

Performance Review

University of Guelph Pension Plans

4th Quarter 2017

UNIVERSITY
of GUELPH

CHANGING LIVES
IMPROVING LIFE

Prepared by:

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Pension Plans Results Overview

(Net of fees returns for the 12 months ended December 31st, 2017)

The Total Plan gained 8.2% over the last 12 months, underperforming the unhedged benchmark by 1.5% and the hedged benchmark by 1.8%.

Canadian Equity

- The Canadian equity portfolio underperformed the S&P/TSX index return by 3.1% over the past year.
- Results are mixed for the plan's large cap managers. Sionna outperformed the S&P/TSX by 0.3%. However, Burgundy and CC&L lagged the benchmark by 6.6% and 3.5% respectively.
- The plan's Canadian small cap manager (Sionna) had good performance (8.4%) over the last year, beating the BMO Small Cap index by 2.0%.

Global/Non-North American Equity

- In Canadian dollars, Non-North American equities outperformed both Canada (9.1%) and the U.S. (13.8%), with the MSCI EAFE Index returning 17.3%.
- LSV and Tweedy Browne lagged the MSCI EAFE index by 1.0% and 2.6% respectively. As a result, the plan's Non-North American equity underperformance during the past year was 1.8%.
- Global equities, as measured by the MSCI World ex-Canada index, returned 15.2% over the last year. The pension plan's only Global equity manager, Acadian, beat the index 1-year return by 1.3%.

U.S. Equity

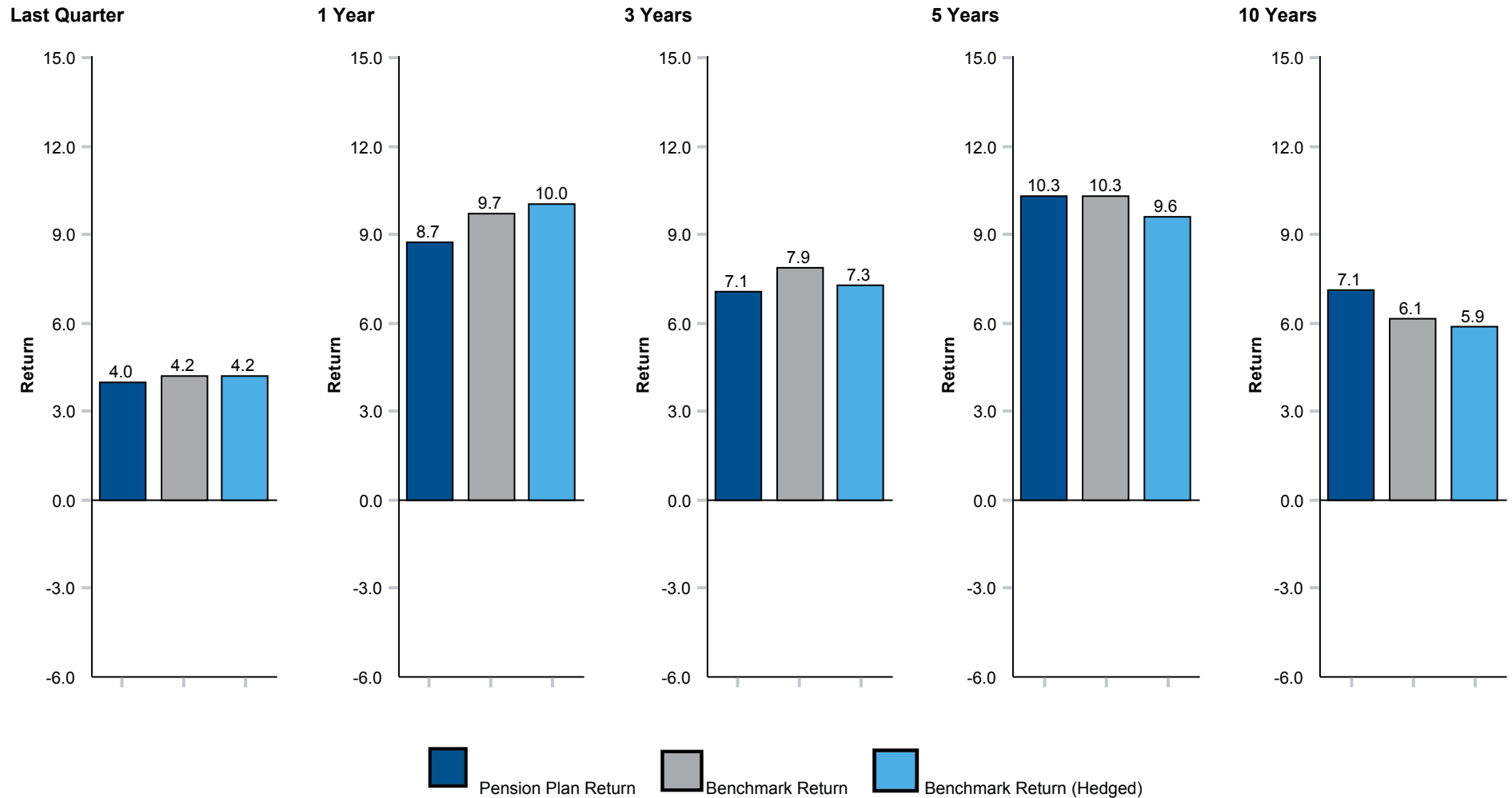
- U.S. large caps had solid performance as the S&P 500 returned 13.8% in Canadian dollar terms over the last year.
- The plan's U.S. equity investments (including U.S. small and mid-caps) generated a return of 7.8%, underperforming the S&P 500 by 6.0%.
- The plan's large cap manager (Barrow) beat the Russell 1000 Value index by 2.5%. The mid-cap portfolio managed by Wedge also added 4.7% versus its index, but the firm's small-cap strategy lagged the Russell 2000 Value Index by 2.2%.

