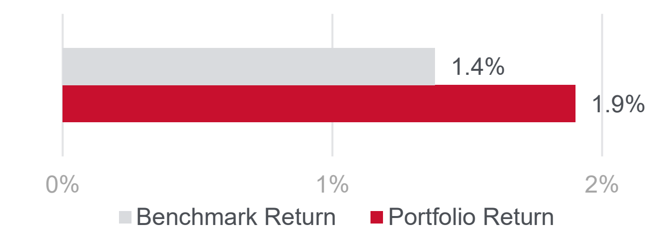


Figure 6.3 – Portfolio Asset Type as at December 31, 2018

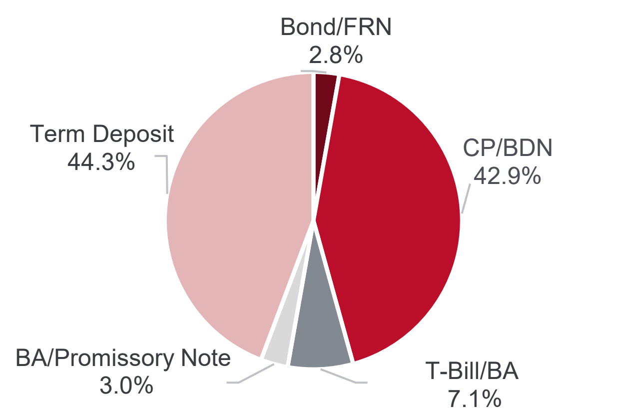
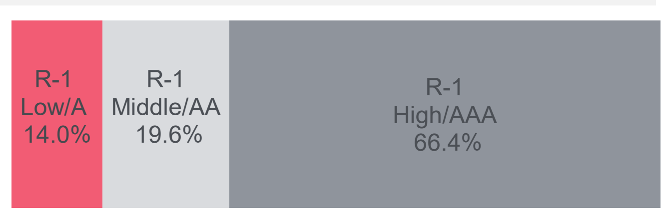


Figure 6.4 – Credit Quality of Assets in Portfolio as at December 31, 2018



Fixed Income

Canadian Long-Term (Universe) and Short-Term bonds met each of their respective benchmarks in 2018 with Canadian Long-Term bonds returning 1.4 per cent and Short-Term bonds returning 2.8 per cent. The new Global Long-Term bonds mandate returned 6.2 per cent compared to the benchmark of 8.7 per cent (Figure 7.1). Rising interest rates and concerns about the global economy have negatively impacted the bond market. The downward pressure on yields is evident as 10-year Canadian bond yields fell from 2.2 per cent to 1.9 per cent at the end of the year.

Short-Term Bond Portfolio

Managers: *(AUM $millions)*

- Addenda Capital ($104.3)
- Blackrock ($44.7)
- Connor Clark & Lunn ($369.2)
- Phillips, Hager & North ($584.3)
- Sunlife ($10.0)

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.

Long-Term Bond Portfolio

Managers: *(AUM $millions)*

- BlackRock ($247.6)
- Connor Clark & Lunn ($207.9)
- Crestline ($18.7)
- EQT ($12.5)
- Manulife ($132.2)
- Phillips, Hager & North ($219.9)
- PIMCO ($343.6)
- Sunlife ($15.3)

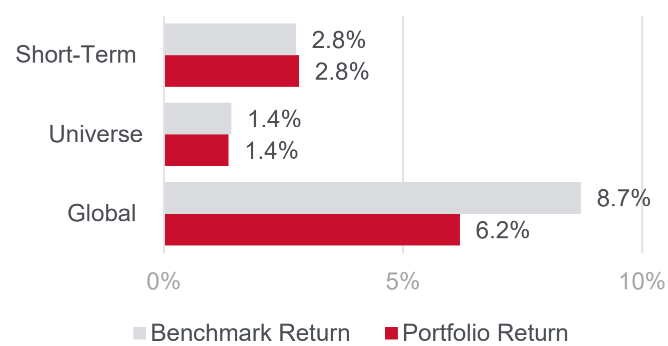
Mandate: Investment in a diversified portfolio of fixed income securities with an average term to maturity of seven to ten years. This portfolio includes private credit mandates.

