



PERFORMANCE BULLETIN FUND PERFORMANCE

Annual Returns (net of all fees)

as at December 31

FUND	2018		2017		2016		2015		2014		2013		2012	
	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)
Accelerated Growth Fund	(5.1)	(3.2)	12.0	10.8	8.3	9.6	5.5	5.1	9.1	9.8	23.0	21.2	10.4	11.0
Growth Fund	(4.3)	(2.7)	11.0	9.7	7.7	8.6	5.2	4.9	9.0	9.5	19.6	18.3	9.6	10.1
Balanced Fund	(3.6)	(2.2)	9.9	8.7	7.0	7.6	4.9	4.7	8.7	9.3	16.9	15.7	8.9	9.3
Moderate Fund	(2.5)	(1.3)	8.2	7.2	6.0	6.2	4.4	4.4	8.4	9.1	12.6	11.9	7.6	7.9
Conservative Fund	(1.1)	(0.2)	6.0	5.2	4.6	4.3	3.7	4.0	7.5	8.4	7.3	7.0	5.7	6.0
Bond Fund*	1.4	1.4	2.5	2.5	1.9	1.6	3.0	3.3						
Money Market Fund*	1.7	1.4	0.9	0.5	0.8	0.5	0.9	0.6						
PEPP Step 1	(5.1)	(3.2)	12.0	10.8	8.3	9.6	5.5	5.1	9.1	9.8	23.0	21.2	10.4	11.0
PEPP Step 2	(4.7)	(3.0)	11.5	10.3	8.0	9.1	5.3	5.0	9.2	9.7	21.1	19.7	9.9	10.5
PEPP Step 3	(4.3)	(2.7)	11.0	9.7	7.7	8.6	5.2	4.9	9.0	9.5	19.6	18.3	9.6	10.1
PEPP Step 4	(4.0)	(2.4)	10.4	9.2	7.4	8.1	5.0	4.8	9.0	9.5	18.5	17.1	9.1	9.7
PEPP Step 5	(3.6)	(2.2)	9.9	8.7	7.0	7.6	4.9	4.7	8.7	9.3	16.9	15.7	8.9	9.3
PEPP Step 6	(3.3)	(1.9)	9.3	8.2	6.7	7.2	4.7	4.6	8.7	9.2	15.3	14.3	8.3	8.8
PEPP Step 7	(2.9)	(1.6)	8.7	7.7	6.3	6.7	4.6	4.5	8.5	9.1	13.7	12.8	8.0	8.4
PEPP Step 8	(2.5)	(1.3)	8.2	7.2	6.0	6.2	4.4	4.4	8.4	9.1	12.6	11.9	7.6	7.9
PEPP Step 9	(2.1)	(1.1)	7.6	6.7	5.7	5.7	4.3	4.3	8.1	8.9	11.2	10.5	7.2	7.5
PEPP Step 10	(1.8)	(0.8)	7.0	6.2	5.3	5.3	4.1	4.2	8.0	8.7	9.8	9.2	6.6	7.0
PEPP Step 11	(1.5)	(0.5)	6.5	5.7	4.9	4.8	3.7	4.1	7.7	8.6	8.6	8.2	6.0	6.4
PEPP Step 12	(1.1)	(0.2)	6.0	5.2	4.6	4.3	3.7	4.0	7.5	8.4	7.3	7.0	5.7	6.0

* The Bond Fund has an inception date of July 2, 2014 and the Money Market Fund has an inception date of October 31, 2014. Longer term performance history is therefore not available.

Past results are not necessarily indicative of future performance.

The returns shown are after the deduction of any administration, investment, or other fees.

Investment returns vary over time and as such, no guarantees are applicable to the rates of return shown for each of the funds.

Where actual benchmark data is not available at the time of reporting, it will be estimated using comparable indices, and updated in future Performance Bulletins.



