



AC2017-0303
ATTACHMENT

2016 Annual Investment Report

The City of Calgary

Chief Financial Officer's Department

Finance / Treasury

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I. Investment Results Summary

- As at December 31, 2016, the market value of total investments under management was \$4.41 billion, up slightly from \$4.37 billion in 2015 and generated \$94.0 million of realized investment income for The City.
- Total City investments (including internally and externally managed assets), returned 2.59% on a market value basis, compared to the benchmark return of 2.04%. All returns are gross of fees unless otherwise indicated.
- Canadian short and longer term bonds provided positive returns of 1.68% and 2.37% respectively in 2016, as interest rates generally remained low during the year with some increase following the U.S. presidential election in November.
- Canadian interest rates were steady throughout much of 2016 before increasing moderately in the fourth quarter. The City's internally managed short term portfolios (including Trusts) posted an average return of 1.19%.
- All fixed income portfolios exceeded their respective benchmark returns in 2016.
- 2016 was a very positive year for equity returns, particularly in Canada. Combined equity portfolios posted a large absolute return of 13.02%. While Canadian equities outperformed Global stocks returning 18.22% compared to 8.55%, equities underperformed their respective benchmark returns of 21.08% and 8.92% during the year.

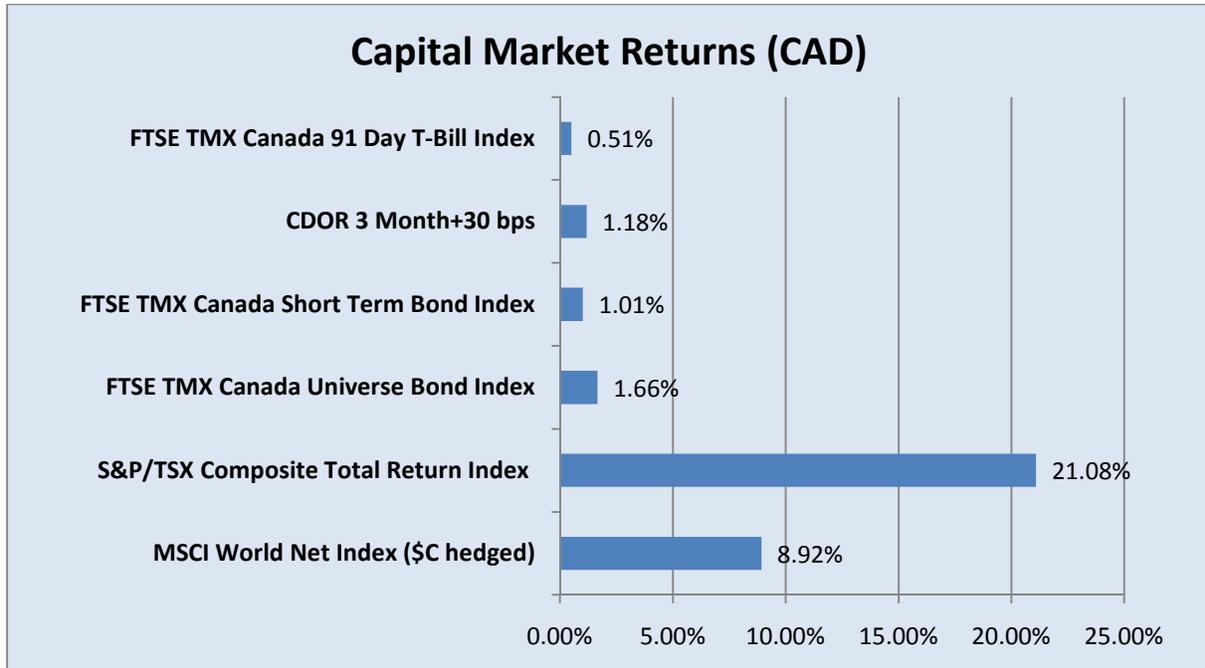
Capital Market Review

The past year was a volatile year for global capital markets partly due to investor reactions to a number of unexpected events. The year began unfavourably for global equity markets which plunged in the first weeks in January and oil tumbled to below \$30 per barrel. However, equity markets recovered over the balance of the year and posted strong returns for the year.

