



Calgary



2021 Annual Investment Report

Chief Financial Officer's Department

All figures stated in Canadian dollars unless otherwise noted



Contents	
Capital Markets Review	3
Investment Objectives	4
Summary of Investments	5
Investment Allocation	6
Investment Performance	8
Investment Income	11
Short Term Liquidity	12
Short Term Fixed Income	14
Long Term Fixed Income	16
Equities	18
Real Assets	20
Currency Overlay	22
2022 Economic & Capital Market Outlook	24
Investment Governance	25
Investment Advisory Committee Members	28
Definitions/Glossary	29
Appendix 1 – Mandate Level Returns	30

Capital Markets Review

The global economy rebounded strongly in 2021 despite multiple waves of COVID-19, as vaccine uptake muted the economic impacts of the virus. Supply chain disruptions caused challenges to global trade, spurring high inflation for much of the second half of the year. The S&P 500 index rallied 27.6% through 2021 as governments and central banks began to pull back on stimulus and reduce pandemic restrictions. Global financial markets posted positive returns in Q4 2021 despite the rapid spread of the Omicron COVID variant which slowed reopening. Investors responded positively on overall economic resilience and strong corporate earnings.

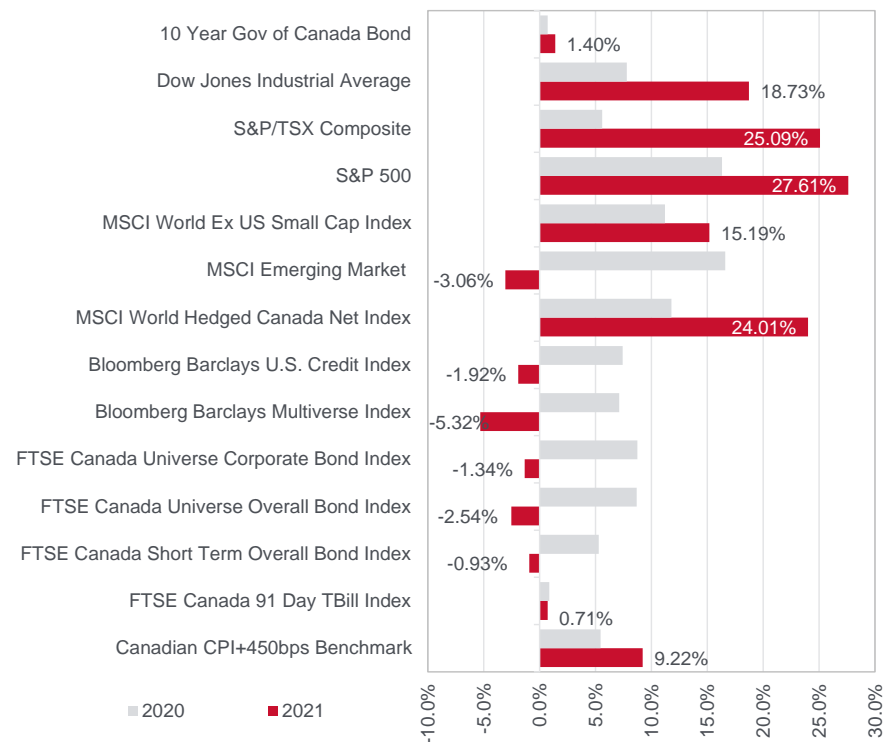
Equities significantly outperformed fixed income assets in 2021, with the S&P/TSX Composite returning 25.1% and the FTSE Canada Universe Overall Bond Index returning -2.5%. The bond market saw an increase in yields in Q4 across most maturities.

Crude oil prices increased more than 55% in 2021 partly due to optimism over phased reopening plans, capped supply from OPEC, and increasing geopolitical tensions.

As inflation concerns began to rise, the stance of several central banks began to change. The hawkish shift from both the Federal Reserve and the Bank of Canada led to solid relative performance from both the US and Canadian Dollar against most other major currencies.

Environmental, Social, and Governance (ESG) investing took another big leap forward in 2021. Investments flowing into ESG-focused funds increased by 20% year over year, and now account for 10% of fund assets worldwide.

2021 Capital Market Returns



Source: CIBC Mellon, evestment, Government of Canada, Refinitiv

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

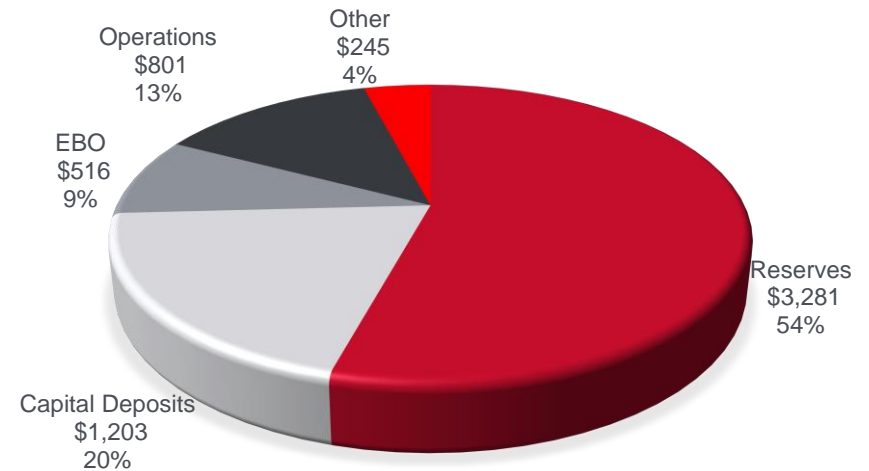
The City of Calgary invests funds that stem from the following sources:

- 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

*Includes: Calgary Housing Company, Calgary Parking, Roads, Livery Transport Services, and other non-utilities that do not impact the overall asset mix

Sources of Investments

As at December 31, 2021 (\$ millions)



Asset Mix – By Source of Investment

As at December 31, 2021

Source of Investments	Short Term Liquidity	Short Term Fixed Income	Long Term Fixed Income	Equity	Real Assets
Reserves	5.0%	11.7%	50.0%	16.7%	16.7%
Capital Deposits	0.0%	30.0%	60.0%	0.0%	10.0%
EBO	1.0%	11.0%	50.1%	22.3%	15.7%
Operations	60.0%	40.0%	0.0%	0.0%	0.0%

Summary of Investments

Total Assets Under Management

As at December 31, 2021, the market value of The City's total investment portfolio was \$6.1 billion, an increase of \$797 million from \$5.3 billion in the previous year, predominantly due to additions to reserves and investment returns.

Market value and cost – last four quarters

\$ millions

Market value	Q4/21	Q3/21	Q2/21	Q1/21
Internal Management				
Short Term Liquidity	1,270	1,653	1,695	874
External Management				
Short Term Fixed Income	1,833	1,840	1,803	1,587
Long Term Fixed Income	1,996	1,987	1,634	1,595
Equities	656	636	603	575
Real Assets	257	230	230	218
Currency Overlay	41	37	37	36
Total	6,053	6,383	6,002	4,886

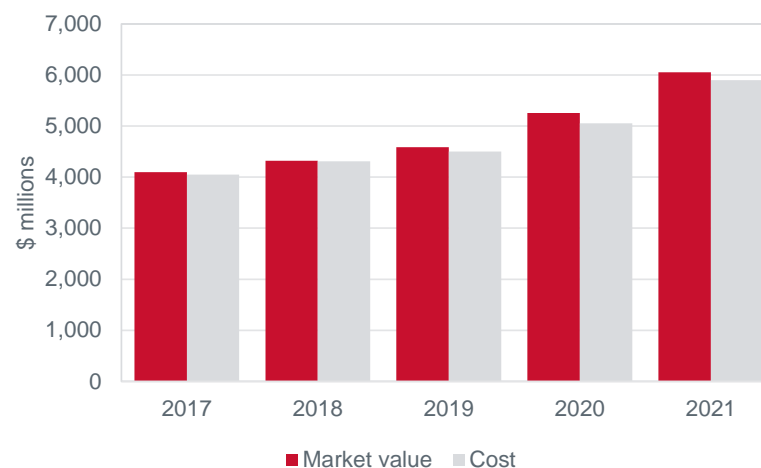
Cost	Q4/21	Q3/21	Q2/21	Q1/21
Internal Management				
Short Term Liquidity	1,270	1,653	1,695	874
External Management				
Short Term Fixed Income	1,833	1,831	1,790	1,574
Long Term Fixed Income	1,970	1,952	1,608	1,580
Equities	562	537	509	508
Real Assets	222	199	198	189
Currency Overlay	42	36	43	32
Total	5,898	6,208	5,842	4,756