Fixed Income

- The total fixed income portfolio underperformed its benchmark by 0.2%.
- We note that starting in November 2016, the bond portfolio was transitioned from a FTSE/TMX Universe index to a combination of the Global High Yield, Short-Term and Long-Term indexes. During this period it was difficult to benchmark.
- The real estate portfolio managed by Greystone beat its index by 3.7%, while the new infrastructure investment managed by Brookfield lagged its index by 11.5%. Short-term returns should be interpreted with caution due to the long-term nature and illiquidity of the investment.

Total Pension Portfolio Vs Composite Benchmark

As of December 31, 2017 (Gross of Fees, Annualized for Periods over 1 Year)



Returns are presented gross of fees in CAD. Current Composite Benchmark: 20% S&P/TSX Comp Capped + 20% MSCI EAFE Net (\$CAD) + 20% S&P 500 (\$CAD) + 10% FTSE TMX ST Bond Index + 17.5% FTSE TMX LT Bond Index + 2.5% FTSE TMX 91 Day T-Bill + 5% IPD Canada Annual Property Index + 5% Barclays Global High Yield Index Hedged to CAD. The Hedged Benchmark has the same composition as the Composite Benchmark, but all foreign indices are 50% hedged back to Canadian dollars from December 2011 to March 2017, 37.5% hedged from April to June 2017, 25% hedged from July to September 2017, 12.5% hedged from October to December 2017, 0% hedged since January 2017.

Asset Class Performance

As of December 31, 2017 (Gross of Fees)