Private Credit Portfolio average credit rating[1]:

Crestline:	Ba/B
EQT:	B/B-
Sunlife:	A

[1] *Estimated average portfolio credit rating*

Figure 7.1 – 2018 Annualized Portfolio Return vs Benchmark



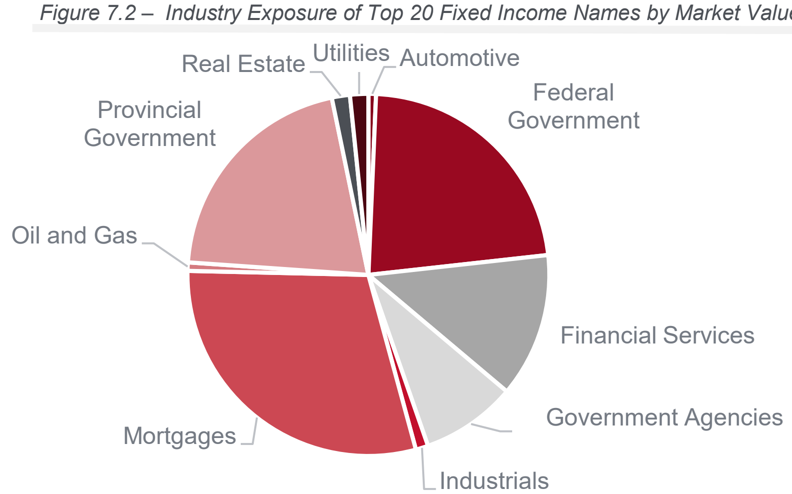
Geographic Exposure – Top Five ($millions)

1. Canada	$ 1,871.5
2. United States	$ 465.8
3. Europe	$ 7.0
4. United Kingdom	$ 4.6
5. Argentina	$ 1.3

Name Exposure – Top Five ($millions)

1. Government of Canada	$ 257.8
2. Province of Ontario	$ 141.6
3. Canada Housing Trust No. 1	$ 107.4
4. US Treasury Note	$ 72.4
5. Bank of Montreal	$ 59.4

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



Note: All figures reflect values as at December 31, 2018 unless otherwise specified

Equity

The City's Global Equity portfolio generated returns of -5.1 per cent in 2018, and the Canadian Equity portfolio returned -7.7 per cent. Both Global and Canadian Equity asset classes outperformed their respective benchmarks of -7.8 per cent and -8.9 per cent in 2018 (Figure 8.1). This relative outperformance against benchmark is expected in poor performing equity markets as The City's asset managers are defensively positioned. A defensive equity portfolio strategy focuses primarily on minimizing loss of principal in bear markets. This conservative investment philosophy is expected to provide moderate returns in strong markets while protecting against significant loss during market downturns.

Canadian Equity Portfolio

Managers: *(AUM $millions)*
Fidelity Investments Canada ($96.7)

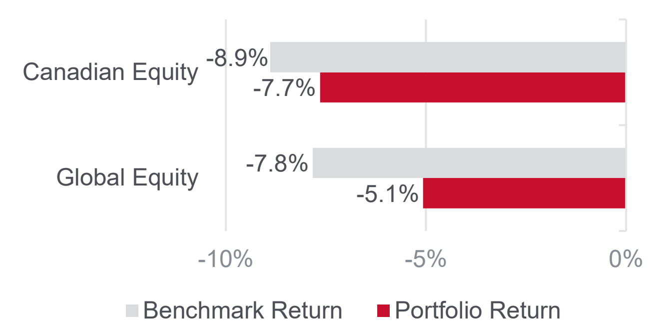
Mandate: Investment in in a diversified portfolio of large capitalized Canadian equities to achieve long-term capital appreciation and inflation protection.