PERFORMANCE BULLETIN FUND PERFORMANCE

Annualized Returns (net of all fees)

as at December 31, 2018

FUND	YTD [†]		1 Year		2 Year		3 Year		4 Year		5 Year		10 Year	
	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)	Return (%)	Benchmark (%)
Accelerated Growth Fund	(5.0)	(2.8)	(5.1)	(3.2)	3.1	3.5	4.8	5.5	5.0	5.4	5.8	6.3	8.5	9.3
Growth Fund	(4.3)	(2.3)	(4.3)	(2.7)	3.0	3.3	4.6	5.1	4.7	5.0	5.6	5.9	8.0	8.6
Balanced Fund	(3.6)	(1.9)	(3.6)	(2.2)	2.9	3.1	4.3	4.6	4.4	4.6	5.3	5.6	7.5	7.9
Moderate Fund	(2.5)	(1.1)	(2.5)	(1.3)	2.7	2.9	3.8	4.0	3.9	4.1	4.8	5.1	6.7	7.1
Conservative Fund	(1.1)	(0.2)	(1.1)	(0.2)	2.4	2.5	3.1	3.1	3.3	3.3	4.1	4.3	5.4	5.5
Bond Fund*	1.4	1.3	1.4	1.4	1.9	2.0	1.9	1.8	2.2	2.2				
Money Market Fund*	1.3	1.1	1.7	1.4	1.3	1.0	1.1	0.8	1.1	0.8				
PEPP Step 1	(5.0)	(2.8)	(5.1)	(3.2)	3.1	3.5	4.8	5.5	5.0	5.4	5.8	6.3	8.5	9.3
PEPP Step 2	(4.6)	(2.6)	(4.7)	(3.0)	3.1	3.4	4.7	5.3	4.9	5.2	5.7	6.1	8.3	9.0
PEPP Step 3	(4.3)	(2.3)	(4.3)	(2.7)	3.0	3.3	4.6	5.1	4.7	5.0	5.6	5.9	8.0	8.6
PEPP Step 4	(3.9)	(2.1)	(4.0)	(2.4)	3.0	3.2	4.4	4.8	4.6	4.8	5.4	5.7	7.8	8.3
PEPP Step 5	(3.6)	(1.9)	(3.6)	(2.2)	2.9	3.1	4.3	4.6	4.4	4.6	5.3	5.6	7.5	7.9
PEPP Step 6	(3.2)	(1.6)	(3.3)	(1.9)	2.8	3.0	4.1	4.4	4.3	4.4	5.1	5.4	7.2	7.7
PEPP Step 7	(2.8)	(1.4)	(2.9)	(1.6)	2.8	2.9	3.9	4.2	4.1	4.3	5.0	5.2	6.9	7.3
PEPP Step 8	(2.5)	(1.1)	(2.5)	(1.3)	2.7	2.9	3.8	4.0	3.9	4.1	4.8	5.1	6.7	7.1
PEPP Step 9	(2.1)	(0.9)	(2.1)	(1.1)	2.6	2.8	3.6	3.7	3.8	3.9	4.6	4.9	6.4	6.7
PEPP Step 10	(1.8)	(0.6)	(1.8)	(0.8)	2.5	2.7	3.4	3.5	3.6	3.7	4.5	4.7	6.0	6.3
PEPP Step 11	(1.4)	(0.4)	(1.5)	(0.5)	2.4	2.6	3.2	3.3	3.4	3.5	4.2	4.5	5.6	5.8
PEPP Step 12	(1.1)	(0.2)	(1.1)	(0.2)	2.4	2.5	3.1	3.1	3.3	3.3	4.1	4.3	5.4	5.5

[†] YTD returns are calculated from the Plan Year commencement date of April 1st unless otherwise specified, and are not annualized.

* The Bond Fund has an inception date of July 2, 2014 and the Money Market Fund has an inception date of October 31, 2014. Longer term performance history is therefore not available.

Past results are not necessarily indicative of future performance.

The returns shown are after the deduction of any administration, investment, or other fees.

Investment returns vary over time and as such, no guarantees are applicable to the rates of return shown for each of the funds.

Where actual benchmark data is not available at the time of reporting, it will be estimated using comparable indices, and updated in future Performance Bulletins.

PERFORMANCE BULLETIN - Explanation of terms

Annualized Returns

The performance shown in the annualized returns is the single return that, when compounded, produces the same result as the various actual returns.

