



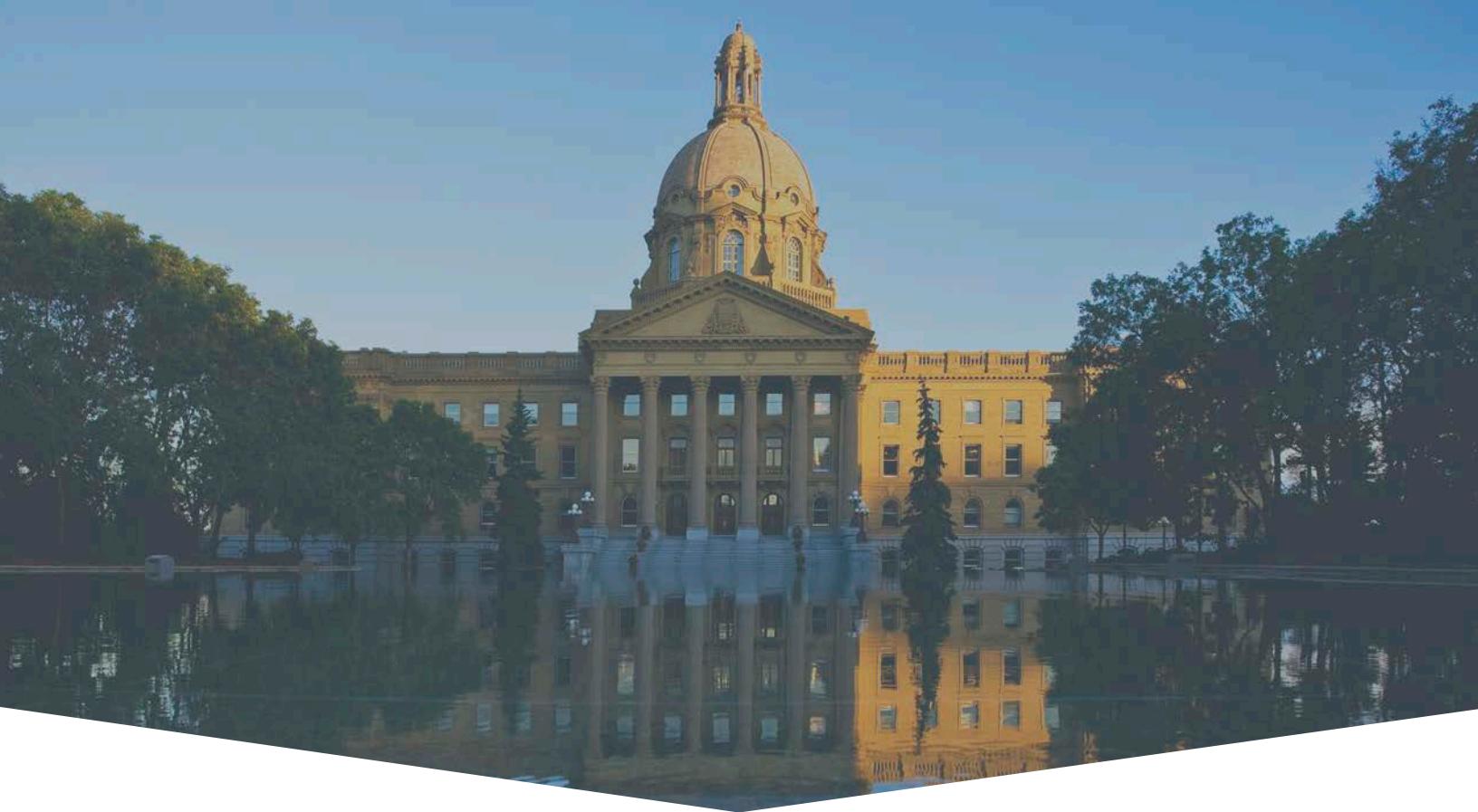
Management Employees Pension Plan
ANNUAL REPORT
2019

MEPP
management employees pension plan



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MEPP Governance Statement

The Management Employees Pension Plan (“MEPP” or the “Plan”) was originally established in 1972 as the Public Service Management Pension Plan for management employees of the Alberta government and approved agencies, boards and commissions. In 1993, new legislation was passed that split the plan into two separate plans: MEPP and the Public Service Management (Closed Membership) Pension Plan (“Closed Plan”). The latter plan holds the entitlements of former managers not in active service as of January 1, 1992.

The Management Employees Pension Board (the “Board”) has legislated responsibilities for MEPP and limited legislated responsibilities for the Public Service Management (Closed Membership) Pension Plan (the “Closed Plan”). The mandate of the Board, as established under the *Public Sector Pension Plans Act* (“PSPPA”), Schedule 5, section 3, and Schedule 6 is to:

- 1.1** advise the Minister on any pension matter that is of interest to persons receiving or entitled in the future, to receive benefits under the MEPP;
- 1.2** consult with the Minister with respect to:
 - 1.2.1** amending or repealing and replacing the Management Employees Pension Plan Regulation (the “Plan Rules”); including Plan Rules and adjusting contribution rates to ensure that the MEPP is funded;
 - 1.2.2** conducting an actuarial valuation with respect to the MEPP;
 - 1.2.3** conducting an actuarial valuation with respect to the Closed Plan;
 - 1.2.4** changes proposed to the Public Sector Pension Plans (Legislative Provisions) Regulation;
 - 1.2.5** the cost to be charged for the administration of the MEPP; and
 - 1.2.6** the cost to be charged for the administration of the Closed Plan.
- 1.3** set general policy guidelines such as the Investment Policy on the investment and management of the MEPP fund that it considers should be followed; and
- 1.4** set general policy guidelines on the administration of the MEPP that it considers should be followed.