Global Equity Portfolio

Managers: *(AUM $millions)*
Fidelity Investments Canada ($99.5)
TD Asset Management ($115.8)

Mandate: Investment in a diversified portfolio of large capitalized international equities located in developed markets to achieve long-term capital appreciation and inflation protection.

Figure 8.1 – 2018 Annualized Portfolio Return vs Benchmark



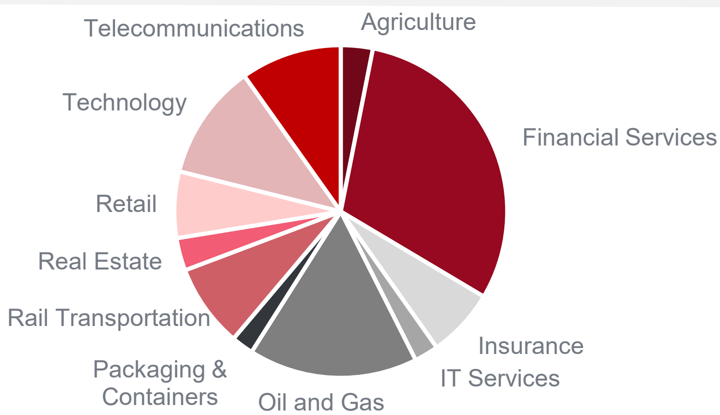
Geographic Exposure – Top Five ($millions)

1. United States	$ 118.3
2. Canada	$ 96.3
3. Japan	$ 26.9
4. United Kingdom	$ 18.2
5. Australia	$ 7.1

Name Exposure – Top Five ($millions)

1. Toronto Dominion Bank	$ 8.8
2. Royal Bank of Canada	$ 8.5
3. Suncor Energy	$ 4.7
4. Brookfield Asset Mgmt	$ 4.4
5. Canadian National Railway	$ 4.8

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



Note: All figures reflect values as at December 31, 2018 unless otherwise specified

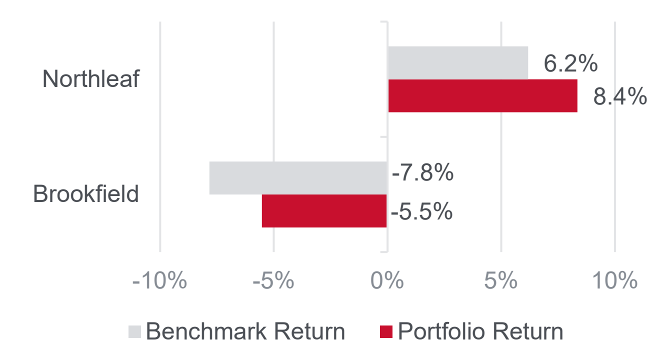
Infrastructure

As of December 31, 2018, Northleaf has called over one quarter of The City's $125 million committed capital and generated positive returns on the fund's initial investments. Brookfield posted a negative return for the year, in part, due to losses on currency hedges but managed to outperform its global listed equity benchmark.

Managers: *(AUM $millions)*
Brookfield Investment Management ($50.7)
Northleaf Capital Partners ($36.6)

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

Figure 9.0 – 2018 Annualized Portfolio Return vs Benchmark



Currency Overlay

BNP Paribas Asset Management (BNPP AM) was engaged in February 2018 to manage a foreign currency overlay strategy on behalf of The City. The notional value to which BNPP AM manages the portfolio is based on the foreign currency exposures of The City's underlying portfolio, excluding all non-CAD exposures less than one per cent. BNPP AM reviews net foreign currency exposures for The City's portfolio on a monthly basis and at their discretion, implements a hedge between 0 to 100 per cent for each underlying currency exposure.