On June 23, Britain voted to exit the European Union. This sent shockwaves as global equity markets sold off but subsequently recovered. In November, Donald Trump won the U.S. presidential election. Following the U.S. election, U.S. and global markets found renewed strength based on optimism regarding President Trump's proposed economic and tax stimulus policies. This propelled U.S. and global equity markets to end the year on a strong note with U.S. equities approaching record highs. It also led to an increase in bond yields as investors anticipate that central banks will be increasing interest rates faster in response to increased inflationary pressures in 2017.

As highlighted in Exhibit 1 below, Canadian equities were among the world's top performing markets with the S&P/TSX returning over 21% and approaching a record high. This was largely due to a pick up in the economy and significant increases in oil and commodity prices. Fixed income generated smaller returns in 2016 as yields remained low before increasing in the fourth quarter. The City's fixed income portfolios outperformed their respective benchmarks, demonstrating the value of active investment management.

Exhibit 1: 2016 Capital Market Asset Class Returns



II. 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

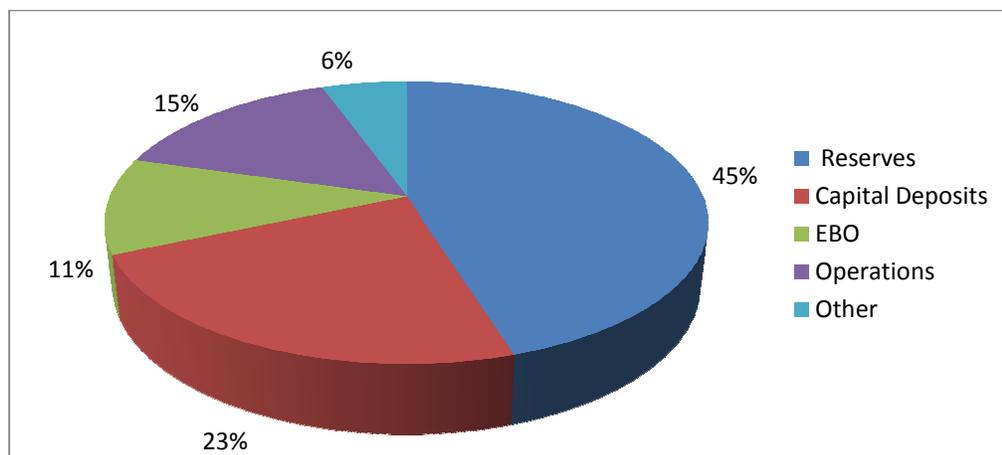
In keeping with The City's investment objectives, investments generated a total return of 2.59% in 2016, which exceeded the portfolio's benchmark return of 2.04% and generated \$94.0 million of realized investment income for The City.

III. Sources of Investments

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

- Reserves (operating & capital)
- Capital Deposits (off-site levies and government grants)
- Funded Employee Benefit Obligations (EBO)
- General Operations; and
- Other (Trusts & affiliated entities)

Exhibit 2: Sources of Investments (preliminary)



City funds are invested in a diversified portfolio of financial assets consisting of money market securities, short term and long term government and corporate bonds, commercial mortgages, and global and Canadian equity investments, to meet the investment objectives of City Funds. This includes return and liquidity requirements as well to match funds with longer-term time horizons.

IV. Investment Governance

The City's Investment Governance Policy 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 and Council approved policy and is consistent with industry best practices. During the year the IAC 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 reserves, capital deposits, and working capital, in order to fully understand fund characteristics including risk tolerance, time horizon, and liquidity requirements of these funds. The new policy provides for new asset classes and portfolio investments including global bonds, infrastructure equity, and active foreign currency management, designed to increase risk-adjusted returns as well as sector and global diversification of assets to mitigate investment risks.

Environmental, Social, and Governance (ESG) Considerations

The City takes a prudent investment management approach to achieve its investment objectives to preserve capital and maximize investment returns subject to an appropriate level of risk. By acting as an engaged and responsible institutional investor, it is expected that The City can enhance the long term sustainable return/risk performance of its investment portfolios.

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

Investment managers seek to integrate ESG considerations into their investment process to derive a better assessment of a company's fundamental value and risk profile. This involves thoughtful balance of both ESG criteria and financial considerations in investment decisions and portfolio construction. Investment managers don't screen out or exclude companies on non-financial ESG factors alone, as this unduly narrows the universe of investable opportunities, but they do focus on ESG risks and opportunities in developing investment decisions. The belief is that companies and governments that follow leading ESG principles and practices and minimize ESG risks are expected to provide superior long term risk-adjusted financial performance.