MEPP Administration Report 2019

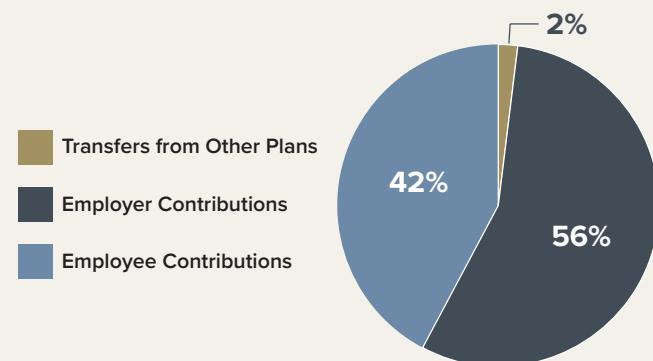
Alberta Pensions Services Corporation (APS) provides valued pensions services, as directed under a Pension Services Agreement with the President of the Treasury Board and Minister of Finance, on behalf of MEPP members, pensioners, employers and plan governors.

Services include:

- Contributions management
- Member, pensioner and employer information management
- Member, pensioner and employer communications
- Benefit calculations
- Benefit disbursements
- Policy development and implementation
- Compliance, regulatory and plan financial reporting

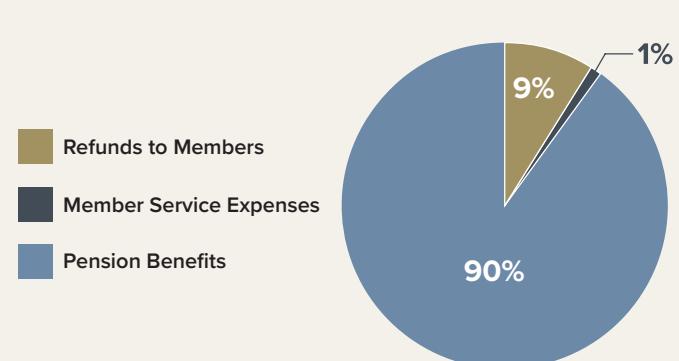
Contributions to MEPP

In 2019 total contributions to MEPP were \$194 million.



Payments from MEPP

In 2019, total payments from MEPP were \$252 million.



MEPP Members, Pensioners and Employers

As at December 31, 2019, MEPP has 21 employers and a total of 12,354 active or deferred members and pensioners. In 2019, 393 members joined the Plan, 50 re-joined the Plan, 173 members retired, 388 members deferred funds, and 37 members terminated and left the Plan.

MEPP Member Services Expenses

MEPP's share of APS' operating and plan-specific costs are based on cost allocation policies approved by the President of Treasury Board and Minister of Finance.

In 2019, MEPP's share of APS' costs was \$2.5 million. Based on average membership for the year, MEPP's per member service expense is \$203, which includes APS' operating costs, Board costs and other professional fees.

Member Service Expenses (\$ thousands)	2019	2018
General administration costs	2,222	2,254
Board costs	42	62
Actuarial fees	69	66
Other professional fees	178	155
Total	2,511	2,537
Member service expenses per member	\$203	\$208

Cost-of-Living Adjustment to Pensions in Pay

After a member begins to receive a pension, a cost-of-living adjustment (COLA) is applied every year there is an increase in the Alberta Consumer Price Index (ACPI). COLA is equal to 60% of the yearly increase of the ACPI.

As of January 1, 2019, the COLA granted to pensioners was 1.5%. For those who retired during 2019, this COLA was prorated.

Achievements in 2019

On behalf of MEPP, APS achieved the following successes for employers and Plan members:

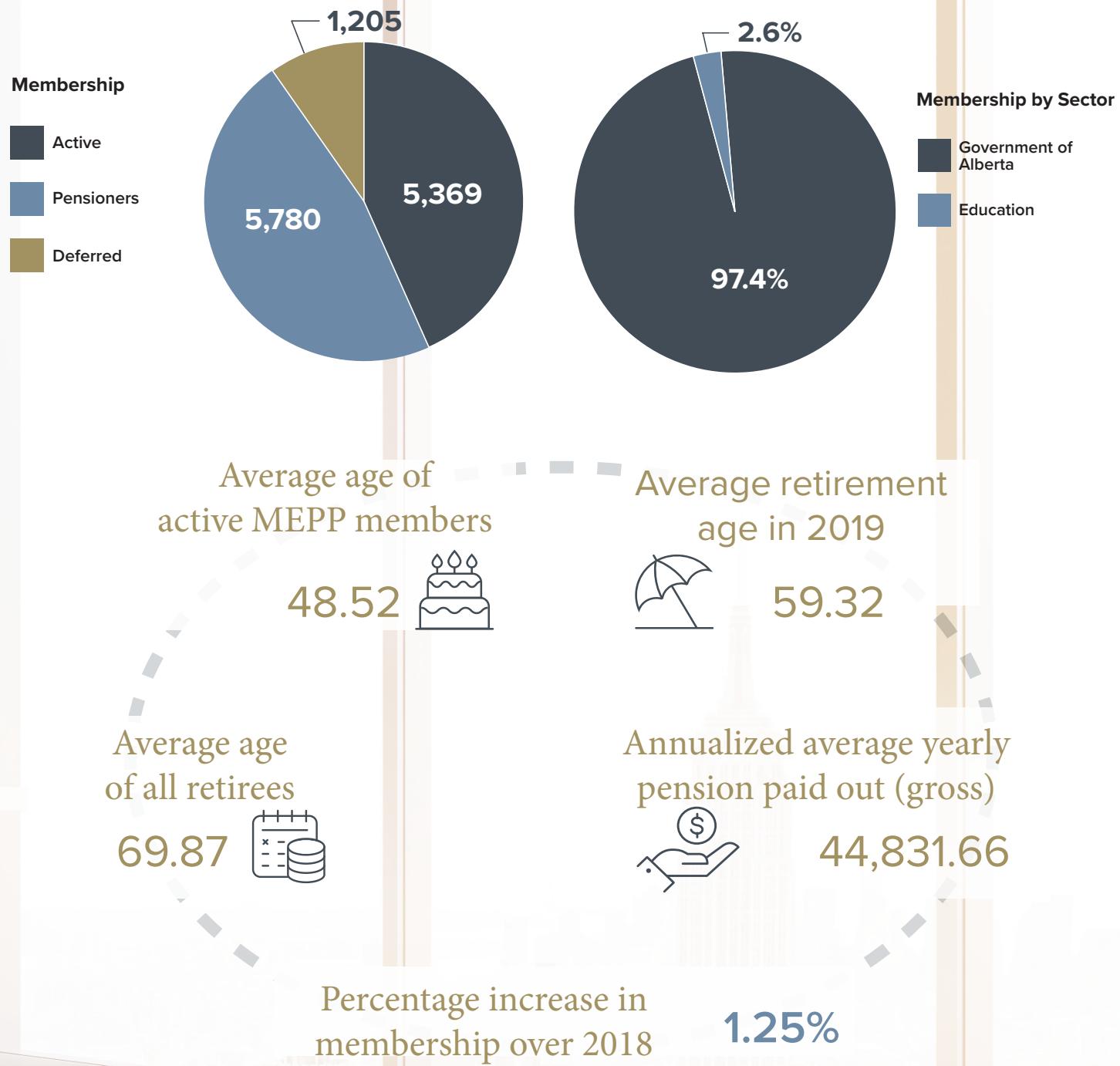
- A 100% payout calculation accuracy rate for the year.
- All member phone-call related service level targets were achieved with an 84% satisfaction rating of those services by Plan members.
- Provided Plan member education services across Alberta, including 117 one-on-one sessions, 13 group sessions and 7 webinars.
- Ended the year with a 78% employer engagement score, comprised of measurements of APS' employer services relative to employer satisfaction, employer compliance and the employer portal.
- Registrations on mypensionplan™ grew by 15% to 6,796 Plan members, meaning that more than half of all MEPP members are accessing their pension information securely online.
- Visits to mepp.ca increased by 24% to 10,842.
- Continued to enhance the mepp.ca experience for members by providing timely updates.
- Worked in collaboration with the Board in the development of two newsletters.
- Implemented an improved client relations strategy, further to strategic recruitment activities.