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)

Currency	% Average Hedge Ratio
USD	41.4
GBP	0.0
EUR	0.0
JPY	17.9

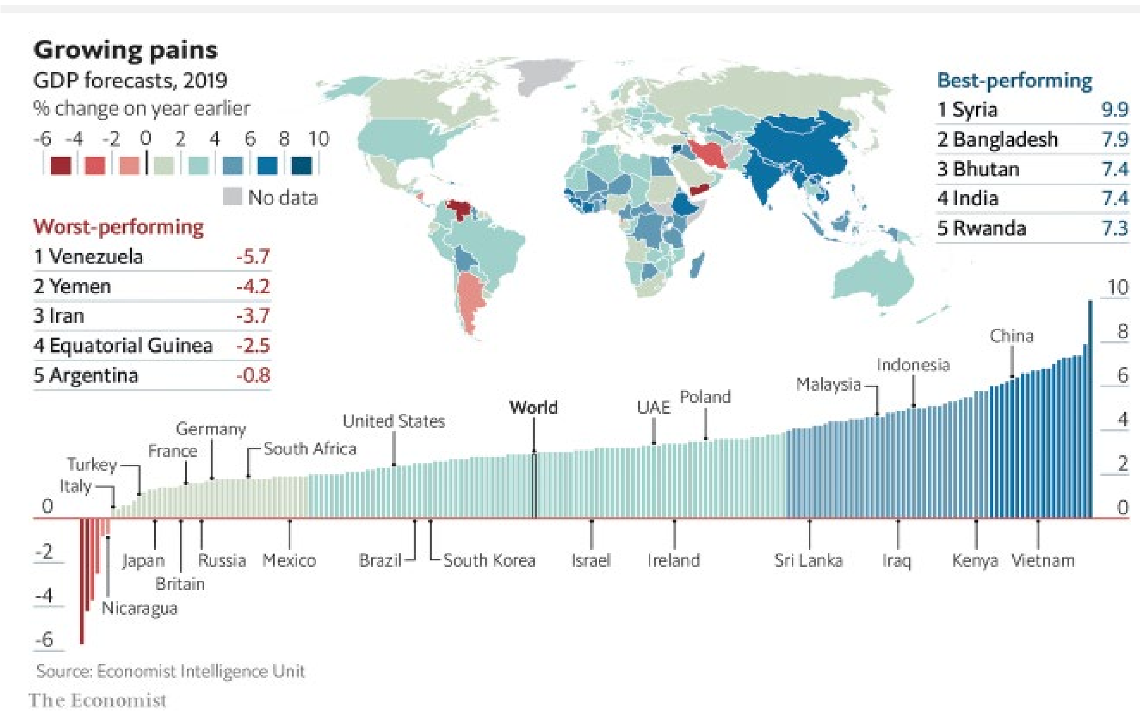
Portfolio Currency Exposures (CAD $ millions)				
As Of Date	31-Dec-18		30-Sep-18	
Currency	Market Value	% Exposure	Market Value	% Exposure
CAD	0.0	0.0	9.3	1.9
USD	489.7	92.6	465.6	95.7
GBP	0.0	0.0	0.0	0.0
EUR	22.3	4.2	0.0	0.0
JPY	16.8	3.2	11.5	2.4
Total Notional Value	**528.8**	**100.0**	**486.4**	**100.0**

	Q4 2018 Return (%)	Return Since Inception - Feb-18 (%)
Portfolio	-1.0	-1.9
Benchmark	0.0	0.0
Excess Return	-1.0	-1.9

2019 Capital Market Outlook

The global economy is forecasted by Capital Economics to grow at a rate of 3.0 per cent in 2019 after expanding by 3.6 per cent in 2018. This rate is lower than the International Monetary Fund's forecast of 3.5 per cent but is more conservative given the headwinds to growth. Figure 10.0 depicts the forecasted national growth rates and indicates that growth should be strong in South Asia, with only five countries seeing a contraction in GDP. Trade growth is expected to continue to slow and investment growth in advanced economies is expected to decline from 3.5 per cent in 2018 down to 1.5 per cent in 2020. Debt levels are currently higher than they were prior to the global financial crisis and deleveraging should hurt growth. Inflation is expected to be under control in most of the world's economies and this should reduce the pressure on central banks to raise rates. The US Federal Reserve is expected to hike rates only once in 2019. The Bank of Canada is not expected to change rates. Both the European Central Bank and the Bank of Japan are expected to maintain their negative overnight interest rates.