Totals may not add due to rounding

Growth in Investments

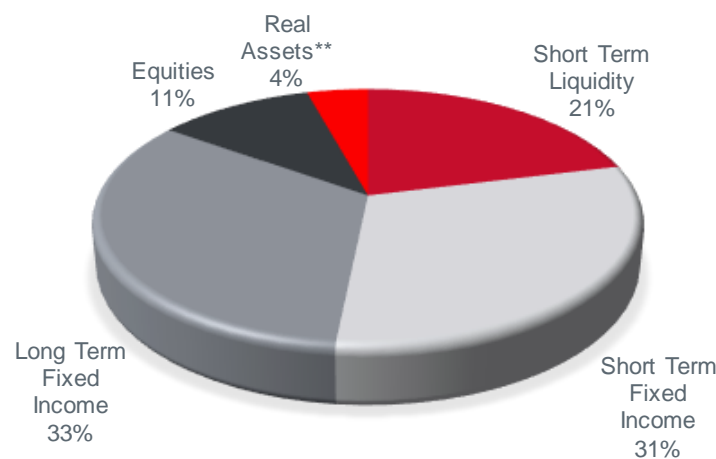
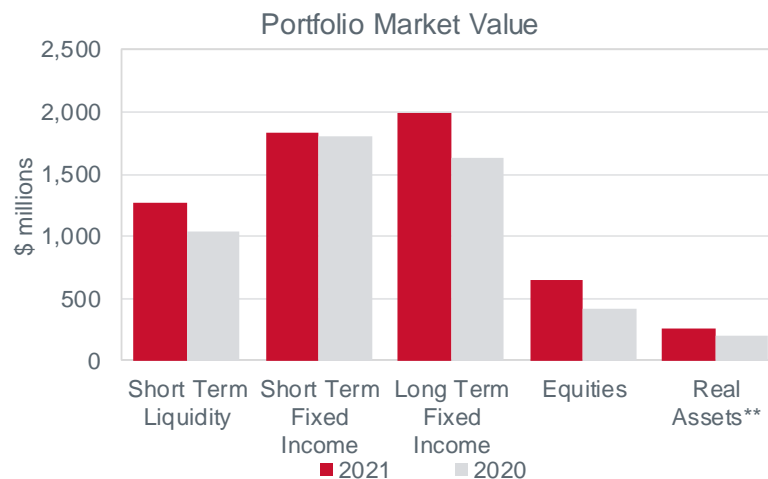
The City's investment portfolio has grown by \$2.0 billion since year end 2017. The increase is driven by additions to reserves and investment returns.

AUM by Calendar Year



Investment Allocation

Portfolio Manager/mandate	Market Value (\$ millions)	Allocation %
Short Term Liquidity	1,269.8	21.1%
Short Term Liquidity	1,269.8	0.0%
Short Term Fixed Income	1,832.9	30.5%
Short Term Universe Bonds	1,228.7	20.4%
CC&L Short Term	454.9	7.6%
PH&N Short Term	539.8	9.0%
Short-Term Bonds (Internal)	234.0	3.9%
Canadian Commercial Mortgage:	604.2	10.1%
Addenda Mortgage	124.3	2.1%
PH&N - Mortgage	367.8	6.1%
Sun Life Mortgage	112.1	1.9%
Long Term Fixed Income	1,996.1	33.2%
Universe Bonds	916.0	15.2%
CC&L Universe	370.6	6.2%
PH&N Universe	374.6	6.2%
BlackRock Universe	170.8	2.8%
Global Bonds	801.1	13.3%
Pimco	400.2	6.7%
Manulife	202.8	3.4%
BlackRock FIGO	198.1	3.3%
Private Credit*	279.0	4.6%
Sun Life PFIP	167.0	2.8%
Crestline SLF II	46.0	0.8%
Crestline SLF III	11.7	0.2%
Bridgepoint BDL II	54.2	0.9%
Equities	655.8	10.9%
Vanguard S&P 500 ETF	209.7	3.5%
CC&L - International	195.7	3.3%
Wasatch	134.8	2.2%
Ashmore	115.6	1.9%
Real Assets**	257.0	4.3%
Brookfield IM	74.3	1.2%
Northleaf Capital	141.5	2.4%
Northleaf US	28.7	0.5%
BlackRock GRP III	12.5	0.2%



* Private credit AUM does not include committed capital not yet deployed (\$33 million)

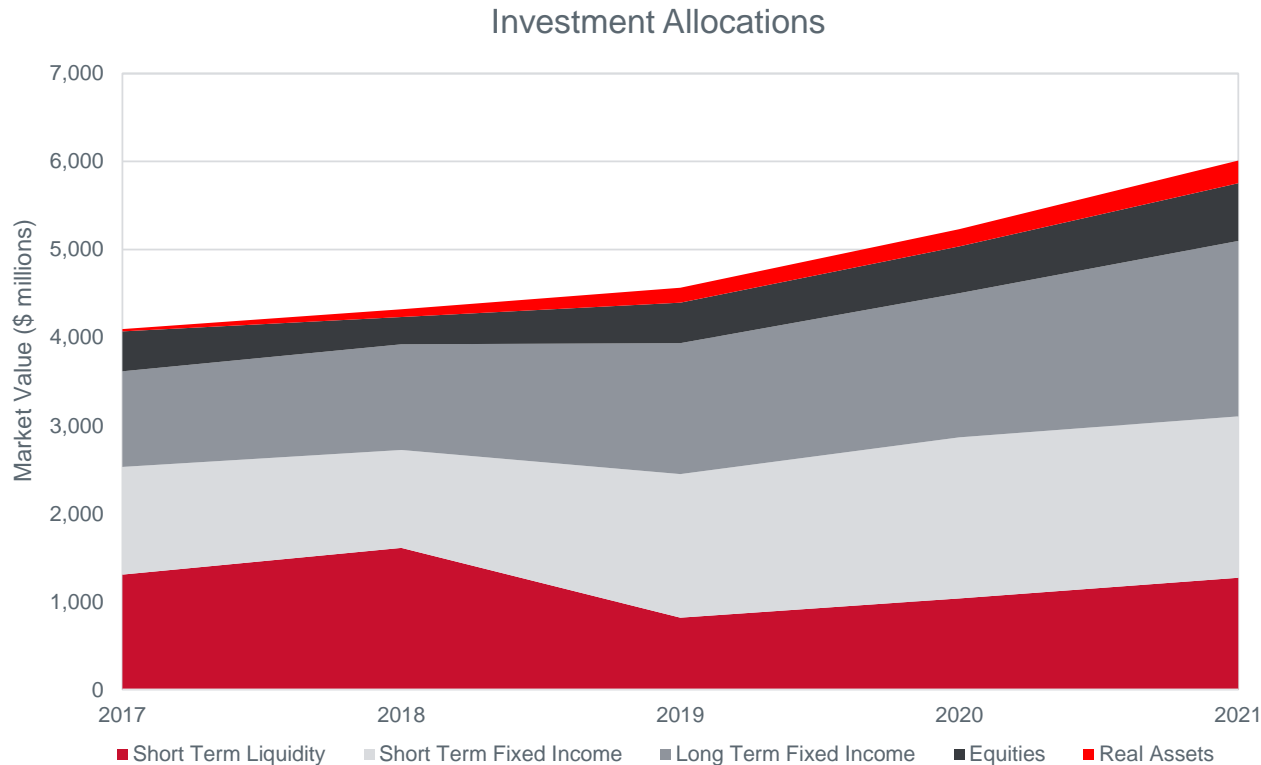
**Real assets AUM does not include committed capital not yet deployed (\$245 million)

Investment Allocation (cont.)

The City of Calgary investment policy was updated in 2020 to revise the aggregate asset mix to mitigate investment risks and increase risk-adjusted returns. Through various sources of funding and investment returns, the market value of the City of Calgary’s consolidated investment portfolio has increased from \$4,097 million in 2017 to \$6,053 million for the year ending 2021.

Over the same period, the Short Term Liquidity portfolio has decreased in notional amount from \$1,306 million to \$1,270 million, and by percentage of the consolidated portfolio decreasing from 32% to 21%. The portfolios funded from this decrease were longer term asset classes including the Equities portfolio, which has grown from a market value of \$452 million to \$656 million. Further, the Real Assets portfolio has grown from \$27 million to \$257 million (excluding \$245 million of committed capital not yet deployed). Last, Private Credit allocations within the Long Term Fixed Income portfolio has risen from \$4 million to \$279 million (excluding \$33 million of committed capital not yet deployed).

Looking forward, The City will continue to fund longer term asset classes including a new real estate allocation, and by continuing to fund prior Private Credit and Real Asset commitments as additional capital is called.



Investment Performance

Historical Performance

	Q4/21	Annualized Returns				Annual Returns				
		1 Year	3 Years	5 Years	ITD	2021	2020	2019	2018	2017
City of Calgary Consolidated	0.98	2.06	5.00	3.78	3.28	2.06	6.53	6.46	1.48	2.51
Benchmark	0.99	1.28	4.47	3.44	2.89	1.28	6.65	5.55	1.62	1.28
Value Added	-0.01	0.79	0.53	0.34	0.39	0.79	-0.12	0.91	-0.14	0.79
Short Term Liquidity	0.18	0.85	1.67	1.65	1.51	0.85	1.79	2.38	1.86	0.85
Benchmark	0.05	0.17	0.89	0.92	0.82	0.17	0.86	1.65	1.38	0.17
Value Added	0.13	0.68	0.78	0.73	0.69	0.68	0.93	0.73	0.48	0.68
Short Term Fixed Income	-0.11	0.00	2.93	2.49	2.49	0.00	5.93	2.95	2.83	0.00
Benchmark	-0.49	-0.93	2.35	2.10	2.08	-0.93	5.19	2.89	2.76	-0.93
Value Added	0.38	0.94	0.59	0.40	0.41	0.94	0.75	0.06	0.07	0.94
Long Term Fixed Income	0.82	-0.63	5.03	4.14	3.56	-0.63	8.53	7.43	2.98	-0.63
Benchmark	0.56	-2.59	3.92	3.55	3.11	-2.59	8.23	6.45	3.65	-2.59
Value Added	0.26	1.96	1.11	0.59	0.44	1.96	0.30	0.98	-0.67	1.96
Equities	4.11	12.07	13.77	8.95	9.75	12.07	5.98	23.99	-6.36	12.07
Benchmark	6.36	17.53	19.31	12.08	11.13	17.53	14.80	25.88	-8.66	17.53
Value Added	-2.25	-5.46	-5.54	-3.13	-1.38	-5.46	-8.82	-1.89	2.30	-5.46
Real Assets	2.39	9.92	11.77	7.99	7.99	9.92	6.41	19.39	5.16	9.92
Benchmark	3.59	10.43	8.49	7.57	7.57	10.43	1.28	14.19	5.79	10.43
Value Added	-1.20	-0.51	3.28	0.42	0.42	-0.51	5.13	5.19	-0.63	-0.51
Currency Hedge Overlay	0.29	1.10	1.21	n.a.	0.42	1.10	0.82	1.72	-1.96	n.a.
Benchmark	0.00	0.00	0.00	n.a.	0.00	0.00	0.00	0.00	0.00	n.a.
Value Added	0.29	1.10	1.21	n.a.	0.42	1.10	0.82	1.72	-1.96	n.a.