Looking Ahead

In 2020, APS is focusing on key themes of reliability, innovation, as well as people and culture to position the organization to achieve operational excellence. This focus will positively impact the support provided to MEPP in serving Plan members and employers. Major service improvements, projects and initiatives in 2020 include the following:

- Responding to an evolving pandemic: As the global COVID-19 pandemic evolves, APS remains committed to ensuring the safety of its employees while providing excellent and, wherever possible, seamless service experiences for Plan members which meet service level targets.
- Providing valuable services: Continued commitment to delivering valuable pension benefit administration services in a cost-effective manner, which is measured annually and compared to a peer group of other Canadian public sector pension administrators.
- Serving Plan members: Continued work on the electronic portal (currently known as mypensionplan™) to customize the tool for MEPP members and to integrate it into mepp.ca.
- Continuously improving: Continued commitment to operational excellence by seeking and implementing operational and member-focused service efficiencies, including to the pension administration system and online resources for employers.

Additional Information



Summary of Financial Position (2019)

Based on Management Employees Pension Plan Financial Statements (as at December 31, 2019).

(\$ thousands)	2019	2018
Net assets available for benefits	5,635,568	5,061,332
Pension obligation	4,627,433	4,390,632
Surplus	1,008,135	670,700

Plan Performance

The MEPP Plan Performance is prepared by the Ministry of Treasury Board and Finance.

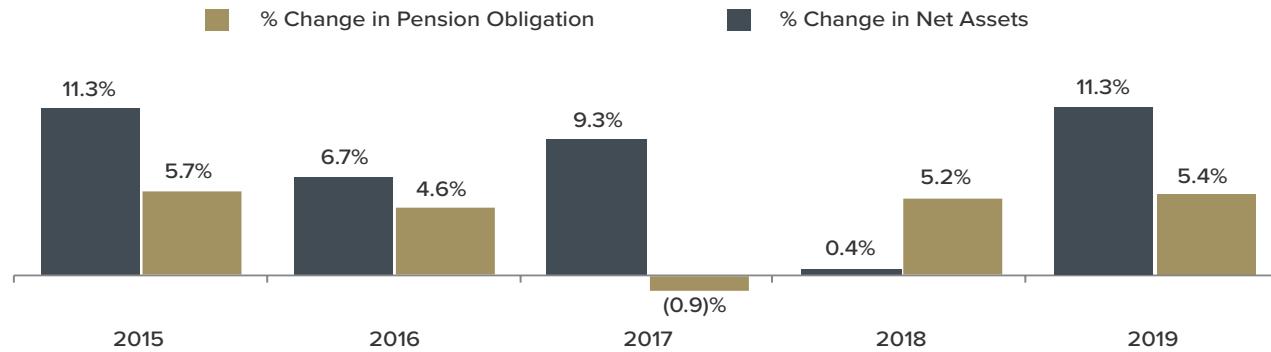
Fair Value of Net Assets versus Pension Obligation

Net assets of the Plan primarily include investments, as well as investment- and pension-related receivables and payables. Net assets increase when there is positive overall investment returns and when employee and employer contributions exceed pension benefits paid. Net assets decrease when there are investment losses, or when benefits paid exceeds the amount of contributions received.

The total pension obligation is based on the estimated net present value of future pension benefits paid to employees when they retire. Retirement benefits earned by employees provide a lifetime pension for each year of pensionable service based on a specified percentage applied to the average salary for the five highest consecutive years, subject to the maximum benefit limit allowed under the Canadian Income Tax Act. The estimated pension obligation generally increases annually for each additional year of pensionable service earned by employees. The pension obligation is an estimate because it is based on various assumptions used by the Plan's actuary. For example, an estimated discount rate is used to determine the present value of future retirement payments. A lower estimated discount rate will increase the estimated pension obligation. Similarly, a higher estimated life expectancy will increase the pension obligation. This year's pension obligation was impacted by a decrease in the discount rate to 6.0%, continuing a downward trend in the past few years (6.1% in 2018 and 6.4% in 2017).