	Allocation		Annualized Performance(%)						Annual Performance(%)			
	Market Value (\$)	% of portfolio	Quarter To Date	1 Year	3 Years	5 Years	10 Years	1 Year Ending Dec-2016	1 Year Ending Dec-2015	1 Year Ending Dec-2014	1 Year Ending Dec-2013	1 Year Ending Dec-2012
Canadian Equity	289,310,328	19.2	4.0	6.4	6.5	10.2	5.9	24.6	-9.0	10.6	21.9	13.8
S&P/TSX Composite Index			4.5	9.1	6.6	8.6	4.6	21.1	-8.3	10.6	13.0	7.2
Relative Performance			-0.5	-2.7	-0.1	1.6	1.3	3.5	-0.7	0.0	8.9	6.6
US Equity	238,080,427	15.8	5.9	8.4	12.3	20.6	12.1	12.8	15.9	25.3	43.7	16.9
S&P 500 Index (CAD)			6.8	13.8	14.4	21.2	11.1	8.1	21.6	23.9	41.3	13.4
Relative Performance			-0.9	-5.4	-2.1	-0.6	1.0	4.7	-5.7	1.4	2.4	3.5
Non-North American Equity	258,283,131	17.2	3.7	16.5	11.7	14.2	7.6	1.1	18.5	4.9	32.5	17.9
MSCI EAFE Composite			4.5	17.3	11.2	13.5	4.9	-2.0	19.4	4.1	31.5	15.2
Relative Performance			-0.8	-0.8	0.5	0.7	2.7	3.1	-0.9	0.8	1.0	2.7
Global Equity	119,592,273	8.0	6.9	17.2	12.9	18.5	7.6	3.2	19.0	17.9	37.9	13.4
MSCI World Ex Canada			5.9	15.2	13.0	17.9	8.3	3.9	20.7	15.2	37.0	14.3
Relative Performance			1.0	2.0	-0.1	0.6	-0.7	-0.7	-1.7	2.7	0.9	-0.9
Fixed Income	472,133,942	31.4	3.2	4.5	3.0	3.3	4.7	0.9	3.6	8.8	-1.1	3.6
Fixed Income Benchmark			3.0	4.7	3.1	3.4	4.8	1.3	3.5	8.8	-1.2	3.6
Relative Performance			0.2	-0.2	-0.1	-0.1	-0.1	-0.4	0.1	0.0	0.1	0.0
Real Estate	71,907,444	4.8	3.8	10.6	8.2	8.5	--	7.7	6.3	6.3	11.7	--
IPD Canadian Property Index			1.5	6.0	6.2	7.3	8.2	4.7	7.8	7.0	11.0	16.4
Relative Performance			2.3	4.6	2.0	1.2	--	3.0	-1.5	-0.7	0.7	--
Infrastructure	25,603,100	1.7	2.9	2.1	--	--	--	--	--	--	--	--
Dow Jones Brookfield Global Infrastructure Index			0.9	9.1	--	--	--	--	--	--	--	--
Relative Performance			2.0	-7.0	--	--	--	--	--	--	--	--
Internal Cash (STIF)*	28,016,042	1.9	0.6	2.5	2.5	2.7	1.5	1.7	3.1	6.3	-0.1	-5.6
FTSE TMX Canada 91 Day T-Bill			0.2	0.6	0.6	0.7	1.0	0.5	0.6	0.9	1.0	1.0
Relative Performance			0.4	1.9	1.9	2.0	0.5	1.2	2.5	5.4	-1.1	-6.6

*Cash amounts and percentages presented exclude residual manager cash balances and FX overlay (currency hedging). However, they include the proceeds of the former Banyan Private Equity position, which explains its high 2-year return. All returns are reported gross of fees in CAD except for the Total Pension Plan where returns are displayed both net and gross of fees. EAFE Stands for Europe, Australasia and Far East. The IPD Canadian Property Index is published quarterly with a 2-month lag, it is approximated by CIBC Mellon.

Asset Class Performance

As of December 31, 2017 (Gross of Fees)

	Allocation		Quarter To Date	Annualized Performance(%)					Annual Performance(%)				
	Market Value (\$)	% of portfolio		1 Year	3 Years	5 Years	10 Years	1 Year Ending Dec-2016	1 Year Ending Dec-2015	1 Year Ending Dec-2014	1 Year Ending Dec-2013	1 Year Ending Dec-2012	
Total Pension													
Gross of Fees	1,502,926,686	100.0	4.0	8.7	7.1	10.3	7.1	9.7	3.0	10.9	19.8	12.0	
Net of Fees			3.9	8.2	6.6	9.8	6.7	9.1	2.6	10.5	19.3	11.5	
Relative Performance			0.1	0.5	0.5	0.5	0.4	0.6	0.4	0.4	0.5	0.5	
Composite Benchmark (Hedged)			4.2	10.0	7.3	9.6	5.9	8.1	3.8	10.3	16.1	9.5	
Relative Performance			-0.2	-1.3	-0.2	0.7	1.2	1.6	-0.8	0.6	3.7	2.5	
Total Pension (Gross of Fees)													
Total Pension ex. FX overlay	1,502,926,686	100.0	4.0	8.7	7.1	10.3	7.1	9.7	3.0	10.9	19.8	12.0	
Relative Performance			-0.1	0.3	-0.7	-0.8	--	1.1	-3.3	-0.9	-1.3	0.6	

Current Fixed Income Benchmark: 30.8% FTSE TMX ST Bond Index + 53.8% FTSE TMX LT Bond Index + 15.4% Barclays Global High Yield Hedged to CAD.