Canadian dollar returns
Source: CIBC Mellon

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)

Long Term Fixed Income Portfolio

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

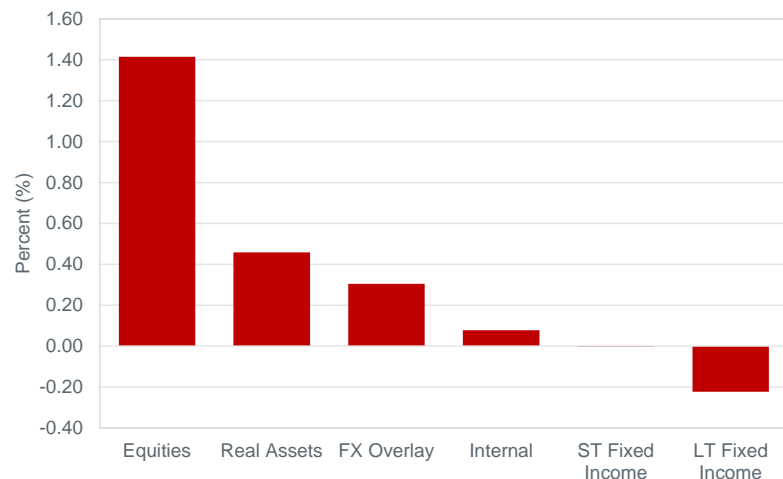
- MSCI ACWI ex-US (CC&L)
- S&P 500 (Vanguard VOO)
- MSCI EM (Ashmore)
- MSCI World Small Cap (Wasatch)
- MSCI World for Global Low Volatility Equity (TDAM)

Real Assets

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

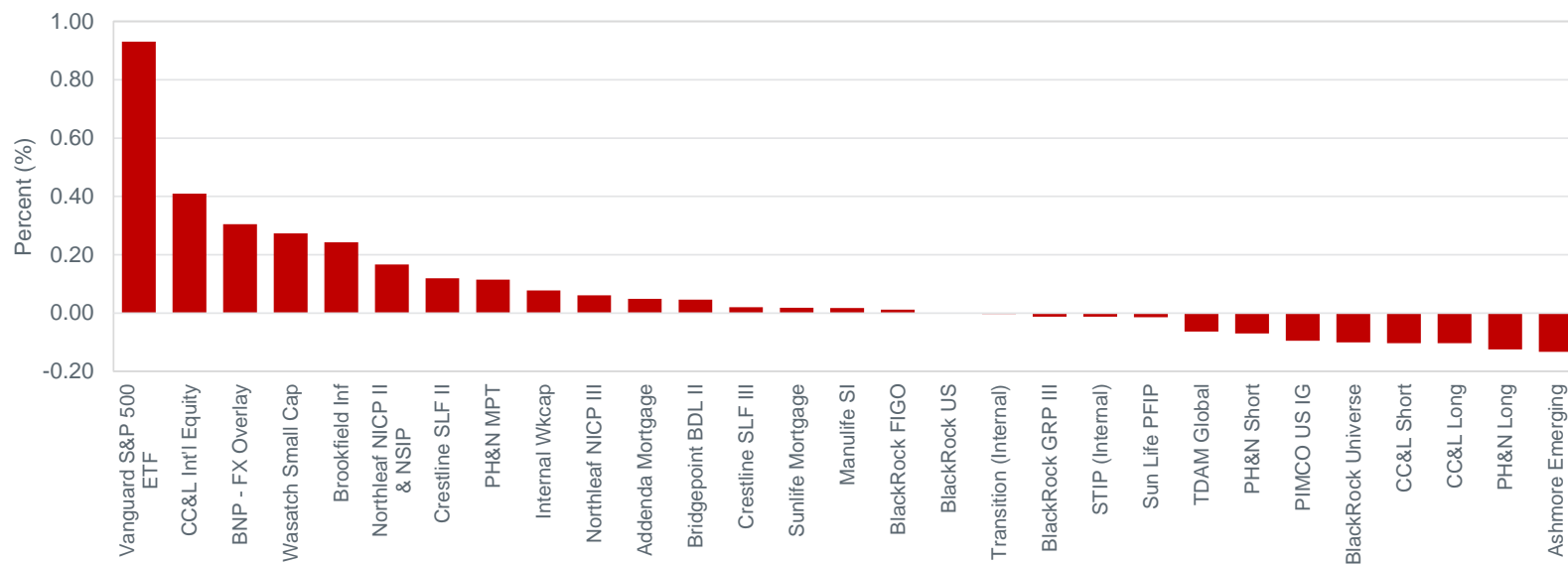
Contribution to Return

Portfolio Contribution to Return - 2021



- The total City of Calgary consolidated portfolio return in 2021 was 2.1%
- Equities were the largest contributors to total return at 1.4%
- Real Assets, Currency Overlay and Internal Working Capital portfolios also contributed to positive returns last year
- Long Term Fixed Income was the largest detractor

Mandate Contribution to Return – 2021



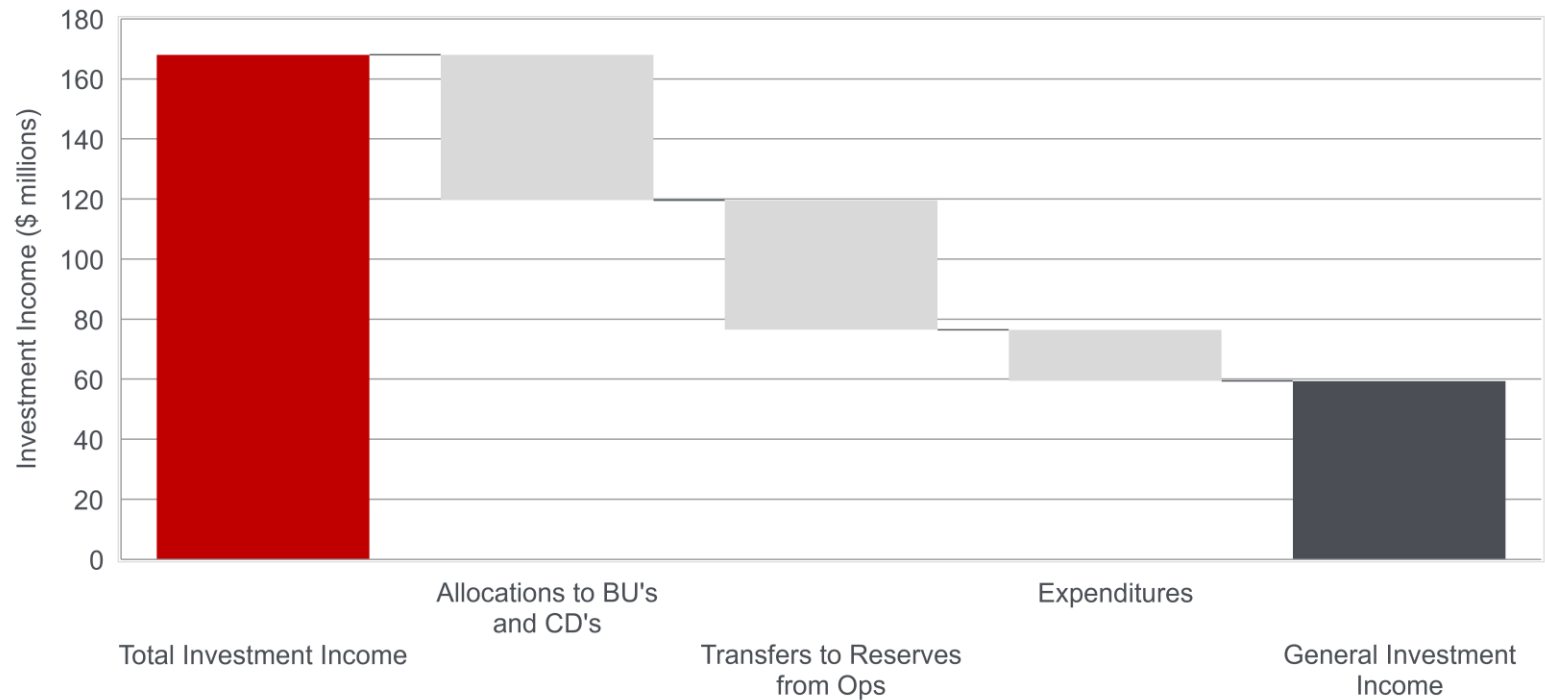
Investment Income

In 2021, The City of Calgary’s total portfolio generated \$168.1 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 (\$ millions) as at December 31	2017	2018	2019	2020 *	2021
Corporate Total Investment Income	125.6	73.6	211.5	167.7	168.1
Allocations to Self-Supporting Business Units and Capital Deposits	40.2	22.0	43.1	52.0	48.5
Transfers to Reserves from Operations	27.2	19.0	41.0	47.0	43.1
Expenditures (net of receivables)	7.0	2.4	7.0	11.2	17.0
General Investment Income	51.2	30.2	120.4	57.6	59.4