Figure 10.0 – 2019 World Economic Growth Projections



The Canadian economy is forecasted to expand by approximately 1.7 per cent in 2019 following a better than expected 1.8 per cent in 2018. Export volumes are expected to decline despite a weakening Canadian dollar. The energy sector will likely continue to struggle with oil prices remaining in the $50-$60 range and may be negatively impacted by a lack of foreign and domestic investment. Canadian households are among the most indebted in the world and this combined with a weaker housing market may reduce overall consumer spending. If the United States-Mexico-Canada Agreement (USMCA) is not ratified in 2019 there could be a significantly negative effect on business and consumer confidence. Despite the somewhat slower economic growth than 2018, consensus forecasts show Canadian equities are expected to provide total returns of approximately 15 per cent for the year, though with higher volatility. For Canadian Universe bonds, consensus forecasts show returns of approximately 2.7 per cent as corporate spreads continue to widen and Canadian credit underperforms global credit.

The United States economy is expected to grow by 2.2 per cent as it reaches the longest expansion in its history. Housing and business investment growth should continue to slow but consumption growth should remain strong. Equity returns are expected to be in the high single-digits while bonds remain moderately expensive. The Eurozone is forecasted to post growth of only 1.0 per cent due to declining consumer confidence, a weakening of exports and a lower rate of growth in business investment. Japan is expected to post growth of less than 1.0 per cent, in part due to a planned increase in the sales tax. Emerging market growth is expected to slow from 4.5 per cent in 2018 to 4 per cent in 2019, largely due to a slowdown in China. China should see slower credit growth as it grapples with a debt level that is more than double that of other emerging markets. India’s growth should remain solid with a boost from pre-election spending. Emerging Asia is expected to slow as a result of China’s slowdown combined with increased interest rates as their central banks tighten. Lastly, growth in Latin America and Africa is expected to accelerate.

The global economic expansion is expected to continue in 2019 though at a slower rate as the end of the cycle approaches. Equity and fixed income returns should be positive in much of the world. Inflation is expected to be kept under control and widespread recession is not forecast to occur before 2020.

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, 2018)*

- Carla Male (Chair), CPA, CA - Acting Chief Financial Officer
- Brad Stevens, J.D., MBA, ICD.D - Deputy City Manager
- David Duckworth, P.Eng, MBA - General Manager UEP
- Thao Nguyen, CPA, CA - Acting City Treasurer and Director of Finance

External Members *(as at December 31, 2018)*

- Vern Malcolm, MBA, CFA - *BDC,* Director of Growth and Transition Capital
- Dr. Michael Robinson, MBA, Ph.D., CFA, ICD.D *- Haskayne School of Business*, Associate Professor of Entrepreneurial Finance
- Ian Bourne, F.ICD - Corporate Director

Definitions/Glossary

Term	Description
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	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 any individual investment found within the portfolio. 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 only if the securities in the portfolio are not perfectly correlated.
Infrastructure Investments	Investments in Canadian or global businesses that focus on a variety of public sponsored and private quality core infrastructure assets such as toll roads, airports, 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 are considered to be 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 producing that return.

Reference Documents

Document Name	Approved By	Updated/Approved
Investment Governance Policy CFO001	Council	July 2016
Investment Policy CFO007	Council	July 2016
IAC Terms of Reference *(*Investment Governance Policy Appendix*)*	Council	July 2016
Implementation and Rebalancing Policy	Investment Advisory Committee	June 2018