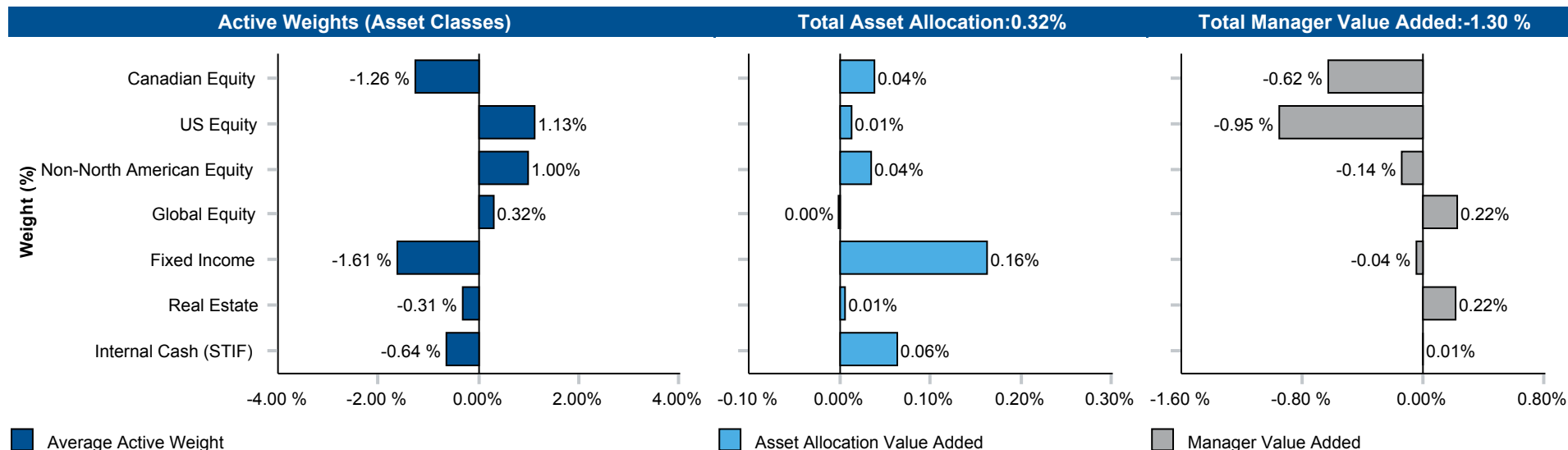
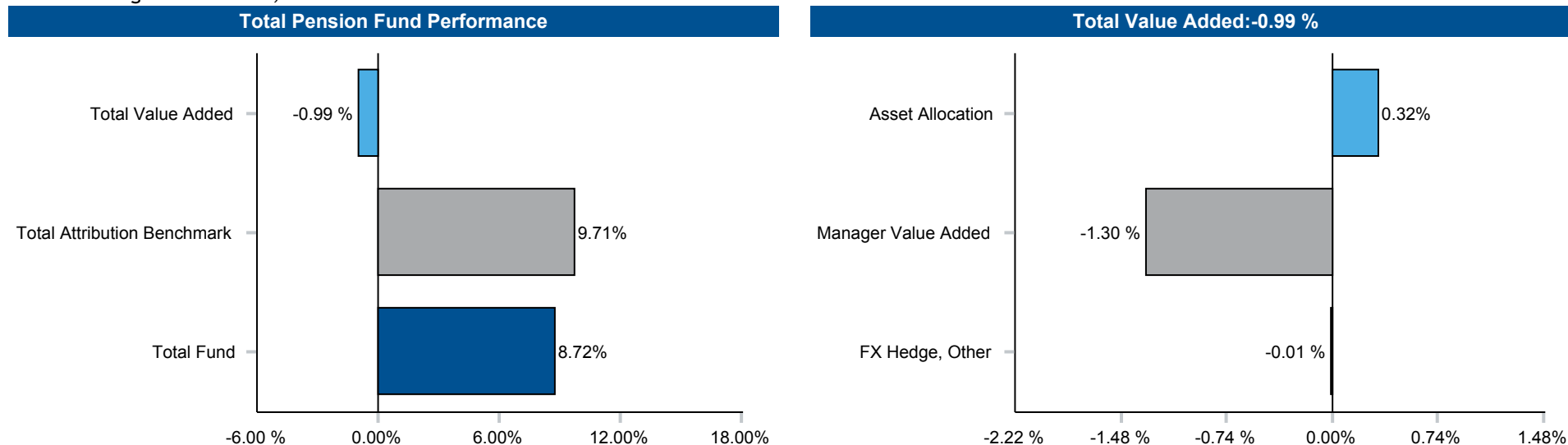
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Performance Attribution

Total Pension Plans Vs Attribution Benchmark

1 Year Ending December 31, 2017



Returns are presented gross of fees in CAD.