An important component of ESG and sustainable investing is corporate engagement with company management. Institutional investors can exercise influence over companies by engaging in dialogue with them and active proxy voting. Shareholders can use their influence and voting authority to modify a company's ESG practices to enhance long term value.

Risk Management and Compliance

The City manages investment risk through a sound governance framework and a comprehensive Investment Policy. The Investment Policy incorporates the requirements of the Alberta Municipal Government Act and its investment regulations and establishes industry best practice guidelines and controls for the management of The City's investment portfolios. This includes defining 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 diversification. Diversification is key 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. Portfolio diversification reduces 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, on a risk-adjusted basis, The City is meeting its investment objectives.

The City's investments are held electronically at a securities custodian, CIBC Mellon. An important control the custodian provides is independent, third party settling and reporting of all investment transactions which protects The City's assets. As well, the custodian provides independent verification of all accounting information and security holdings. The City also receives third party performance measurement, analytics, and reporting for management oversight. Return performance reported by The City's investment managers is verified and compared against both market benchmarks and peers which provides objective evaluation of investment performance.

The City also participates annually in an investment cost benchmarking service which is a global survey of investment management programs' costs. The City strives to keep costs low as compared to its peers as lower costs mean higher investment income to support citizens' priorities. In the most recent survey, for 2015, The City's costs were lower than the average comparably sized fund on an asset class adjusted basis.

Compliance statements from investment managers are examined quarterly. During the year, all investments were in compliance with the Municipal Government Act and The City of Calgary Investment Policy.

V. Summary of City Investments

As at December 31, 2016 the market value of The City's total investment portfolio was \$4.41 billion, up from \$4.37 billion in 2015 (Exhibit 3).

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. In addition to the shorter term Working Capital portfolio, Treasury also manages a \$160 million short term laddered bond Portfolio, specifically structured to fund the capital cash flow requirements of the recreation centres' construction project.

Funds that are suitable for investment for longer time horizons are invested in the externally managed Short Term Bond, Long Term Bond, and Equity portfolios.

The City's external bond managers are Connor Clark & Lunn Investment Management (CC&L), Franklin Templeton Investments (Bissett), Phillips Hager & North Investment Management (PH&N), Pacific Investment Management Company (PIMCO) and Goldman Sachs Asset Management (GSAM). The GSAM purchase settled in early 2017, so no performance data is provided for GSAM in this report.

The equity portfolio managers include Brookfield Investment Management, Fidelity Investments Canada; Pavilion Advisory Group (PAG) and TD Asset Management (TDAM).

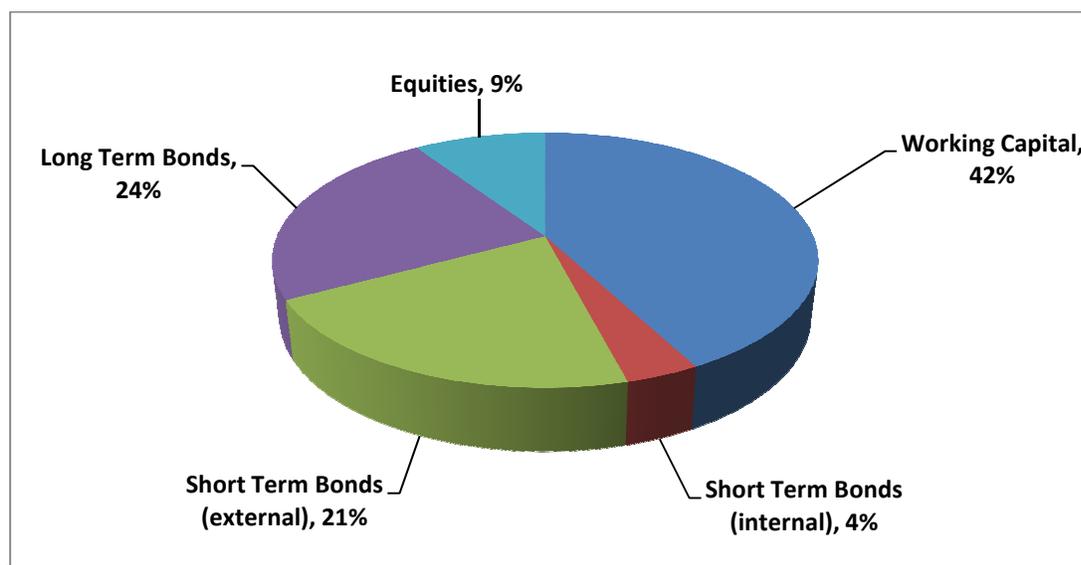
Exhibit 3: Investment Portfolios under Management