*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

Investment Income – 2021



Short Term Liquidity

Investment Objective

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

Performance (% net of fees)

As at December 31, 2021

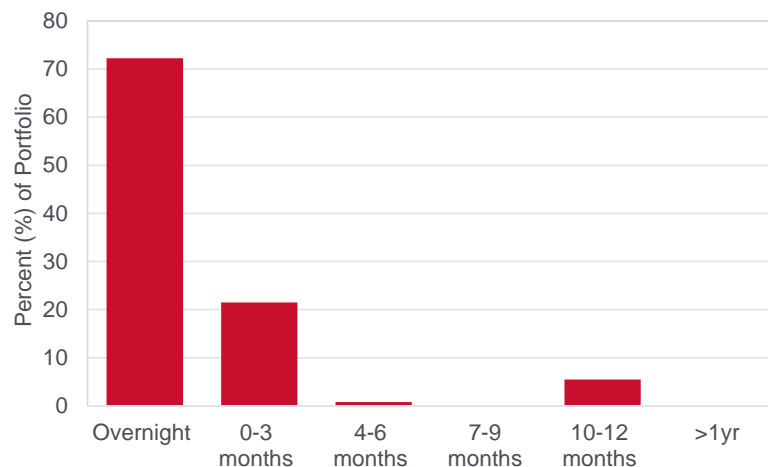
	Q4/21	Annualized Returns*			
		1 Year	3 Years	5 Years	ITD
Short Term Liquidity	0.18	0.85	1.67	1.65	1.51
Benchmark	0.05	0.17	0.89	0.92	0.82
Value Added	0.13	0.68	0.78	0.73	0.69

Benchmark: FTSE Canada 91 Day TBill Index

*Returns are for term deposits only

Portfolio Maturities

As at December 31, 2021



Assets Under Management

	\$ millions
Term Deposits*	355.0
High Interest Savings & High Interest Notice accounts	914.8
Closing Net Asset Value - December 31, 2021	1,269.8

*Held at large Canadian financial institutions

Positioning

The short term liquidity portfolio invests 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. In 2021, cash balances remained significantly higher than usual as we continued to receive higher rates holding cash with the banks compared to high credit quality short term instruments available in the market.

Investment Highlights

The internally managed term deposit portfolio returned 0.85% in 2021, outperforming the benchmark return of 0.17%. The excess return achieved by the internal portfolio is largely attributed to a longer term to maturity vs. the benchmark, credit exposure, and the illiquidity premium received on the term deposits held.

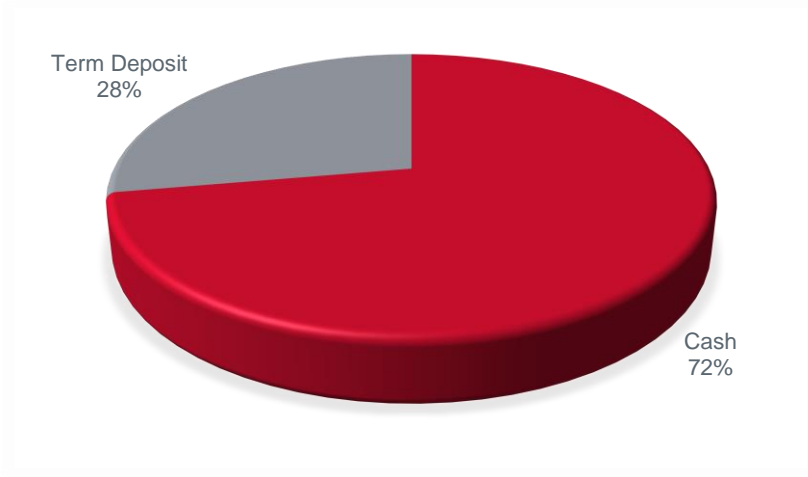
Forward Looking Strategy

Treasury continuously assesses the benefits of holding overnight balances with the bank against returns available through short term investment vehicles, while also considering liquidity requirements. With continued high overnight cash balances, The City can access top tier overnight interest rates offered by the banks, while also maintaining liquidity in the portfolio.

Short Term Liquidity (cont.)

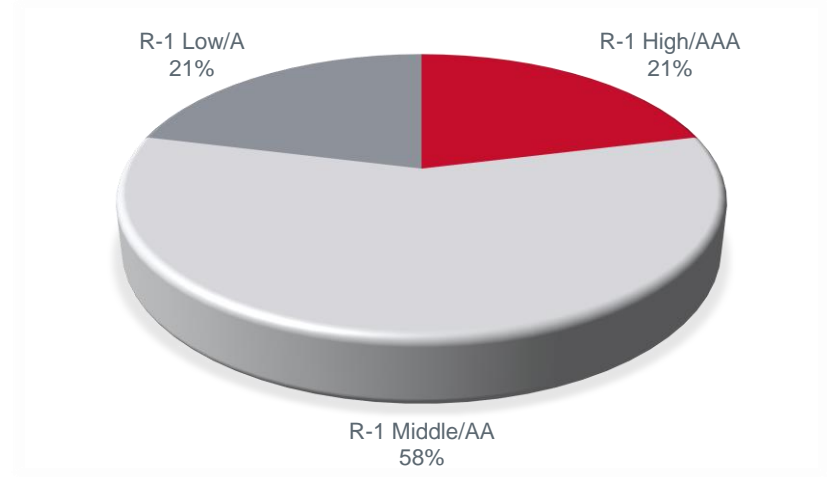
Asset Type

As at December 31, 2021



Credit Quality *

As at December 31, 2021



*Term deposits only

Short Term Fixed Income

Investment Objective

To provide exposure to short term Canadian fixed income securities and commercial mortgages, with an emphasis on capital preservation and income generation.

Performance (% net of fees)

As at December 31, 2021

	Q4/21	Annualized Returns			
		1 Year	3 Years	5 Years	ITD
Short Term Bonds	-0.11	0.00	2.93	2.49	2.49
Benchmark	-0.49	-0.93	2.35	2.10	2.08
Value Added	0.38	0.94	0.59	0.40	0.41

Benchmark: FTSE TMX Canada Short Term Bond Index

Composition

Mandate	AUM (\$ millions)	% of portfolio	Current Yield (%)	Duration (years)
Addenda Mortgage	124.3	7%	2.69%	2.0
CC&L Short Term	454.9	25%	1.40%	2.6
PH&N Short Term	539.8	29%	1.43%	2.5
PH&N Mortgage Pension Trust	367.8	20%	2.28%	3.3
Sun Life Mortgage Fund	112.1	6%	2.56%	4.5
Short-Term Bonds (Internal)	234.0	13%	n.a.	1.9
Short Term Bonds	1,832.9			

Assets Under Management

	\$ millions
Opening Net Asset Value - January 1, 2021	1,804.8
Cash Flows	28.3
Portfolio Gains & Losses*	-0.2
Closing Net Asset Value - December 31, 2021	1,832.9

*Includes realized/unrealized capital gains and losses, dividends, and interest income

Positioning

Short term bond mandates are positioned overweight corporate credits and underweight government bonds, shorter than benchmark duration. Commercial mortgage mandates remain focused on multifamily and industrial properties.

Investment Highlights

The short term fixed income portfolio returned 0.0% in 2021 vs. the benchmark return of -0.93%. Positive contributions from Canadian commercial mortgage mandates helped offset negative returns on short term public bond mandates.

The flooding in BC did not materially impact the Canadian commercial mortgage investments.

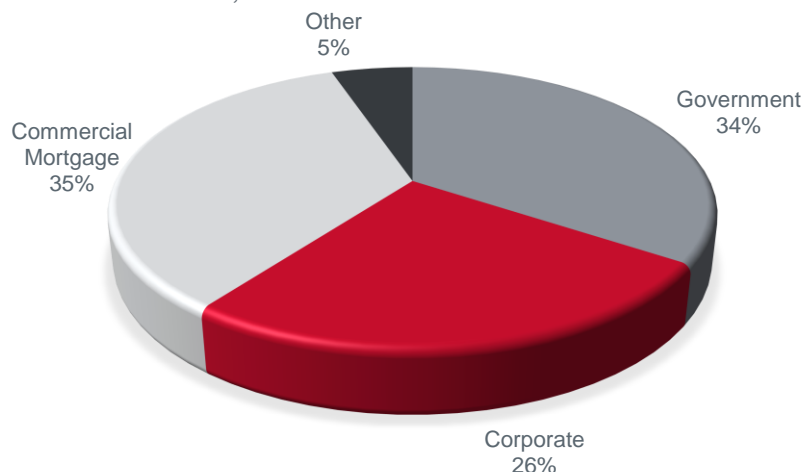
Forward Looking Strategy

The City plans to reduce the short term fixed income portfolio to fund existing infrastructure commitments in the real asset portfolio.

Short Term Fixed Income (cont.)

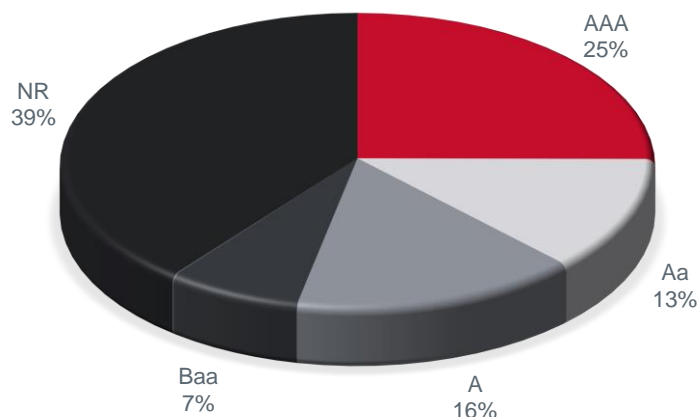
Sector Allocation

As at December 31, 2021



Credit Quality

As at December 31, 2021



NR – not rated, includes commercial mortgages

Geographic Allocation

As at December 31, 2021 the short term fixed income portfolio is 100% allocated to Canada.