The Attribution Benchmark was created to account for small variations of asset allocation between the Total Pension Plans and their Composite Benchmark. Its composition is as follow: 20% S&P/TSX Comp Capped + 16% S&P 500 (\$CAD) + 16% MSCI EAFE Net (\$CAD) + 8% MSCI World + 10% FTSE TMX ST Bond Index + 17.5% FTSE TMX LT Bond Index + 5% IPD Canada Annual Property Index + 2.5% FTSE TMX 91 Day T-Bill + 5% Barclays Global High Yield Hedged to CAD.

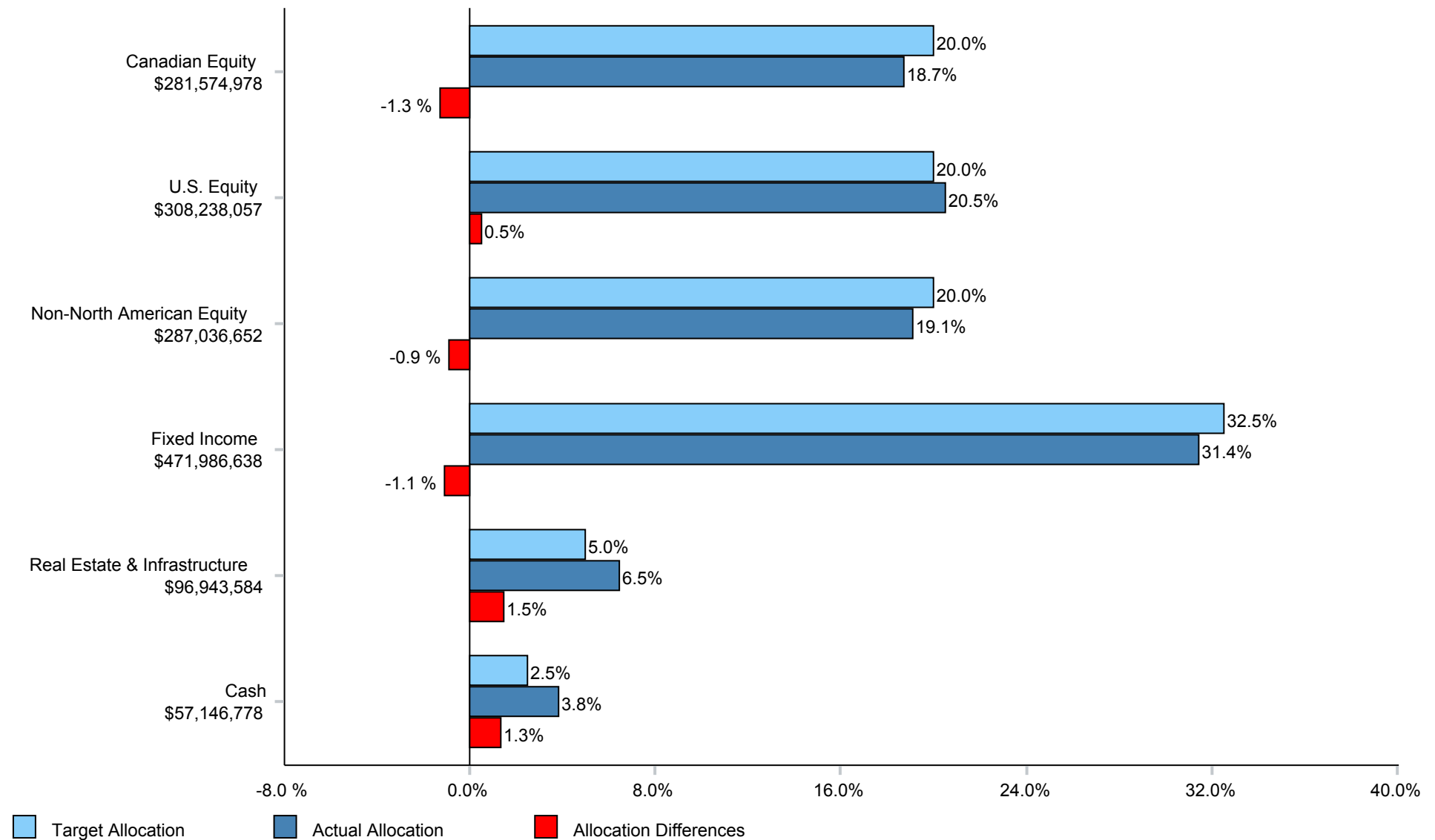
“Other” includes the effects of all other factors on the Total Pensions Plans' relative return, including rebalancing and residual trading returns.