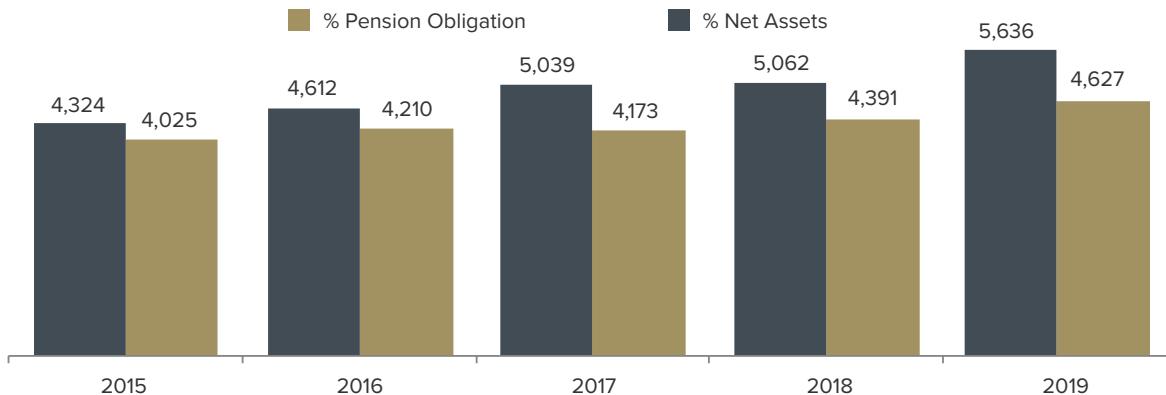
As shown in the chart below, net assets increased by 11.3% in 2019 compared to an increase in the estimated pension obligation of 5.4%.

Per Cent Change in Net Assets and Pension Obligation
(per audited financial statements)



When the Plan has net assets that exceed the pension obligation, it is said to be in a surplus position. If the net assets are insufficient to cover the obligation, the Plan is in a deficit position. At December 31, 2019, the fair value of the Plan's net assets totaling \$5.636 billion exceeded the estimated pension obligation of \$4.627 billion resulting in an accounting surplus of \$1.009 billion.

Net Assets Compared to Total Pension Obligation (in millions)
(per audited financial statements)



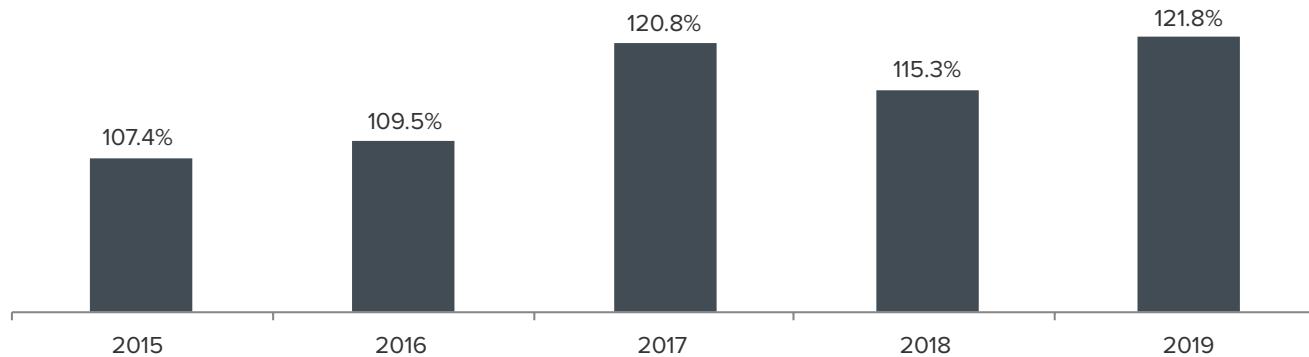
Fair Value of Net Assets	
	\$5.636 billion
Pension Obligation	
	\$4.627 billion
Surplus	
	\$1.009 billion
Investment Income and Contributions	
	\$867 million
Benefits and Expenses	
	\$293 million

In 2019, MEPP's surplus rose to the highest level in the Plan's history on the back of very strong investment performance. The Plan's surplus increased by \$338 million to \$1.009 billion, according to the 2019 audited financial statements.

At December 31, 2019, the fair value of the Plan's net assets increased by 11.3% (\$574 million) to \$5.636 billion. Less than one-half of the increase in net assets was offset by an increase in the pension obligation which increased by 5.4% (\$236 million) to \$4.627 billion.

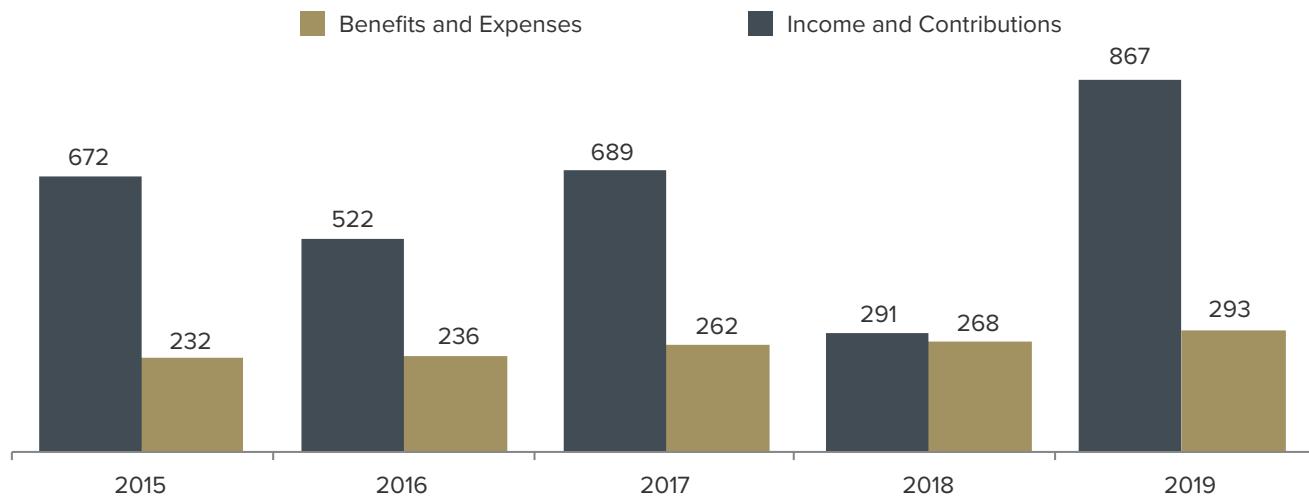
According to the most recent audited financial statements, the Plan closed out 2019 with 121.8% of the total pension obligation supported by assets. The Plan has been fully funded for accounting purposes since 2013.