For each of the periods shown, the return is the annualized return for the period in question ending at the month-end shown. For example, if a one year return is 10 per cent, you will know that \$100 invested exactly one year ago would be valued as \$110 today. You can calculate this by multiplying the \$100 investment by the 10 per cent rate of return. If the two-year rate of return shows 7.5 per cent, the return earned over the two-year period is equivalent to 7.5 per cent earned each year. In this case, an initial investment of \$100 would be valued at \$115.56 at the end of the two-year period. The same holds true for all other periods.

Also shown is the benchmark performance for each fund. These benchmarks are set out in the Statement of Investment Policies and Goals (SIP&G) adopted by the Public Employees Pension Board. Benchmarks enable you to monitor the performance of the fund, by comparing fund performance against the fund benchmark. The fund's performance is monitored over rolling four-year periods.

The fund performance is shown at a particular point of time, over various periods of time, which tells you how the fund has performed. The returns shown assume a single deposit at the beginning of the period. It would be rare to see your own return match those shown because you are contributing into the Public Employees Pension Plan on an ongoing basis. Your statement shows your personalized rate of return, based on your actual transactions.

Annual Returns

The annual returns show the 12-month performance as at the month-end for various years. For example, if the Performance Bulletin was as of November 30 of a particular year, you would see performance numbers for November 30 of that year, and for November 30 in each previous year going back to 2001, where data exists. These performance indicators show the annual return achieved for the 12-month period ending November 30 of the year indicated.

This shows if an exceptional year affected the annualized performance. It also illustrates how the performance for a particular fund can be volatile, by showing major swings in the annual performance of the fund.

Benchmarks

The benchmarks for the various funds are a blend of individual indices, as detailed in the following table.

Benchmarks (continued)

Benchmark	S&P/TSX			FTSE TMX			MSCI			MSCI			S&P500			Russell		Investment Property		GOC		US Gov	
	Composite Index (%)	Small Cap Index (%)	Completion Index (%)	Universe Bond Index (%)	Universe All Govt Bo Index (%)	MSCI EAFE Index (%)	MSCI World Index (%)	MSCI ACWI Index (%)	MSCI EAFE SC Index (%)	MSCI xUS SC Index (%)	MSCI EM Index (%)	Composite Index (%)	2500 Index (%)	2000 Index (%)	Databank (%)	T-Bills (%)	91-day T-Bills (%)	91-day T-Bills (%)	Currency Hedging (%)				
Accel. Growth Fund	16.9	3.7	2.0	12.7	0.5	4.5	15.3	7.7	2.0	2.0	5.6	4.5	2.0	2.0	6.5	7.1	5.2	18.9					
Growth Fund	14.9	3.2	1.8	21.2	0.8	4.0	13.5	6.8	1.7	1.7	5.0	4.0	1.7	1.7	5.7	7.7	4.6	16.6					
Balanced Fund	12.9	2.8	1.6	29.7	1.1	3.4	11.7	5.9	1.5	1.5	4.3	3.4	1.5	1.5	4.9	8.2	4.0	14.4					
Moderate Fund	10.0	2.2	1.2	42.5	1.6	2.7	9.0	4.5	1.2	1.2	3.3	2.7	1.2	1.2	3.8	9.1	3.1	11.1					
Conservative Fund	6.0	1.3	0.7	59.5	2.3	1.6	5.4	2.7	0.7	0.7	2.0	1.6	0.7	0.7	2.3	10.2	1.8	6.7					
Bond Fund				91.6	6.4											2.0							
Money Market Fund																100.0							
PEPP Step 1	16.9	3.7	2.0	12.7	0.5	4.5	15.3	7.7	2.0	2.0	5.6	4.5	2.0	2.0	6.5	7.1	5.2	18.9					
PEPP Step 2	15.9	3.4	1.9	17.0	0.6	4.2	14.4	7.2	1.8	1.8	5.3	4.2	1.8	1.8	6.1	7.4	4.9	17.7					
PEPP Step 3	14.9	3.2	1.8	21.2	0.8	4.0	13.5	6.8	1.7	1.7	5.0	4.0	1.7	1.7	5.7	7.7	4.6	16.6					
PEPP Step 4	13.9	3.0	1.7	25.5	1.0	3.7	12.6	6.3	1.6	1.6	4.6	3.7	1.6	1.6	5.3	8.0	4.3	15.5					
PEPP Step 5	12.9	2.8	1.6	29.7	1.1	3.4	11.7	5.9	1.5	1.5	4.3	3.4	1.5	1.5	4.9	8.2	4.0	14.4					
PEPP Step 6	11.9	2.6	1.4	34.0	1.3	3.2	10.8	5.4	1.4	1.4	4.0	3.2	1.4	1.4	4.6	8.5	3.7	13.3					
PEPP Step 7	10.9	2.4	1.3	38.2	1.5	2.9	9.9	5.0	1.3	1.3	3.6	2.9	1.3	1.3	4.2	8.8	3.4	12.2					
PEPP Step 8	10.0	2.2	1.2	42.5	1.6	2.7	9.0	4.5	1.2	1.2	3.3	2.7	1.2	1.2	3.8	9.1	3.1	11.1					
PEPP Step 9	9.0	1.9	1.1	46.7	1.8	2.4	8.1	4.1	1.0	1.0	3.0	2.4	1.0	1.0	3.4	9.3	2.7	10.0					
PEPP Step 10	8.0	1.7	1.0	51.0	1.9	2.1	7.2	3.6	0.9	0.9	2.6	2.1	0.9	0.9	3.0	9.6	2.4	8.9					
PEPP Step 11	7.0	1.5	0.8	55.2	2.1	1.9	6.3	3.2	0.8	0.8	2.3	1.9	0.8	0.8	2.7	9.9	2.1	7.8					
PEPP Step 12	6.0	1.3	0.7	59.5	2.3	1.6	5.4	2.7	0.7	0.7	2.0	1.6	0.7	0.7	2.3	10.2	1.8	6.7					