Pension Plans Asset Mix

Actual Allocation vs. Investment Policy Allocation

As of December 31, 2017

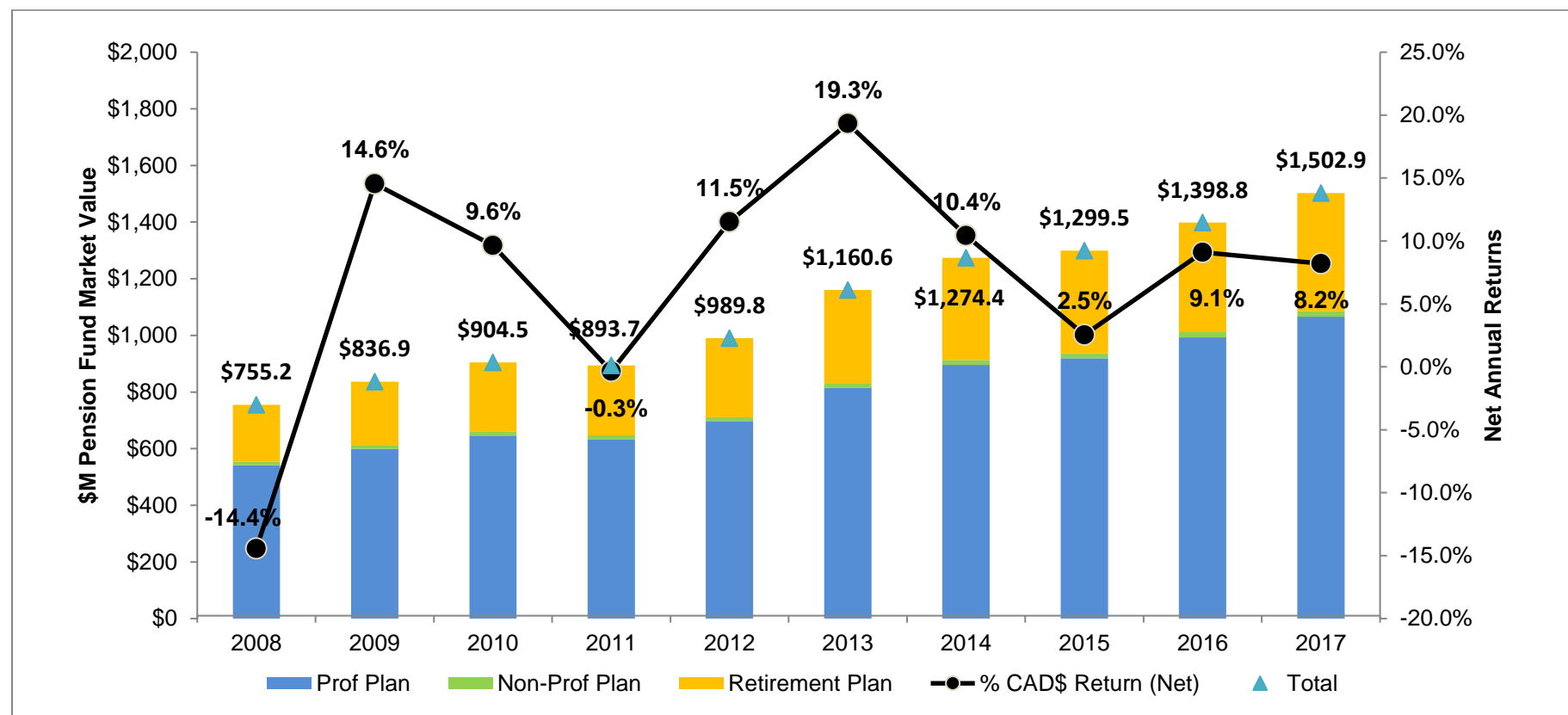
December 31, 2017 : \$1,502,926,686



Note: This actual allocation displays the aggregate managers' holdings regardless of their mandate. Cash presented includes internal cash (STIF) and manager residual cash balances (data from CIBC Mellon).

Growth of Pension Assets

December Market Values and Net 1-year Returns to December 31st of Each Year



Over the last 12 months the Total Pension portfolio increased \$104.1 M to \$1,502.9 M consisting of:

- Total contributions of \$ 68.4 M and disbursements of \$76.5 M.
- 1-year return (net of investment management fees) of 8.2% compared to 9.1% one year ago.