Per Cent of Pension Obligation Supported by Net Assets
(per audited financial statements)



In 2019, investment income and contributions from employees and employers totaling \$867 million was substantially higher than the outflows for benefit payments and expenses of \$293 million resulting in a significant increase in the net assets for the Plan.

MEPP Inflows and Outflows (in millions)
(per audited financial statements)

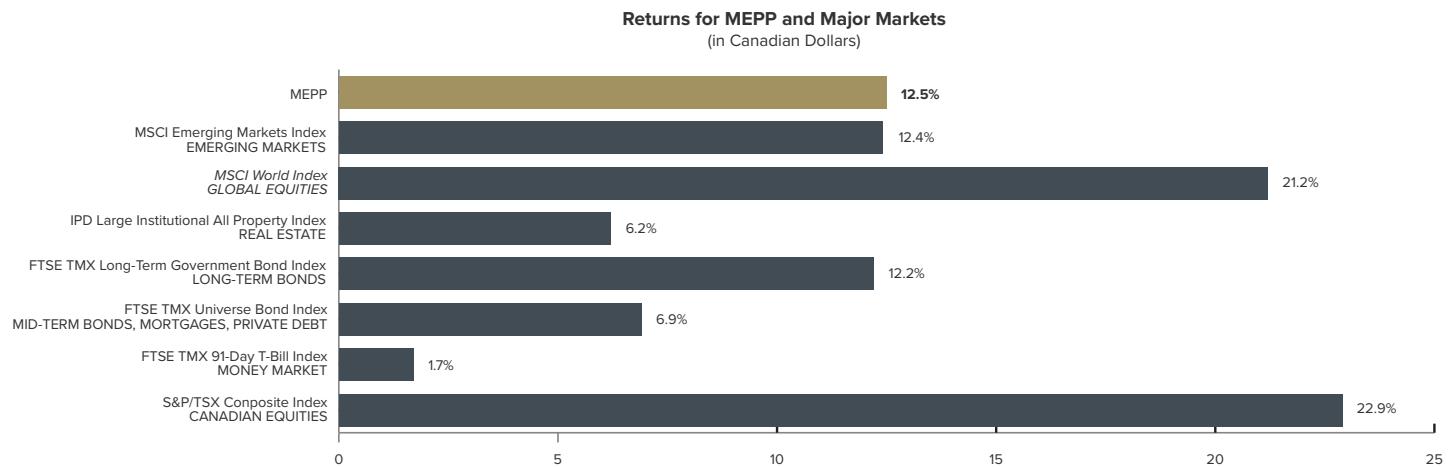


Investment Performance

At December 31, 2019, the fair value of the Plan's net assets totalled \$5.636 billion, up 11.3% or \$574 million from \$5.062 billion at the beginning of the year. The growth in net assets is comprised of a return on investments of 12.5%, or \$633 million, after investment expenses and a decline of 1.1%, or \$59 million, from pension benefits in excess of contributions. Investment expenses totaled \$41.1 million in 2019 compared to \$33.1 million in 2018.

MEPP's Investment Returns		After a dismal 2018, which saw the Plan barely post a positive return on the investment portfolio, markets bounced back for a strong showing in 2019. MEPP began the year with a robust 5.7% gain in the 1st quarter. Returns leveled off over the next six months, posting 1.6% and 0.8% in the 2nd and 3rd quarters, respectively, before finishing the year strong with a 3.9% return in the 4th quarter.
1st quarter	5.7%	
2nd quarter	1.6%	
3rd quarter	0.8%	
4th quarter	3.9%	
Annual 2019	12.5%	The strong gains were driven mainly by an incredible turnaround in equity markets. MEPP realized a gain of 17.4% on their public equity investments compared to a loss of 3.2% on the same portfolio in 2018. Despite the strong returns in the current year, MEPP investment portfolio underperformed the benchmark return of 13.3%.

The following chart summarizes the market returns from various indices around the world and the overall return of MEPP for 2019.



The Morgan Stanley Capital International (MSCI) World Index is a broad global equity benchmark that represents large and mid-cap equity performance across 23 developed countries. This index is used to benchmark the performance of the Plan's global developed public equities. In 2019, the MSCI World Index increased by 21.2% in Canadian dollars (2018: decreased by 0.5% in Canadian dollars).

The Plan's emerging market investments are benchmarked against the MSCI Emerging Markets Index, which gained 12.4% in Canadian dollars in 2019 compared to a loss of 6.9% in Canadian dollars in 2018.

The Canadian real estate market, represented by the IPD Large Institutional Index, gained 6.2% this year, compared to last year's gain of 7.7%.

Medium- and long-term bond indices improved over the last year, with the FTSE TMX Universe Bond Index posting a gain of 6.9% in 2019 compared to a gain of 1.4% in 2018. The FTSE TMX Long-term Government Bond Index recorded a gain of 12.2% in 2019, compared to a gain of 0.5% in 2018.

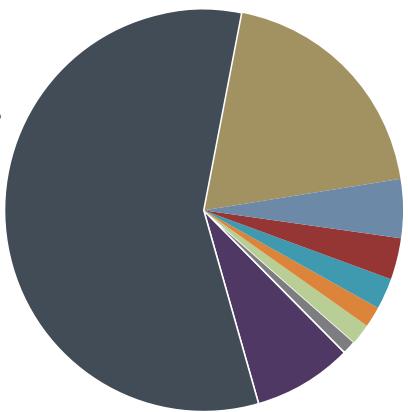
In 2019, the Canadian stock market represented by the Standard & Poor's Toronto Stock Exchange (S&P/TSX) Composite Index gained 22.9%, bouncing back nicely from the loss of 8.9% in 2018.