Index Full Names and Descriptions

S&P/TSX Composite Index - S&P/TSX Capped Composite Index. Measures Canadian equity performance.

S&P/TSX Small Cap Index - S&P/TSX Small Cap Total Return Index. Measures Canadian equity performance (smaller firms).

S&P/TSX Completion Index. Measures Canadian equity performance (mid-size and smaller firms).

FTSE TMX Canada Universe Bond Index - Measures Canadian bond performance.

MSCI EAFE Index - Morgan Stanley Capital International (MSCI) Europe, Australasia and Far East (EAFE) Total Return Index. Measures non-North American equity performance.

MSCI World Index - Morgan Stanley Capital International (MSCI) World Total Return Index. Measures aggregate equity performance for all developed markets.

MSCI ACWI - Morgan Stanley Capital International (MSCI) All Country World Total Return Index. Measures aggregate equity performance for all developed and emerging markets.

MSCI EAFE SC - Morgan Stanley Capital International Europe, Australasia, and Far East Small Cap Total Return Index. Measures aggregate equity performance across Developed Markets countries, excluding the US and Canada.

MSCI EAFE SC ex US - Morgan Stanley Capital International World ex U.S. Small Cap Total Return Index. Measures aggregate equity performance across Developed Markets countries, excluding the US.

MSCI EM - Morgan Stanley Capital International Emerging Markets Total Return Gross Index. Measures aggregate equity performance of large and mid cap representation across 23 Emerging Markets countries.

S&P 500 Composite Index - Standard & Poors 500 Composite Total Return Index. Measures US equity performance.

Russell 2500 Index - Russell 2500 Total Return Index measures the performance of the small to mid-cap segment of the U.S. equity universe, commonly referred to as "smid" cap.

Russell 2000 Index - Russell 2000 Total Return Index measures the performance of the small-cap segment of the U.S. equity universe.

Investment Property Databank. Measures real estate performance.

GOC 91-day T-Bills - Government of Canada 91-day Treasury Bills. Measures money market performance.

US 91-day T-Bills - U.S. Government 91-day Treasury Bills. Measures money market performance.

Currency Hedging - Currency contribution to a passively managed hedge of 50% on applicable foreign currency exposures. Measures the performance of the Plan's derivative based currency hedging strategy.