Environmental, Social, & Governance

- CC&L is a member of several professional organizations, including the UNPRI, Canadian Coalition for Good Governance (CCGG), and Climate Engagement Canada (CEC)
- Addenda enlisted in the Net Zero Asset Managers (NZAM) Initiative in early 2021 which is a global group of financial institutions that are vowing to work with clients on decarbonization targets. This initiative includes 200 signatories worldwide, representing \$57 trillion in AUM
- PH&N Fixed Income team engaged with a power generation company regarding converting existing bonds to green bonds
- SLC Management is rated “A” by the UNPRI

Long Term Fixed Income

Investment Objective

To provide exposure to longer term Canadian and Global fixed income securities and private credit investments, with an emphasis on capital preservation and income generation.

Performance (% net of fees)

As at December 31, 2021

	Q4/21	Annualized Returns			
		1 Year	3 Years	5 Years	ITD
Long Term Bonds	0.82	-0.63	5.03	4.14	3.56
Benchmark	0.56	-2.59	3.92	3.55	3.11
Value Added	0.26	1.96	1.11	0.59	0.44

Benchmark: FTSE TMX Canada Universe Bond Index

Composition

Mandate	AUM (\$ millions)*	% of portfolio	Current Yield (%)	Duration (years)
CC&L Universe	370.6	19%	2.00%	8.3
PH&N Universe	374.6	19%	1.97%	8.1
BlackRock Universe	170.8	9%	n.a.	n.a.
Canadian Universe	916.0	46%		
Pimco US IG	400.2	20%	2.98%	7.6
Manulife Strategic Income	202.8	10%	2.73%	3.8
BlackRock FIGO	198.1	10%	n.a.	n.a.
Global Fixed Income	801.1	40%		
Sun Life PFIP	167.0	8%	3.19%	6.7
Crestline SLF II	46.0	2%	n.a.	n.a.
Crestline SLF III	11.7	1%	n.a.	n.a.
Bridgepoint BDL II	54.2	3%	6.20%	n.a.
Private Debt	279.0	14%		
Long Term Fixed Income	1,996.1			

* Private debt AUM does not include committed capital not yet deployed (\$27 million to Crestline SLF III; \$6 million to Bridgepoint BDL II)

Assets Under Management

	\$ millions
Opening Net Asset Value - January 1, 2021	1,635.0
Cash Flows	369.0
Portfolio Gains & Losses*	-7.8
Closing Net Asset Value - December 31, 2021	1,996.1

*Includes realized/unrealized capital gains and losses, dividends, and interest income

Positioning

Canadian public bond mandates are positioned overweight corporate credits and underweight government bonds, shorter than benchmark duration. Global fixed income managers have been biased towards bonds with shorter than benchmark duration which has provided a source of added value.

Investment Highlights

The long term fixed income portfolio returned -0.63% in 2021 vs. the benchmark return of -2.59%. Positive returns from private credit partially offset negative returns from public bonds.

Forward Looking Strategy

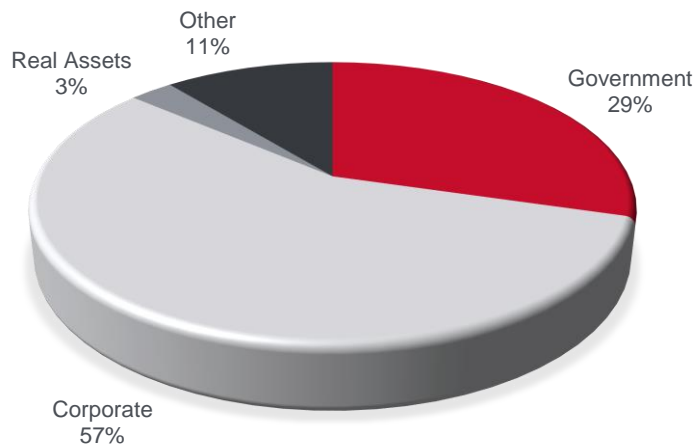
In an environment of high inflation and expectations of rising interest rates, The City plans to continue to look for ways to shorten duration and generate strong cash yields.

The City will continue to allocate to the Private Credit markets through existing commitments (\$27 million to Crestline SLF III; \$6 million to Bridgepoint BDL II) and look to make further commitments in 2022.

Long Term Fixed Income (cont.)

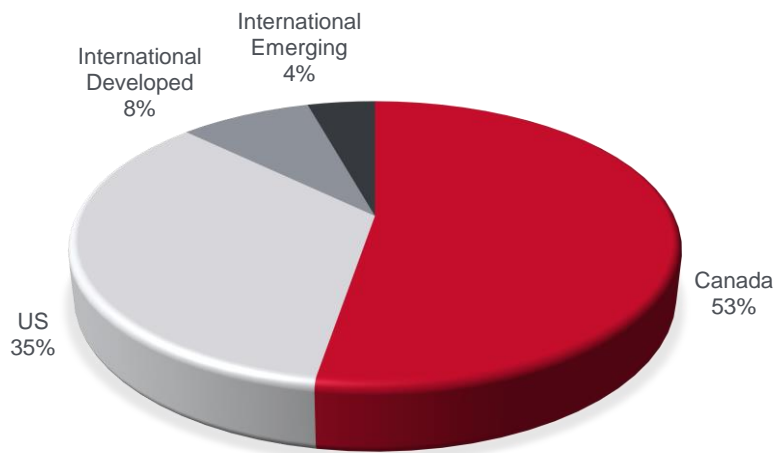
Sector Allocation

As at December 31, 2021



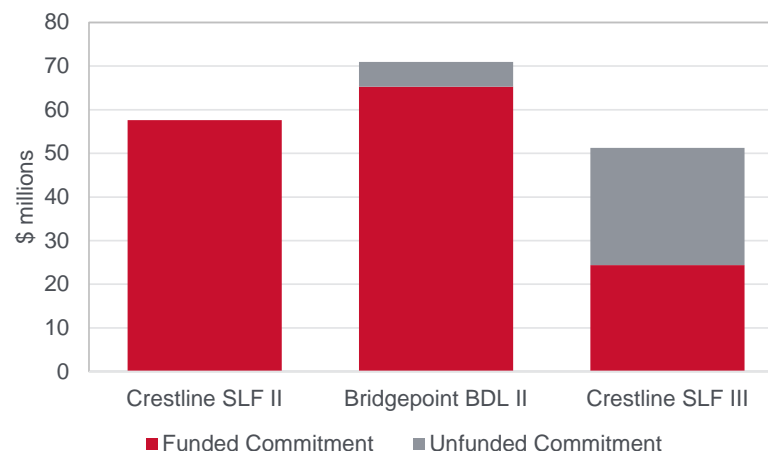
Geographic Allocation

As at December 31, 2021



Committed Capital

As at March 2022



Environmental, Social, & Governance

- Bridgepoint has been awarded an “A+” for strategy and governance, an “A” for private equity, and an “A” for credit for the last 3 years by PRI
- PIMCO has been awarded an “A+” across all Fixed Income categories by PRI for 2018, 2019, and 2020
- Manulife scored an “AA” in an ESG rating by MSCI, which is considered a Leader in the industry
- BlackRock was rated an “A+” or “A” across every category in the 2020 PRI assessment report, and ranked #2 amongst each company in the S&P 250 by the 2019 Transparency Awards

Equities

Investment Objective

Investment in a diversified portfolio of global equities located in developed and emerging markets to achieve long term capital appreciation, dividend income and inflation protection.

Performance (% net of fees)

As at December 31, 2021

	Q4/21	Annualized Returns			
		1 Year	3 Years	5 Years	ITD
Equities	4.11	12.07	13.77	8.95	9.75
Benchmark	6.36	17.53	19.31	12.08	11.13
Value Added	-2.25	-5.46	-5.54	-3.13	-1.38

Benchmark: MSCI All Country World Index

Composition

Mandate	AUM (\$ millions)	% of portfolio	Strategy	Current Yield (%)
Vanguard S&P 500 ETF	209.7	32%	Passive	1.56%
CC&L International	195.7	30%	Quantitative	2.50%
Wasatch Small Cap	134.8	21%	Active	0.45%
Ashmore Emerging Markets	115.6	18%	Active	1.92%
Equities	655.8			

Assets Under Management

	\$ millions
Opening Net Asset Value - January 1, 2021	411.6
Cash Flows	173.6
Portfolio Gains & Losses*	70.5
Closing Net Asset Value - December 31, 2021	655.8

*Includes realized/unrealized capital gains and losses, dividends, and interest income

Positioning

The equity portfolio is a mix of passive and actively managed mandates. The portfolio is overweight mid cap and emerging market equities compared to the benchmark.

Investment Highlights

The equity portfolio returned 12.07% in 2021 vs. the benchmark return of 17.53%. US equities significantly outperformed international and small cap stocks. Emerging markets stocks were the largest detractors from the portfolio.