Investments by Currency

At December 31, 2019, 57.8% of the Plan's investments were denominated in Canadian currency (2018: 62.2%), followed by 19.2% in U.S. currency (2018: 19.4%) and 23.0% in other foreign currencies. The value of the Plan's foreign investment portfolio is exposed to foreign currency risk (i.e. loss) when the value of the Canadian currency strengthens against other currencies. By year-end, the Canadian dollar was stronger against the U.S. dollar, meaning U.S. dollar investments were worth less when translated into Canadian dollars. At December 31, 2019, one U.S. dollar investment was worth \$1.30 Canadian compared to \$1.36 Canadian at the beginning of the year. The Canadian dollar was also stronger against the Euro, with one Euro worth \$1.46 Canadian compared to \$1.56 Canadian at the beginning of the year.

MEPP Investments by Currency

- Canadian Dollar (CAD) - 57.7%
- United States Dollar (USD) - 19.3%
- Euro (EUR) - 4.9%
- British Pound (GBP) - 3.1%
- Japanese Yen (JPY) - 2.6%
- Hong Kong Dollar (HKD) - 1.8%
- Chinese Yuan (CNY) - 1.5%
- Brazilian Real (BRL) - 1.2%
- Other foreign currencies - 7.9%



Investment Management Services

Alberta Investment Management Corporation (AIMCo) is a provincial corporation, created on January 1, 2008, in the Alberta Ministry of Treasury Board and Finance. AIMCo invests MEPP's assets subject to legislation and the investment policies established and approved by the Board. The Plan invests in units issued by pooled investment funds, which are created and managed by AIMCo. There are thousands of securities held in many pooled investment funds. These securities are bought, sold and managed by AIMCo on a daily basis. For various reasons, such as to achieve greater diversification, access external expertise and specialized knowledge and reduce operational complexity, some investments are managed by third party investment managers selected and monitored by AIMCo.

The Board monitors AIMCo's investment performance and associated charges. An independent investment consultant, Ellement Consulting Group Inc., assists the Board in its review of the investment performance of the Plan. The Board has designed the Plan's investment policies with a focus on assessing the risk tolerance of the Plan and ways to manage the inherent volatility of the long-term asset mix.

Investment Expenses

In 2019, the overall investment expense charged by AIMCo totaled \$41.1 million compared to \$33.1 million in the previous year. Investment expenses, before GST, increased by 24.0% in 2019 compared to an increase of 16.7% the previous year.

(\$ millions)	2019	2018
Amounts charged by AIMCO for:		
Investment costs ^(a)	\$ 24.9	\$ 25.3
Performance based fees ^(a)	14.9	6.8
Investment expense before GST	39.8	32.1
GST ^(b)	1.3	1.0
Total investment expense including GST	\$ 41.1	\$ 33.1
Per cent increase in investment expense, before GST	24.0%	16.7%
Per cent increase in average investments under management	5.9%	4.7%
(Decrease) Increase in value of investments attributed to AIMCo	(0.8)%	0.5%
Investment expense as per cent of each dollar invested	0.8%	0.7%

(a) Please refer to AIMCo's financial statements for a detailed breakdown of the types of expenses incurred by AIMCo. Amounts recovered by AIMCo for investment costs include those costs that are primarily non-performance related including external management fees, external administration costs, employee salaries and incentive benefits and overhead costs. Amounts recovered by AIMCo for performance based fees related to external managers hired by AIMCo. Investment costs includes charges by Treasury Board and Finance for investment accounting and Plan reporting.

(b) Two-thirds of GST paid is expensed with the remaining one-third recorded as a receivable until recovered.

MEPP Investment Policy

The MEPP Investment Policy (MEPP IP) sets out the governing investment principles and procedures, considering the Plan's provisions, characteristics, and financial obligations. It also defines the management structure and monitoring procedures. The Board reviews the MEPP IP annually and recommends changes if necessary. The MEPP IP can be viewed at mepp.ca.

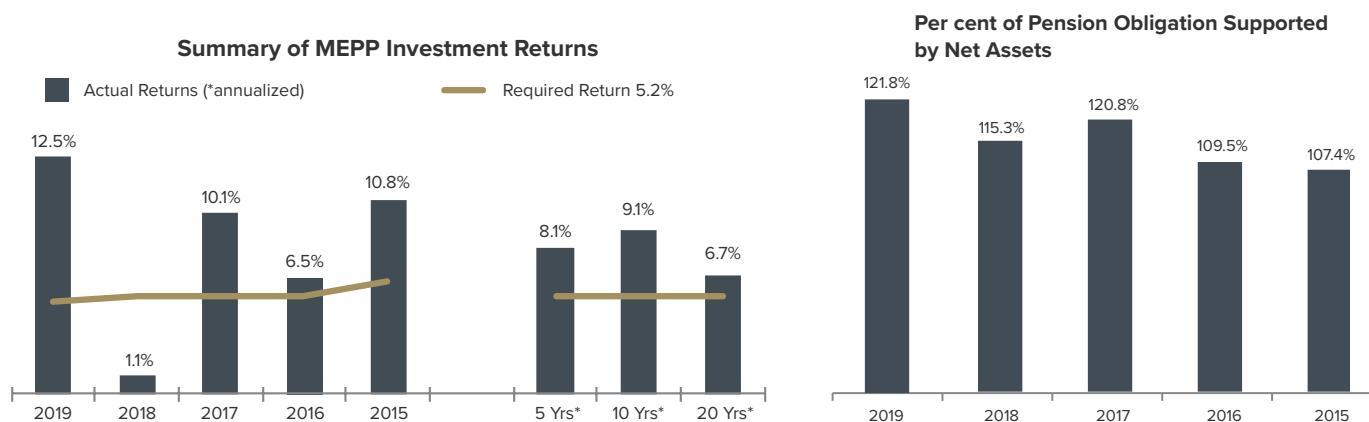
Asset Mix

The table below shows MEPP's policy asset mix including the actual asset mix at December 31, 2019 and 2018.