Market Value as at December 31, 2016 (000,000s)						
(includes cash & accrued interest)	Working Capital	ST Bonds	LT Bonds	Equities	Total 2016	Total 2015
Internal Management:						
Working Capital	\$1,825				\$1,825	\$1,925
ST Bonds		\$160			\$160	\$205
Trust Investments	\$86				\$86	\$89
External Management:						
Bonds		\$917	\$1,014		\$1,931	\$1,790
Equities				\$405	\$405	\$359
Total	\$1,911	\$1,077	\$1,014	\$405	\$4,407	\$4,368

Exhibit 4: Asset Mix

<u>Asset Class</u>	<u>Current Mix</u>	<u>Policy Mix Range</u>	<u>Long Term Target</u>
Working Capital/Short Term	42%	30-50%	35%
Short Term Bonds	25%	10-30%	20%
Long Term Bonds	24%	20-40%	30%
Equities	9%	0-10%	10%
Infrastructure investments	0%	0-5%	5%
Total Portfolio	100%		100%

Exhibit 5: Asset Mix as at December 31, 2016



VI. Investment Performance

As illustrated in Exhibit 6 below, The City of Calgary's total portfolio (including internally and externally managed portfolios), returned 2.59% on a market value basis, compared to the benchmark return of 2.04% and generated \$94 million of investment income in 2016. Interest rates remained low throughout 2016 and the internally managed portfolios returned a lower average yield of 1.19% in 2016 compared to 1.78% in 2015.

Canadian longer term bonds (Universe and Non-Universe bonds) returned 2.37% and short term bonds returned 1.68% in 2016.

Both the short and long term portfolios exceeded their performance benchmarks over all time horizons in the past five years as illustrated in Exhibit 7 below.

The City's Global equity portfolio generated returns of 8.55% in 2016, while the Canadian equity portfolio returned 18.22%. Both Global and Canadian equity asset classes underperformed their respective benchmarks in 2016.

