



Public Service Pension Plan

Quarterly Investment Report December 31, 2018

Assets Under Management

As at December 31, 2018 \$13,677.0 million
 As at September 30, 2018 \$13,958.2 million

Asset Mix at December 31, 2018

	Market Value (\$ millions)	Allocation	Long-Term Policy	Policy Ranges
Money Market	\$95.4	0.7%	0.5%	0 - 3%
Fixed Income	\$2,825.8	20.7%	20.5%	11 - 30%
Equities	\$7,421.1	54.3%	55.0%	37 - 65%
Alternatives	\$3,257.0	23.8%	24.0%	15 - 30%
Overlays	\$77.7	0.6%	0.0%	
Fund Total	\$13,677.0	100%	100%	

Please see the PSPP Statement of Investment Policies & Guidelines for more information.



Public Service Pension Plan

Investment Performance ending December 31, 2018

Asset Category	Asset / Sub-asset Category Benchmark	2018		Calendar Years		
		QTD	YTD	2017	2016	2015
Total	Fund Net	(2.00)	1.54	11.28	6.95	9.79
	Policy	(2.93)	0.99	9.68	6.59	7.99
	CPI (one month lag)	(0.52)	1.68	2.10	1.18	1.36
Money Market □	Money Market	0.48	1.65	0.97	0.88	0.90
	FTSE TMX Canada 91 day T-Bill Index	0.45	1.38	0.56	0.51	0.63
Fixed Income	Asset Category Total	2.11	2.21	4.36	3.32	4.63
	Asset Category Index Total	1.96	1.15	3.75	1.66	3.52
	Universe Bonds	1.53	1.89	3.27	3.35	4.13
	FTSE TMX Canada Universe Bond Index	1.76	1.41	2.52	1.66	3.52
	Long Bonds	2.02	0.88	7.61	-	-
	FTSE TMX Canada Long Term All Government Bond Index	2.34	0.50	6.50	-	-
	Private Debt & Loan	1.08	3.99	2.33	4.42	6.13
	FTSE TMX Canada Universe Bond Index	1.76	1.41	2.52	1.66	3.52
Equity	Asset Category Total	(7.43)	(2.92)	14.80	7.61	12.38
	Asset Category Index Total	(6.73)	(1.63)	13.24	7.81	9.75
	Canadian Equity	(10.23)	(9.84)	10.16	19.92	(7.45)
	S&P/TSX Composite Index	(10.11)	(8.89)	9.10	21.08	(8.32)
	Global Developed Equity	(7.90)	(1.03)	15.75	2.71	20.93
	MSCI World (C\$) Index	(6.73)	0.99	13.10	1.98	18.89
	Global Equity Master Pool (MSMP)	(8.93)	(1.87)	16.56	3.38	20.56
	MSCI World (C\$) Index	(8.51)	(0.49)	14.36	3.79	18.89
	LSH	(9.15)	(0.18)	10.71	4.68	-
	MSCI World (C\$) Index	(8.51)	(0.49)	14.36	3.79	-
	Global Minimum Variance Pool	(5.99)	0.57	14.63	-	-
	MSCI World Minimum Volatility (C\$) Index	(2.73)	4.19	10.23	-	-
	Emerging Markets	(2.63)	(8.20)	30.40	8.66	6.18
	MSCI Emerging Markets (C\$) Index	(2.22)	(6.87)	28.26	7.34	2.04
	Private Equity	4.66	18.90	(1.37)	1.16	26.94
	Core Private Equity	7.96	24.10	(0.60)	15.66	36.89
Relationship Investing	(2.86)	13.28	(15.57)	(60.18)	(55.01)	
Venture Capital	(14.95)	(5.69)	(3.31)	(21.00)	11.53	
Private Equity Index ¹	1.76	8.58	8.65	8.35	17.10	
Alternatives	Asset Category Total	8.57	12.68	9.50	6.43	8.51
	Asset Category Index Total	2.30	7.64	6.70	5.81	8.92
	Real Estate	7.55	11.93	8.77	4.96	6.62
	Real Estate Benchmark ²	2.89	8.47	7.03	5.81	8.05
	Canadian Real Estate	7.51	11.53	8.49	5.42	5.09
	Canadian Real Estate Benchmark ³	2.44	7.71	7.03	5.81	8.05
	Foreign Real Estate	7.88	14.71	10.94	1.49	19.02
	Foreign Real Estate Benchmark ⁴	6.10	13.98	7.03	5.81	8.05
	Private Infrastructure	11.84	13.06	9.24	9.47	14.75
	Private Infrastructure Index ⁵	1.16	6.08	6.15	5.85	9.13
	Renewable Resources	4.49	17.73	17.49	10.05	4.20
Renewable Resources Index ⁶	1.16	6.08	6.15	5.85	9.13	
Overlays	Overlays	(5.10)	(2.23)	5.01	(5.14)	80.19

1. Private Equity Index: CPI 1 month lagged + 7.0 % (4-year rolling average). Prior to January 1, 2016, the benchmark was MSCI All Country World Index.

2. Real Estate Index: A blend of the IPD Large Institutional Index & MSCI Global Region Property Index.

3. Canadian Real Estate Index: IPD Large Institutional Index.

4. Foreign Real Estate Index: MSCI Global Region Property Index.

5. Private Infrastructure Index: CPI 1 month lagged + 4.5% (4-year rolling average). Prior to November 1, 2015, the benchmark was 50% FTSE TMX Canada Real Return Bond/50% MSCI ACWI.