Asset Class	Policy Asset Mix		Actual Asset Mix	
	Target %	Range %	Actual % 2019	Actual % 2018
Money market and fixed income	15.0	10 - 30	12.9	19.7
Money market		0 - 5	0.6	0.5
Universe bonds		0 - 15	7.2	12.6
Long bonds		0 - 5	0.0	0.0
Private mortgages		0 - 6	3.4	3.5
Private debt		0 - 10	1.7	3.1
Equities	55.0	40 - 62	56.7	50.3
Canadian equities		5 - 25	15.1	12.4
Global developed		15 - 50	29.7	28.8
Emerging markets		0 - 5	8.3	5.0
Private equity		2.5 - 7.5	3.6	4.1
Inflation sensitive	30.0	20 - 45	29.8	29.1
Real estate		7.5 - 20	13.1	13.5
Infrastructure		7.5 - 20	11.4	8.8
Timberlands		0 - 5	0.6	0.2
Real return bonds		0 - 10	4.7	6.6
Strategic and tactical investments and currency hedges	-	-	0.6	0.9
Total			100.0	100.0

Long-term Investment Objective for Funding Purposes

The chart below compares MEPP's overall actual returns for calendar years 2015 to 2019 and the five, ten and twenty year annualized time periods against the required long-term investment return for funding purposes of 5.2% based on the 2018 actuarial valuation. Over the past twenty years, the actual investment return was 6.7% per annum. According to the audited financial statements at December 31, 2019, 121.8% of the total pension obligation was supported by net assets.



Value Added Return from Active Management

In order to measure the investment performance from AIMCo's active management decisions, such as security selection, the investment return for each asset class and the overall performance of the Plan's assets are measured against clearly defined benchmarks that have been established in the MEPP IP. The policy benchmark return is determined by multiplying the benchmark return for each asset class by its percentage of the total investment portfolio.

Over the past four years, the value added return from AIMCo is 0.4% per annum, including value loss of 0.8% in 2019. On an eight-year basis, the value added return by the investment manager was 0.7%. Over the longer term of twenty years, the value added return is 0.3%.

The table below shows the value added returns by AIMCo in comparison to the various components of the policy benchmark.

Value Added / (Lost) by Manager in Comparison to Benchmarks			
	1 Year %	4 Years %	8 Years %
Overall value added return	(0.8)	0.4	0.7
Fixed income securities			
Bonds and mortgages	0.2	0.9	1.3
Equity			
Canadian equity	(2.1)	(0.8)	0.9
Foreign equity	(0.8)	0.2	1.0
Private equity	(11.6)	(3.6)	(6.3)
Inflation sensitive			
Real estate	(0.8)	0.6	0.9
Real Return bonds	0.3	0.4	0.4
Timberland	1.8	n/a	n/a
Infrastructure	4.1	3.7	1.2

The table below shows MEPP's overall actual investment return and returns for each asset class, net of investment expenses, compared to the policy benchmark return in Canadian dollars.

Table of Investment Returns ⁽¹⁾ (in Canadian dollars)		December 31, 2019			Annual Return (%)			Annualized Return (%)	
Asset Class		Investment (in millions)	Asset Mix (%)	2019	2018	2017	2016	4yr	8yr
OVERALL RETURN									
Actual		\$5,628.8	100.0	12.5	1.1	10.1	6.5	7.5	9.9
Policy Benchmark				13.3	0.6	9.2	5.8	7.1	9.2
Consumer Price Index (CPI)				2.2	1.7	2.1	1.2	1.8	1.5
FIXED INCOME SECURITIES									
Short-Term Fixed Income		33.1	0.6	1.9	1.6	0.9	0.9	1.3	1.2
FTSE TMX 91-day T-Bill Index				1.6	1.4	0.6	0.5	1.0	0.5
Bonds, Mortgages and Private Debt ⁽¹⁾		692.7	12.3	7.1	2.6	3.0	3.3	4.0	4.7
FTSE TMX Universe Bond Index				6.9	1.4	2.5	1.7	3.1	3.4
EQUITIES									
Canadian Equity		850.4	15.1	20.8	(9.8)	10.1	19.9	9.5	8.6
S&P/TSX Composite Index				22.9	(8.9)	9.1	21.1	10.3	7.7
Foreign Equities ⁽¹⁾		2,139.4	38.0	18.7	(2.5)	18.1	5.6	9.6	14.9
MSCI World & MSCI Emerging Market Free Index				19.5	(1.2)	16.2	4.4	9.4	13.9
Private Equities ⁽¹⁾		199.6	3.6	(3.4)	14.1	(0.3)	(1.8)	1.9	5.6
CPI plus 6.5% (5-year rolling average) ⁽²⁾				8.2	8.2	8.0	(1.9)	5.5	11.9
INFLATION SENSITIVE									
Real estate ⁽¹⁾		734.6	13.1	3.6	12.4	9.1	4.4	7.3	9.2
Combined IPD Large Institutional and MSCI Global Region Property Index ⁽³⁾				4.4	9.5	7.0	5.8	6.7	8.3
Canadian Real Estate		484.9	8.7	5.5	11.5	n/a	n/a	n/a	n/a
IPD Large Institutional Index ⁽³⁾				6.2	7.6	n/a	n/a	n/a	n/a
Foreign Real Estate		249.7	4.4	0.1	14.7	n/a	n/a	n/a	n/a
MSCI Global Region Property Index ⁽³⁾				1.1	13.8	n/a	n/a	n/a	n/a
Real Return Bonds		265.2	4.7	8.3	0.1	1.3	3.4	3.2	2.3
FTSE TMX Canada Real Return Bond Index				8.0	0.0	0.7	2.9	2.8	1.9
Timberland ⁽⁴⁾									
CPI plus 4.5% (5-year rolling average)		35.1	0.6	8.0	2.5	n/a	n/a	n/a	n/a
Infrastructure ⁽¹⁾				6.2	6.2	n/a	n/a	n/a	n/a
CPI plus 4.5% (5-year rolling average)		641.9	11.4	10.3	10.6	7.6	10.2	9.7	8.4
				6.2	6.2	6.0	5.7	6.0	7.2
STRATEGIC, TACTICAL AND CURRENCY HEDGES									
Strategic Opportunities		35.6	0.6	20.3	(2.2)	5.0	(3.2)	4.6	13.0
Global Tactical Asset Allocation		1.0	0.0	(60.9)	60.6	38.7	13.1	(0.4)	(3.8)
Currency Hedges		0.2	-	n/a	n/a	n/a	n/a	n/a	n/a

(1) Investment returns are provided by AIMCo. Investment returns for assets classified as Level 3 in the financial statements are based on estimates of fair value. Level 3 includes real estate, private equities, infrastructure, hedge funds and private debt. For these investments, measurement uncertainty exists because trading activity is infrequent and fair values are derived using valuation techniques which incorporate assumptions that are based on non-observable market data. Reasonably possible alternative assumptions could yield an increase or decrease in the fair value amounts and investment returns reported for these types of investments. Any change in estimated returns, resulting from new information received after the cut-off date for preparation of the Plan's financial statements, will be reflected in the next reporting period.