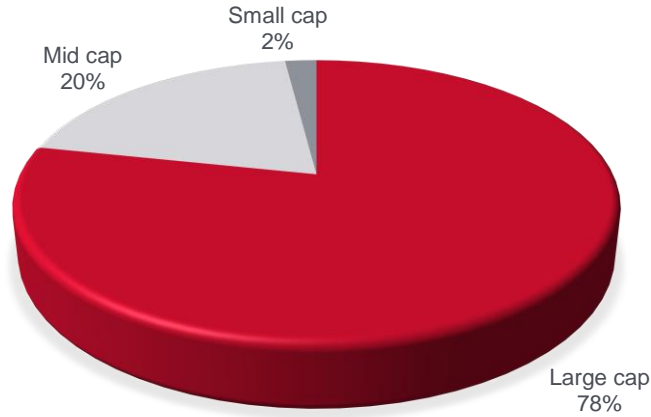
Forward Looking Strategy

The City is reviewing the construction of the equity portfolio in 2022 to determine the optimal asset mix.

Equities (cont.)

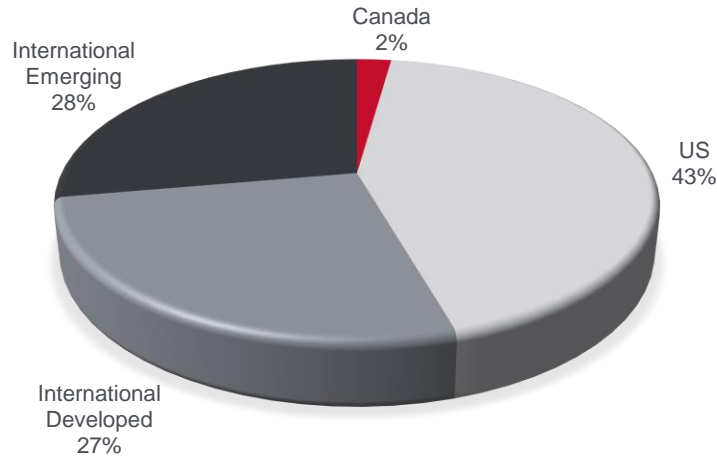
Sector Allocation

As at December 31, 2021



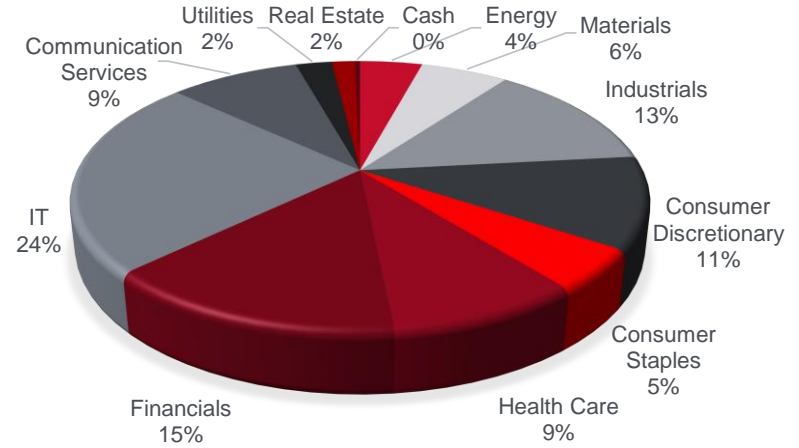
Geographic Allocation

As at December 31, 2021



Sector Allocation

At as March 2022



Environmental, Social, & Governance

- Wasatch became a signatory to the PRI in January 2018
- Ashmore has been a PRI signatory since 2013, and rated an “A” across all categories in 2020

Real Assets

Investment Objective

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

Performance (% net of fees)

As at December 31, 2021

	Q4/21	Annualized Returns			
		1 Year	3 Years	5 Years	ITD
Real Assets	2.39	9.92	11.77	7.99	7.99
Benchmark	3.59	10.43	8.49	7.57	7.57
Value Added	-1.20	-0.51	3.28	0.42	0.42

Benchmark: Canadian CPI +4.5%

Composition

Mandate	AUM (\$ millions)**	% of portfolio	Current Yield (%)	Inception Date*
Brookfield Global Listed Infra	74.3	29%	3.10%	Mar-15
Northleaf NICP II & NSIP	141.5	55%	2.80%	Jan-17
Northleaf NICP III	28.7	11%	n.m.	Mar-21
BlackRock GRP III	12.5	5%	n.m.	Jun-21
Real Assets	257.0			

* City of Calgary engagement date

** Real assets AUM does not include committed capital not yet deployed (\$14 million to Northleaf NICP II & NSIP; \$37 million to Northleaf NICP III; \$66 million to BlackRock GRP III; and \$128 million to CBRE GIF)

n.m. – not meaningful

Assets Under Management

	\$ millions
Opening Net Asset Value - January 1, 2021	194.6
Cash Flows	40.6
Portfolio Gains & Losses*	21.9
Closing Net Asset Value - December 31, 2021	257.0

*Includes realized/unrealized capital gains and losses, dividends, and interest income

Positioning

The real asset portfolio consists of public and private infrastructure investments across four main sectors: Utilities & Renewables, Transports, Energy Infrastructure and Communications.

Investment Highlights

The real asset portfolio returned 9.92% in 2021 vs. the benchmark return of 10.43%. Canadian inflation was at multi-year highs during 2021, while two of The City's mandates were in the early stages of investment.

Forward Looking Strategy

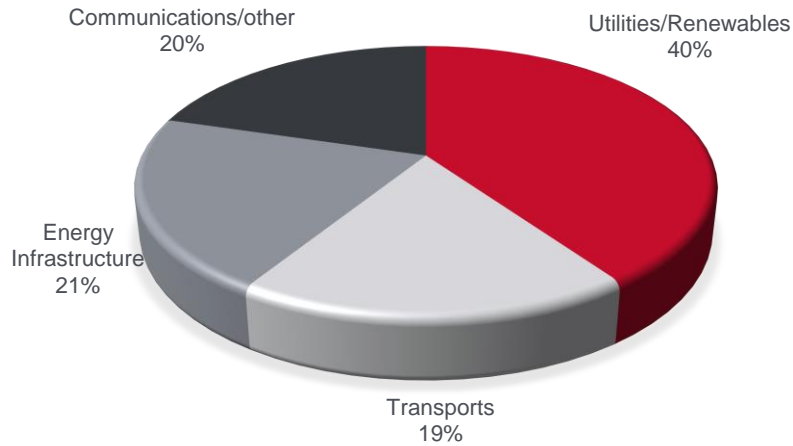
The City will continue to allocate to global infrastructure through existing commitments to BlackRock Global Renewable Power Fund III and the CBRE Global Infrastructure Fund.

The City plans to add a real estate allocation in 2022.

Real Assets (cont.)

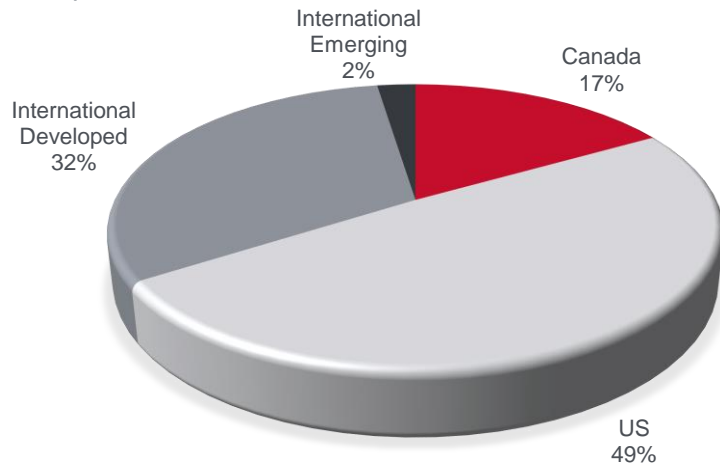
Sector Allocation

As at September 30, 2021



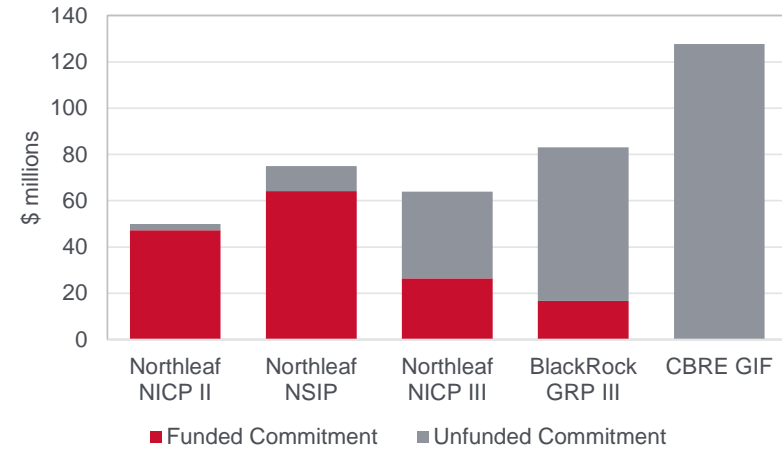
Geographic Allocation

As at September 30, 2021



Committed Capital

As at March 2022



Environmental, Social, & Governance

- Over the last two years, Brookfield has become affiliated with five sustainability organizations, including PRI and NZAM
- Northleaf has maintained ratings of 'A' and above in annual assessments by PRI for the last three years
- BlackRock's GRP fund invests in renewable power and other climate infrastructure, and all investments go through a rigorous ESG due diligence process with ongoing benchmarking

Currency Overlay

Investment Objective

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

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 1% of the portfolio NAV.