Exhibit 6: 2016 Asset Class Returns vs. Benchmark

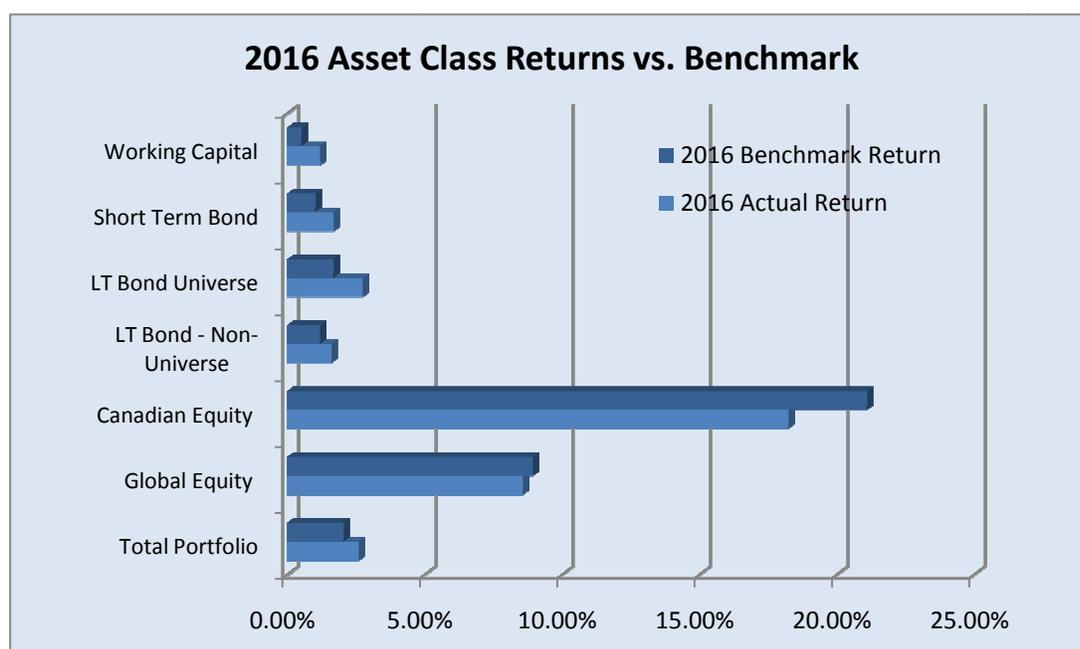


Exhibit 7: Historical Annualized returns

Annualized Rates of Return As at December 31, 2016 (%)					
	1 Year	2 Years	3 Years	4 Years	5 Years
Working Capital Return	1.19*	1.49	1.51	1.46	1.42
Working Capital Benchmark	0.51	0.57	0.68	0.76	0.79
*includes Rec Centre bonds & Trusts					
Short Term Bond Return	1.68	2.33	2.78	2.58	2.63
Short Term Bond Benchmark	1.01	1.81	2.22	2.10	2.08
Long Bond Return – Universe bonds	2.73	3.05	5.04	3.61	3.77
Long Term Bond Benchmark	1.66	2.59	4.61	3.13	3.22
Long Bond Return – Non Universe	1.59	1.46	1.73	-	-
Benchmark	1.18	1.26	1.44	-	-
Canadian Equity Return	18.22	6.50	8.08	9.80	9.68
Canadian Equity Benchmark	21.08	5.36	7.06	8.52	8.25
Global Equity Return	8.55	5.32	7.39	12.49	13.70
Global Equity Benchmark	8.92	5.29	6.98	12.22	12.95
Return on Total Portfolio	2.59	2.27	2.62	2.50	2.45
Benchmark	2.04	1.57	1.97	1.95	1.97

Performance Measurement Benchmarks

The investment performance of all funds is reported to the Chief Financial Officer and the Investment Advisory Committee on a quarterly basis and presented annually to the Audit Committee of The City. 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 measured over a business cycle.

The designated asset class benchmarks are:

Working Capital:	FTSE TMX Canada T-bill 91 day Index
Short-term Bond:	FTSE TMX Canada Bond Short Index
Long Bond - Universe:	FTSE TMX Canada Bond Universe Index
Long Bond – non Universe:	CDOR* 3 months + 30 basis points (bps)
Canadian Equity:	S&P/TSX Composite Total Return Index
Global Equity:	MSCI World Index (hedged to \$CAD)

*Canadian Dollar Offered Rate

Working Capital / Short Term Portfolio

Manager: The City of Calgary, Treasury Division

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

The portfolio is invested in a combination of corporate and bank paper, term deposits, and short term government and corporate bonds with the majority of investments maturing in less than two years. In addition to the Working Capital Portfolio, Treasury also manages a \$160 million laddered bond portfolio structured to fund the cash flow requirements of the recreation centres' construction project.

Working Capital/Short Term Portfolio Annualized Rates of Return

As at December 31, 2016 (%)					
	1 Year	2 Years	3 Years	4 Years	5 Years
Working Capital Portfolio	1.19*	1.49	1.51	1.46	1.42
FTSE TMX Canada T-bill 91 day Index	0.51	0.57	0.68	0.76	0.79
*includes Recreation Centre bonds & Trusts					

Short Term Bond Portfolio

Managers: Phillips, Hager & North
Connor Clark & Lunn

Mandate: Investment in a diversified portfolio of short term fixed income securities with an average term to maturity of three to five years.

The combined portfolio investment balance among the two managers was \$817 million in 2016. The portfolio is invested in a combination of government and corporate bonds, and commercial mortgages. Also as previously mentioned, a \$100 million GSAM bond investment took place over year-end and is reflected in the total investment balance (Exhibit 3) above.

Short Term Bond Annualized Rates of Return

As at December 31, 2016 (%)					
	1 Year	2 Years	3 Years	4 Years	5 Years
City of Calgary	1.68	2.33	2.78	2.58	2.63
FTSE TMX Canada Bond Short Index	1.01	1.81	2.22	2.10	2.08

The portfolio generated a one year return of 1.68% for 2016. On a combined manager basis, the portfolio exceeded the return of the benchmark over all periods reviewed.