6. Renewable Resources Index: CPI 1 month lagged + 4.5% (4-year rolling average). Prior to November 1, 2015, the benchmark was 50% FTSE TMX Canada Real Return Bond/50% MSCI ACWI.



Public Service Pension Plan

Investment Performance ending December 31, 2018

Asset Category	Asset / Sub-asset Category Benchmark	Annualized Years				
		1	2	3	4	10
Total	Fund Net	1.54	6.30	6.52	7.33	9.38
	Policy	0.99	5.25	5.69	6.26	8.50
	CPI (one month lag)	1.68	1.89	1.65	1.58	1.58
Money Market □	Money Market	1.65	1.31	1.16	1.10	1.19
	FTSE TMX Canada 91 day T-Bill Index	1.38	0.97	0.81	0.77	0.82
Fixed Income	Asset Category Total	2.21	3.28	3.29	3.63	5.68
	Asset Category Index Total	1.15	2.45	2.18	2.52	4.26
	Universe Bonds	1.89	2.58	2.84	3.16	5.55
	FTSE TMX Canada Universe Bond Index	1.41	1.96	1.86	2.27	4.16
	Long Bonds	0.88	-	-	-	-
	FTSE TMX Canada Long Term All Government Bond Index	0.50	-	-	-	-
	Private Debt & Loan	3.99	3.15	3.58	4.21	-
	FTSE TMX Canada Universe Bond Index ¹	1.41	1.96	1.86	2.27	-
Private Mortgages	4.73	3.60	3.11	3.58	5.29	
	FTSE TMX Canada Universe Bond Index	1.41	1.96	1.86	2.27	4.16
Equity	Asset Category Total	(2.92)	5.57	6.25	7.75	11.15
	Asset Category Index Total	(1.63)	5.54	6.29	7.15	10.09
	Canadian Equity	(9.84)	(0.34)	6.00	2.47	9.18
	S&P/TSX Composite Index	(8.89)	(0.30)	6.37	2.49	7.92
	Global Developed Equity	(1.03)	7.03	5.57	9.22	11.95
	MSCI World (C\$) Index ²	0.99	6.87	5.22	8.48	10.74
	Global Equity Master Pool (MSMP)	(1.87)	6.95	5.75	9.27	-
	MSCI World (C\$) Index	(0.49)	6.68	5.71	8.86	-
	LSH	(0.18)	5.12	4.98	-	-
	MSCI World (C\$) Index	(0.49)	6.68	5.71	-	-
	Global Minimum Variance Pool	0.57	7.37	-	-	-
	MSCI World Minimum Volatility (C\$) Index	4.19	7.17	-	-	-
	Emerging Markets	(8.20)	9.41	9.16	8.41	10.53
	MSCI Emerging Markets (C\$) Index	(6.87)	9.29	8.64	6.95	9.41
	Private Equity	18.90	8.29	5.86	10.78	8.87
	Core Private Equity	24.10	11.06	12.58	18.22	13.88
Relationship Investing	13.28	(2.21)	(27.52)	(35.66)	-	
Venture Capital	(5.69)	(4.51)	(10.35)	(5.32)	-	
Private Equity Index ³	8.58	8.61	8.52	10.61	12.32	
Alternatives	Asset Category Total	12.68	11.08	9.51	9.26	8.32
	Asset Category Index Total	7.64	7.17	6.71	7.26	8.27
	Real Estate	11.93	10.34	8.52	8.04	9.06
	Real Estate Benchmark ⁴	8.47	7.75	7.10	7.33	8.72
	Canadian Real Estate	11.53	10.00	8.45	7.60	9.10
	Canadian Real Estate Benchmark ⁵	7.71	7.37	6.85	7.15	2.44
	Foreign Real Estate	14.71	12.81	8.90	11.35	-
	Foreign Real Estate Benchmark ⁶	13.98	10.45	8.88	8.67	-
	Private Infrastructure	13.06	11.13	10.58	11.61	7.77
	Private Infrastructure Index ⁷	6.08	6.11	6.02	6.79	8.54
	Renewable Resources	17.73	17.61	15.03	12.22	9.16
Renewable Resources Index ⁸	6.08	6.11	6.02	6.79	8.23	
Overlays	Overlays	(2.23)	1.33	(0.88)	15.10	5.70

1. Private Debt & Loan Benchmark: Prior to April 1, 2014, the benchmark was FTSE/TMX Short Term Overall Bond Index. 2014 performance reflects a blend of the prior and current benchmark.

2. Global Developed Equity Index: MSCI World. Prior to July 1, 2011, the benchmark was MSCI All Country World Index.

3. Private Equity Index: CPI 1 month lagged + 7.0% (4-year rolling average). Prior to January 1, 2016, the benchmark was MSCI All Country World Index.

4. Real Estate Index: A blend of the IPD Large Institutional Index & MSCI Global Region Property Index.

5. Canadian Real Estate Index: IPD Large Institutional Index.

6. Foreign Real Estate Index: MSCI Global Region Property Index.

7. Private Infrastructure Index: CPI 1 month lagged + 4.5% (4-year rolling average). Prior to November 1, 2015, the benchmark was 50% FTSE TMX Canada Real Return Bond/50% MSCI ACWI. Prior to July 1, 2010 the benchmark was CPI + 600 bps.

8. Renewable Resources Index: CPI 1 month lagged + 4.5% (4-year rolling average). Prior to November 1, 2015, the benchmark was 50% FTSE TMX Canada Real Return Bond/50% MSCI ACWI. Prior to July 1, 2010 the benchmark was CPI + 400 bps.