Performance (% net of fees)

As at December 31, 2021

	Q4/21	Annualized Returns			
		1 Year	3 Years	5 Years	ITD
Currency Overlay	0.29	1.10	1.21	n.a.	0.42
Benchmark	0.00	0.00	0.00	n.a.	0.00
Value Added	0.29	1.10	1.21	n.a.	0.42

Benchmark: Zero Benchmark (passive)

Assets Under Management

	\$ millions
Opening Net Asset Value - January 1, 2021	26.2
Cash Flows	1.0
Portfolio Gains & Losses*	13.9
Closing Net Asset Value - December 31, 2021	41.1

*Includes realized/unrealized capital gains and losses, dividends, and interest income

Positioning

BNP reviews net foreign currency exposures for The City's portfolio, and at their discretion, implements a hedge between 0% and 100% for each underlying currency exposure.

Investment Highlights

The loonie appreciated 0.43% vs. the US dollar in 2021, ending the year at \$0.7888 CAD/USD.

The portfolio strategy was able to outperform the zero benchmark in 2021 by 1.1%.

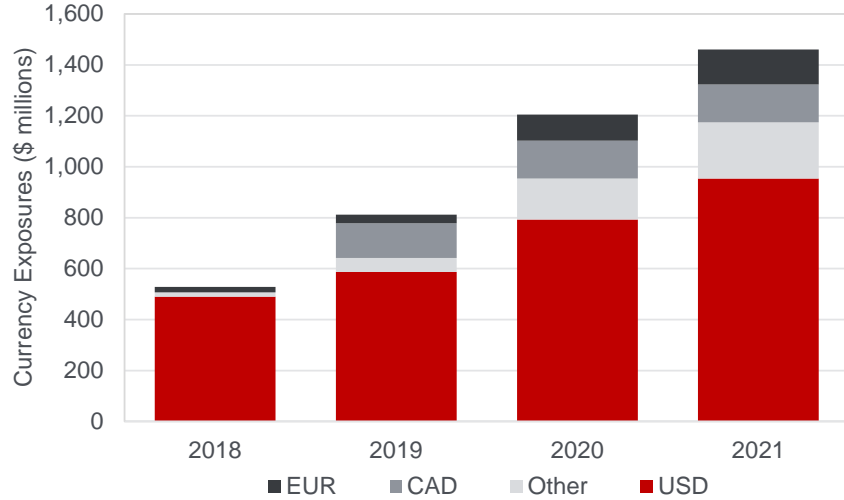
Forward Looking Strategy

In 2021, The City implemented a policy change to allow BNP to begin selling or writing options to provide more flexibility with currency management. There were no fundamental changes to the policy after removing this restriction, and all trades will adhere to the Prudent Investor Rule. The City's risk profile is expected to remain unchanged moving forward.

Currency Overlay (cont.)

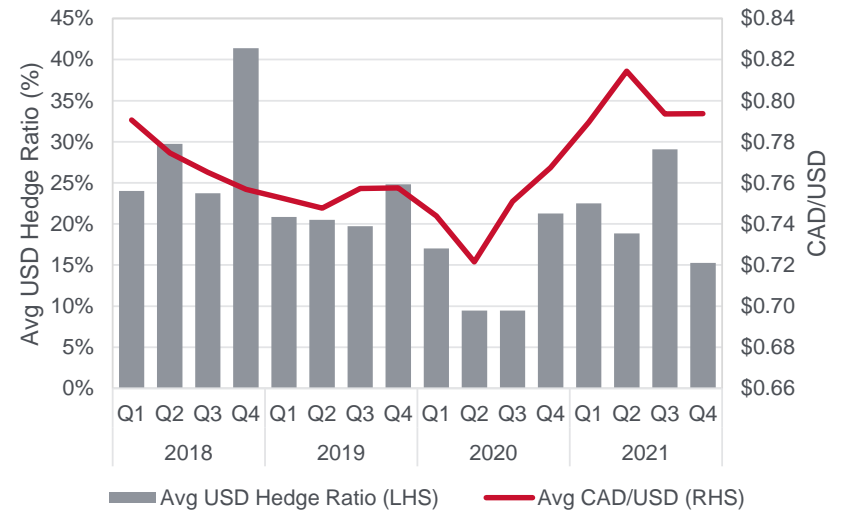
Benchmark Exposures as at December 31

Since Inception



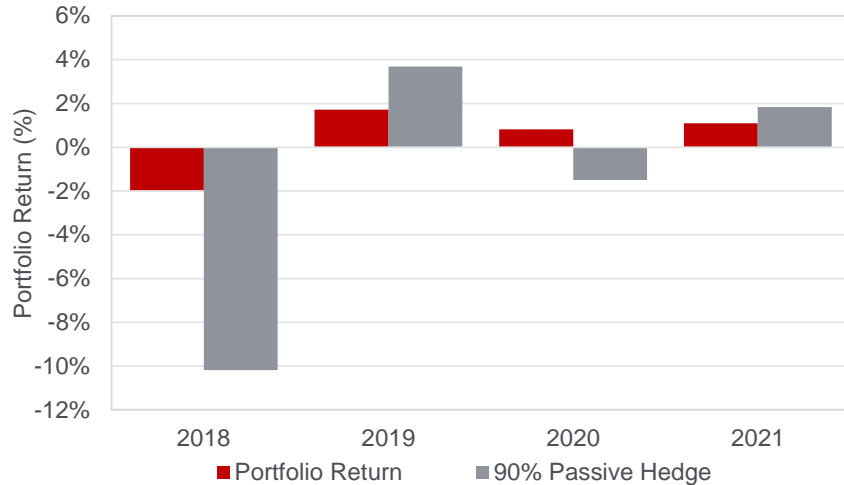
Average USD Hedge Ratio

Since Inception



Historical Performance

Since Inception



2022 Economic & Capital Market Outlook

The International Monetary Fund (IMF) forecasts the global economy to grow by 4.4% in 2022 following a robust 5.9% in 2021. There are several key themes in 2022 causing uncertainty within global economic markets:

- Global short- and long-term impact stemming from imposed sanctions resulting due to Russian military action in the Ukraine;
- Impact of property market-driven slowdown in China;
- Ongoing inflation exacerbated by supply chain disruptions and geopolitical turmoil; and
- Will any new COVID variants emerge leading to further restrictions or lockdowns

It is widely expected that central banks in developed markets will begin raising rates to address spiking inflation after a period of prolonged stimulus dealing with the COVID pandemic. Despite forecasted rate hikes from global central banks, inflation is expected to persist due to ongoing supply chain disruptions and increased energy prices, with the Russian military action in the Ukraine further exacerbating these issues.

According to the IMF, the Canadian economy is forecasted to expand by 4.1% in 2022 following a solid bounce-back year in 2021 in which the country posted gross domestic product (GDP) growth of an estimated 4.6%. Due to the relatively high vaccination rate in Canada, further restrictions should be limited which should lead to continued positive momentum. The energy sector should benefit from increased crude oil prices as companies continue the trend to deleverage their balance sheets. As the Bank of Canada raises rates, the housing sector may face some headwinds. Residential investment now represents a record level in Canada as a lack of supply and low borrowing costs have caused an increase in prices. Led by strong commodity pricing, earnings growth for equities is expected to be solid across most sectors, including cyclically sensitive companies if global growth meets expectations.

According to the IMF, the United States economy is forecasted to expand by 4.0% in 2022 following 2021 where the country posted a GDP growth of an estimated 5.6%. Inflation will remain a key focus throughout 2022 as it touched 40-year highs in Q1 2022 and is expected to remain high for the remainder of the year. However, inflationary pressures could begin to ease in the latter half of 2022 if expected rate hikes by the Federal Reserve go ahead as planned and if supply chain headwinds subside. Due to several market factors, including increased geopolitical risk and a hawkish Fed, US equities could continue to see increased volatility at least through the first half of the year. Alternative asset classes and real estate allocations could provide a solid hedge to an increased inflationary environment.

The global economy has the potential to achieve another year of above-potential growth. The IMF anticipates that emerging markets GDP growth is expected to outperform developed markets with projected growth of 4.8% and 3.9% respectively in 2022. A growing trend to continue through 2022 and beyond is the transition toward the decarbonization of economies in response to climate change. This may create challenges for global growth for several reasons, including inconsistent environmental policies. However, decarbonization and other ESG-led initiatives will also create opportunities as capital is deployed into new projects which should benefit well diversified portfolios.

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 \$11.8 million on external manager fees (not including any private asset performance 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 2020, external investment manager costs were 29.6 bps, which was 17.3 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.

CEM Benchmarking data for 2021 will become available in Q4 of 2022.

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, 2021)*

- 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 – General Manager, Community Services

External Members *(as at December 31, 2021)*

- 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

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>
Duration	Measures the sensitivity of the full price of a bond (including accrued interest) to a change in interest rates.
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.