Long Term Bond Portfolio

Managers: Connor Clark & Lunn
Franklin Templeton (Bissett)
Phillips, Hager & North
PIMCO

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

The combined portfolio balance among the four bond managers was \$1,014 million in 2016.

Long-term Bond Annualized Rates of Return

As at December 31, 2016 (%)					
Universe Bonds	1 Year	2 Years	3 Years	4 Years	5 Years
City of Calgary	2.73	3.05	5.04	3.61	3.77
FTSE TMX Canada Bond Universe Index	1.66	2.59	4.61	3.13	3.22

Long-term Universe bonds returned 2.73% for the year and significantly outperformed the benchmark.

As at December 31, 2016 (%)					
*mandate started in May 2013					
Non-Universe Bonds	1 Year	2 Years	3 Years	4 Years	5 Years
City of Calgary	1.59**	1.46	1.73	-	-
CDOR 3 month + 30 bps	1.18	1.26	1.44	-	-

**This is a tactical bond strategy managed by PIMCO to outperform Canadian money market returns without taking significant interest rate risk. The manager is able to extend duration at its discretion.

Canadian Equity Portfolio

Managers: Fidelity Investments Canada
Pavilion Advisory Group
TD Asset Management

Mandate: To seek long-term capital appreciation by investing in a diversified portfolio of large capitalized Canadian equities.

Canadian Equity Annualized Rates of Return

As at December 31, 2016 (%)					
	1 Year	2 Years	3 Years	4 Years	5 Years
City of Calgary	18.22	6.50	8.08	9.80	9.68
S&P/TSX Composite Index	21.08	5.36	7.06	8.52	8.25

Although Canadian equities posted a high return, the managers collectively underperformed the TSX benchmark with an annual return of 18.22% versus the benchmark return of 21.08%. Total Canadian equities under management totaled \$196 million in 2016

Global Equity Portfolio

Managers: TD Asset Management
Fidelity Investments Canada
Brookfield Investment Management

Mandate: Investment in a diversified portfolio of large capitalized international equities located in developed markets globally.

Global Equity Annualized Rates of Return

As at December 31, 2016 (%)					
	1 Year	2 Years	3 Years	4 Years	5 Years
City of Calgary	8.55	5.32	7.39	12.49	13.70
MSCI World Index (hedged to \$CAD)	8.92	5.29	6.98	12.22	12.95

2016 was a stronger year for foreign equity returns than 2015. The global equity market as measured by the MSCI World Index (\$CAD hedged) generated a return of 8.92% during the year. The City's global equity portfolio returned 8.55%, underperforming the benchmark by 0.37%. Global equity portfolios totalled \$209 million as of yearend.

VII. Capital Market Outlook

The International Monetary Fund forecasts 2017 global economic growth to be 3.4%, up from 3.1% expected in 2016. Although confidence is higher among some market participants, uncertainty looms over the global capital market outlook. The following themes are expected to drive both risks and opportunities for investors:

- The U.S. Presidential election
- A shift away from monetary stimulus toward fiscal stimulus
- The rise of populism
- A re-pricing of inflation expectations

U.S. president Trump's election in November 2016 has brought some additional uncertainty with respect to what fiscal and trade policies will be enacted and how they will impact U.S. and worldwide economies. Some will have positive ramifications for the U.S. economy such as corporate tax cuts, and decreased regulation. Conversely, the renegotiation of current tariffs and trade agreements and the implementation of protectionist policies could benefit the U.S.