Appendix 1 – Mandate Level Returns

Short Term Fixed Income

	Q4/21	Annualized Returns				Annual Returns				
		1 Year	3 Years	5 Years	ITD	2021	2020	2019	2018	2017
PH&N Short Term	-0.32	-0.63	2.90	2.22	2.33	-0.63	6.39	3.06	1.92	0.53
Benchmark	-0.49	-0.93	2.45	1.87	1.96	-0.93	5.29	3.09	1.91	0.08
Value Added	0.17	0.30	0.45	0.36	0.38	0.30	1.10	-0.04	0.00	0.46
CC&L Short Term	-0.49	-0.82	2.70	2.12	2.21	-0.82	5.98	3.06	2.05	0.45
Benchmark	-0.49	-0.93	2.45	1.87	1.96	-0.93	5.29	3.09	1.91	0.08
Value Added	0.00	0.11	0.25	0.25	0.26	0.11	0.69	-0.04	0.14	0.38
Short Term Income Portfolio	-0.45	n.a.	n.a.	n.a.	-0.29	n.a.	n.a.	n.a.	n.a.	n.a.
Benchmark	-0.49	n.a.	n.a.	n.a.	-0.35	n.a.	n.a.	n.a.	n.a.	n.a.
Value Added	0.04	n.a.	n.a.	n.a.	0.06	n.a.	n.a.	n.a.	n.a.	n.a.
PH&N Mortgage Portfolio	0.54	1.50	3.36	3.25	3.26	1.50	5.57	3.04	3.99	2.20
Benchmark	-0.49	-0.93	2.45	1.87	1.89	-0.93	5.29	3.09	1.91	0.08
Value Added	1.03	2.43	0.91	1.38	1.37	2.43	0.28	-0.05	2.07	2.12
Addenda Mortgage	0.38	1.90	3.73	n.a.	3.69	1.90	5.75	3.56	4.05	n.a.
Benchmark	-0.49	-0.93	2.45	n.a.	2.15	-0.93	5.29	3.09	1.91	n.a.
Value Added	0.88	2.83	1.27	n.a.	1.54	2.83	0.46	0.47	2.13	n.a.
Sunlife Mortgage	0.54	0.76	4.01	n.a.	4.01	0.76	7.31	4.06	n.a.	n.a.
Benchmark	-0.49	-0.93	2.45	n.a.	2.45	-0.93	5.29	3.09	n.a.	n.a.
Value Added	1.03	1.69	1.56	n.a.	1.56	1.69	2.02	0.97	n.a.	n.a.

Canadian dollar returns

Source: CIBC Mellon

Long Term Fixed Income

	Q4/21	Annualized Returns				Annual Returns				
		1 Year	3 Years	5 Years	ITD	2021	2020	2019	2018	2017
PH&N Long Term	1.54	-2.33	4.80	3.70	3.62	-2.33	10.40	6.74	1.41	2.72
Benchmark	1.47	-2.54	4.22	3.31	3.18	-2.54	8.68	6.87	1.41	2.52
Value Added	0.07	0.21	0.58	0.39	0.45	0.21	1.72	-0.13	0.01	0.20
CC&L Long Term	1.55	-1.99	4.69	3.54	3.52	-1.99	9.63	6.79	1.27	2.40
Benchmark	1.47	-2.54	4.22	3.31	3.18	-2.54	8.68	6.87	1.41	2.52
Value Added	0.07	0.54	0.47	0.23	0.35	0.54	0.95	-0.08	-0.14	-0.12
BlackRock Long Term	1.45	-2.60	4.17	n.a.	3.61	-2.60	8.55	6.93	1.35	n.a.
Benchmark	1.47	-2.54	4.22	n.a.	3.66	-2.54	8.68	6.87	1.41	n.a.
Value Added	-0.02	-0.07	-0.05	n.a.	-0.05	-0.07	-0.14	0.06	-0.05	n.a.
Pimco US IG	-0.03	-0.80	4.97	n.a.	6.27	-0.80	7.60	8.36	n.a.	n.a.
Benchmark	-0.07	-1.92	4.42	n.a.	5.91	-1.92	7.43	8.04	n.a.	n.a.
Value Added	0.03	1.12	0.55	n.a.	0.36	1.12	0.17	0.32	n.a.	n.a.
Manulife Strategic Income	0.06	0.42	5.77	n.a.	4.05	0.42	8.34	8.77	-0.93	n.a.
Benchmark	-0.99	-5.32	1.04	n.a.	2.05	-5.32	7.11	1.72	7.52	n.a.
Value Added	1.06	5.74	4.73	n.a.	2.00	5.74	1.23	7.05	-8.45	n.a.
BlackRock FIGO	-0.33	0.47	n.a.	n.a.	3.81	0.47	5.63	n.a.	n.a.	n.a.
Benchmark	-0.96	-5.52	n.a.	n.a.	0.22	-5.52	7.28	n.a.	n.a.	n.a.
Value Added	0.63	5.99	n.a.	n.a.	3.59	5.99	-1.65	n.a.	n.a.	n.a.

Canadian dollar returns

Source: CIBC Mellon

Long Term Fixed Income (cont.)

	Q4/21	Annualized Returns				Annual Returns				
		1 Year	3 Years	5 Years	ITD	2021	2020	2019	2018	2017
Sunlife PFIP	1.23	-0.35	4.88	n.a.	5.33	-0.35	8.70	6.50	n.a.	n.a.
Benchmark	1.08	-1.34	5.05	n.a.	5.26	-1.34	8.74	8.05	n.a.	n.a.
Value Added	0.16	0.99	-0.17	n.a.	0.07	0.99	-0.03	-1.55	n.a.	n.a.
Bridgepoint BDL II	-0.98	4.99	5.91	n.a.	4.29	4.99	12.38	0.69	n.a.	n.a.
Benchmark	-0.75	-1.07	3.30	n.a.	2.75	-1.07	11.64	-0.19	n.a.	n.a.
Value Added	-0.22	6.06	2.61	n.a.	1.54	6.06	0.74	0.88	n.a.	n.a.
Crestline SLF II	1.71	15.42	9.58	n.a.	9.85	15.42	7.49	6.05	14.47	n.a.
Benchmark	0.90	6.31	4.92	n.a.	5.81	6.31	3.32	5.15	11.49	n.a.
Value Added	0.81	9.11	4.66	n.a.	4.04	9.11	4.18	0.90	2.99	n.a.
Crestline SLF III	7.10	n.a.	n.a.	n.a.	7.76	n.a.	n.a.	n.a.	n.a.	n.a.
Benchmark	0.90	n.a.	n.a.	n.a.	4.73	n.a.	n.a.	n.a.	n.a.	n.a.
Value Added	6.20	n.a.	n.a.	n.a.	3.03	n.a.	n.a.	n.a.	n.a.	n.a.

Canadian dollar returns

Source: CIBC Mellon

Equities

	Q4/21	Annualized Returns				Annual Returns				
		1 Year	3 Years	5 Years	ITD	2021	2020	2019	2018	2017
Vanguard S&P 500 ETF	10.74	27.76	n.a.	n.a.	21.57	27.76	16.25	n.a.	n.a.	n.a.
Benchmark	10.70	27.61	n.a.	n.a.	21.56	27.61	16.32	n.a.	n.a.	n.a.
Value Added	0.04	0.15	n.a.	n.a.	0.02	0.15	-0.07	n.a.	n.a.	n.a.
CC&L International Q	3.01	12.25	n.a.	n.a.	13.09	12.25	11.97	n.a.	n.a.	n.a.
Benchmark	1.59	7.37	n.a.	n.a.	9.86	7.37	9.18	n.a.	n.a.	n.a.
Value Added	1.43	4.88	n.a.	n.a.	3.24	4.88	2.79	n.a.	n.a.	n.a.
Wasatch Smallcap Developed	-0.49	11.62	n.a.	n.a.	26.70	11.62	n.a.	n.a.	n.a.	n.a.
Benchmark	2.02	15.19	n.a.	n.a.	26.40	15.19	n.a.	n.a.	n.a.	n.a.
Value Added	-2.51	-3.58	n.a.	n.a.	0.29	-3.58	n.a.	n.a.	n.a.	n.a.
Ashmore Emerging Markets	0.42	-5.15	n.a.	n.a.	5.80	-5.15	12.19	n.a.	n.a.	n.a.
Benchmark	-1.53	-3.06	n.a.	n.a.	7.71	-3.06	16.60	n.a.	n.a.	n.a.
Value Added	1.95	-2.09	n.a.	n.a.	-1.91	-2.09	-4.41	n.a.	n.a.	n.a.

Canadian dollar returns

Source: CIBC Mellon

Real Assets

	Q4/21	Annualized Returns				Annual Returns				
		1 Year	3 Years	5 Years	ITD	2021	2020	2019	2018	2017
Northleaf NICP II & NSIP	0.15	6.19	9.02	7.02	7.02	6.19	12.78	8.20	8.35	0.00
Benchmark	2.18	9.22	7.10	6.82	6.82	9.22	5.45	6.67	6.18	6.60
Value Added	-2.03	-3.03	1.92	0.20	0.20	-3.03	7.32	1.52	2.18	-6.60
Brookfield Global Listed Infra	8.96	18.94	12.75	8.10	5.22	18.94	-4.67	26.40	-5.53	n.a.
Benchmark	7.22	13.90	8.85	8.80	7.18	13.90	-5.74	20.14	-0.30	n.a.
Value Added	1.74	5.04	3.90	-0.70	-1.96	5.04	1.08	6.27	-5.23	n.a.
Northleaf NICP III	-1.16	n.a.	n.a.	n.a.	18.63	n.a.	n.a.	n.a.	n.a.	n.a.
Benchmark	2.18	n.a.	n.a.	n.a.	8.02	n.a.	n.a.	n.a.	n.a.	n.a.
Value Added	-3.33	n.a.	n.a.	n.a.	10.61	n.a.	n.a.	n.a.	n.a.	n.a.
BlackRock GRP III	-1.56	n.a.	n.a.	n.a.	-7.07	n.a.	n.a.	n.a.	n.a.	n.a.
Benchmark	2.18	n.a.	n.a.	n.a.	5.29	n.a.	n.a.	n.a.	n.a.	n.a.
Value Added	-3.74	n.a.	n.a.	n.a.	-12.36	n.a.	n.a.	n.a.	n.a.	n.a.

Canadian dollar returns

Source: CIBC Mellon