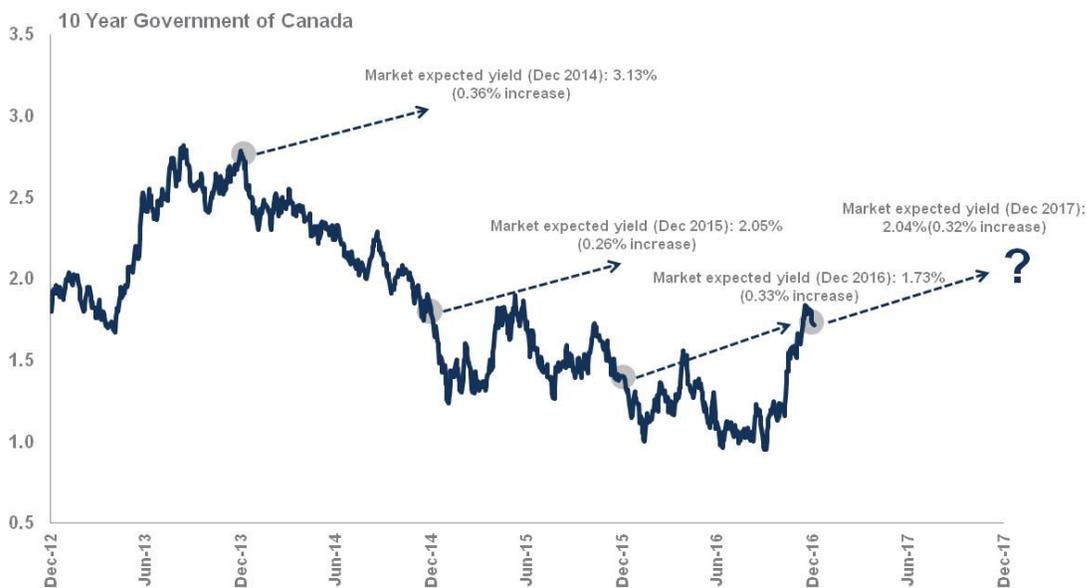
economy in the short run, but this could come at the expense of global growth and countries exporting to the U.S.

For the past several years, markets have been fuelled by accommodative monetary policies and an excess of liquidity in the financial system with some countries experiencing negative interest rates. As we begin 2017, some major central banks have embarked on a tightening and have raised interest rates. The U.S. Federal Reserve is hiking interest rates, the Bank of Canada is taking a “wait and see” approach, and the European Central Bank is preparing the market for an end to its quantitative easing program with the possibility of higher rates in future. Central bankers have been lobbying governments to transition from monetary stimulus to fiscal stimulus. The new U.S. government is planning on stimulating growth with an expansionary fiscal policy and most G7 countries are considering boosting their infrastructure capital spending. This transition to fiscal stimulus is expected to spur the global economy although this could be counterbalanced by a slowing in China’s rate of growth.

Political populism has been a global theme recently and it materialized in 2016 with Brexit, the U.S. election outcome, and the Italian referendum. With the upcoming elections in France and Germany, Europe remains subject to populist election events. The fear is that another populist outcome in Europe could potentially lead to a Eurozone breakup which would have significant ramifications for financial stability and global growth.

Over the past few years, deflation was a major concern for developed economies and global investors. Since the second half of 2016, inflation has bottomed and started to rise. The prospect of higher inflation and stronger economic growth has pushed bond yields higher in most developed countries. However, in Canada, bonds are expected to remain relatively stable as the Bank of Canada continues to keep interest rates low. Moreover, a fixed income portfolio with the inclusion of more global bonds is expected to offer enhanced diversification benefits.

10 Year Government of Canada Yield Market Expectations vs. Actual



Source: FTSE TMX Global Debt Capital Markets Inc. BondLab

Global equities started 2017 on an upswing and confidence amongst market participants has gained momentum. Although equities have been mainly supported by the expansion in price/earnings (P/E) multiples from very low interest rates, valuations remain high. The outlook for equity markets is uncertain with negative concerns such as a peak in global monetary stimulus, political uncertainty from the rise of populism, higher inflation expectations, and the U.S. tightening cycle. On the other hand, the prospect of higher economic growth from U.S. fiscal stimulus (tax cuts and increased capital expenditures) and the recovery in commodity prices supports optimism in equity markets.

In summary, the economic and market outlook for 2017 is dependent on several shifts occurring in different countries. This creates uncertainty for capital market returns which supports maintaining a well-diversified investment portfolio that consists of both public and private market investments. The uncertainty surrounding the global economy could very well result in higher market price volatility which should provide opportunities for active managers to generate value added returns.

VIII. Investment Advisory Committee Members

Eric Sawyer (Chair), Chief Financial Officer

Brad Stevens, Deputy City Manager

Kurt Hanson, General Manager

Carla Male, City Treasurer and Director of Finance

Vern Malcolm, External Member - Investment Executive

Sandy McPherson, External Member - Investment Executive

Dr. Michael Robinson, External Member – University Professor