(2) Prior to July 1, 2016, the private equity benchmark was MSCI All Country World Index (ACWI).

(3) Prior to January 9, 2018, returns for Canadian and foreign real estate were combined and benchmarked against the IDP Large Institutional Index. On January 9, 2018, performance of foreign real estate was measured against the MSCI Global Region Property Index. Actual and benchmark returns for both Canadian and foreign real estate for the current year are from January 9, 2018.

(4) The Plan invested in Timberland on February 2, 2017. Actual and benchmark returns are not available for prior years, nor for four- and eight year annualized.

Money Market and Fixed Income Securities

At December 31, 2019, the Plan's money market and fixed income portfolio totaled \$726 million or 12.9% of total investments compared to \$998 million or 19.7% at December 31, 2018.

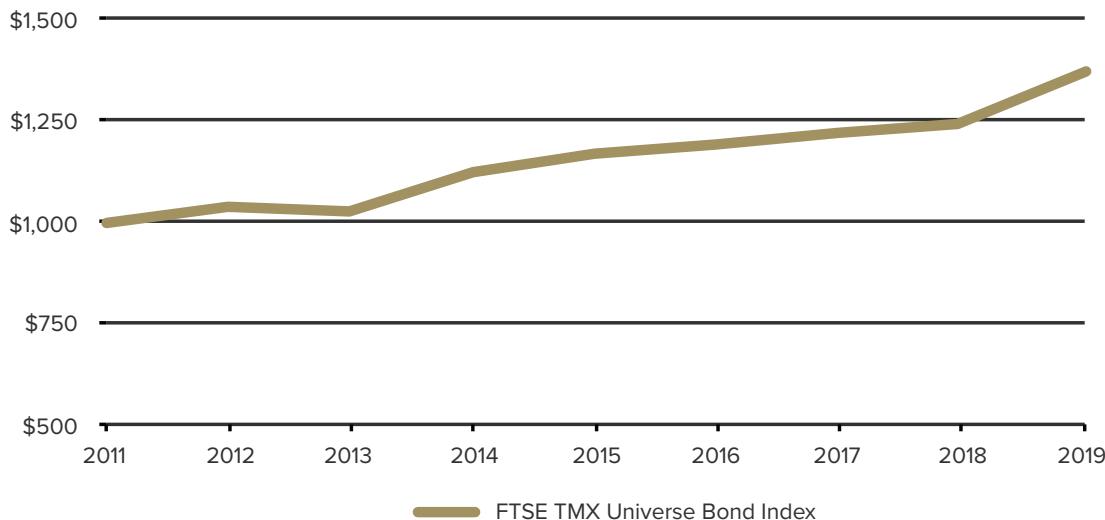
The Plan's money market and fixed income portfolio includes investments in AIMCo's Universe Fixed Income Pool, Private Mortgage Pool, Private Debt Pool and the Consolidated Cash Investment Trust Fund (CCITF).



In 2019, the Plan's actual gain from bonds, mortgages and private debt was 7.1%, 0.2% better than the benchmark gain of 6.9%. The Plan's gain from cash and short-term investments was 1.9% in 2019.

The chart below shows the growth in value over eight years of \$1,000 (Canadian) invested in the bond market, represented by the FTSE TMX Universe Bond Index, for the period December 31, 2011 to December 31, 2019. After eight years, \$1,000 would grow to approximately \$1,303.

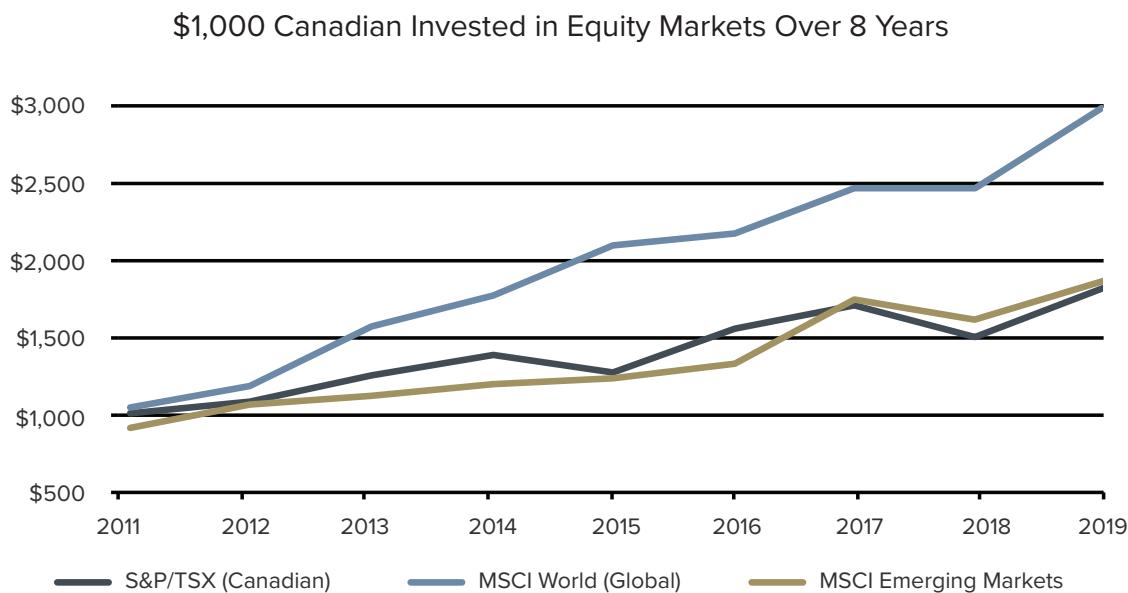
\$1,000 Canadian Invested in Bond Market Over 8 Years



Equity Investments

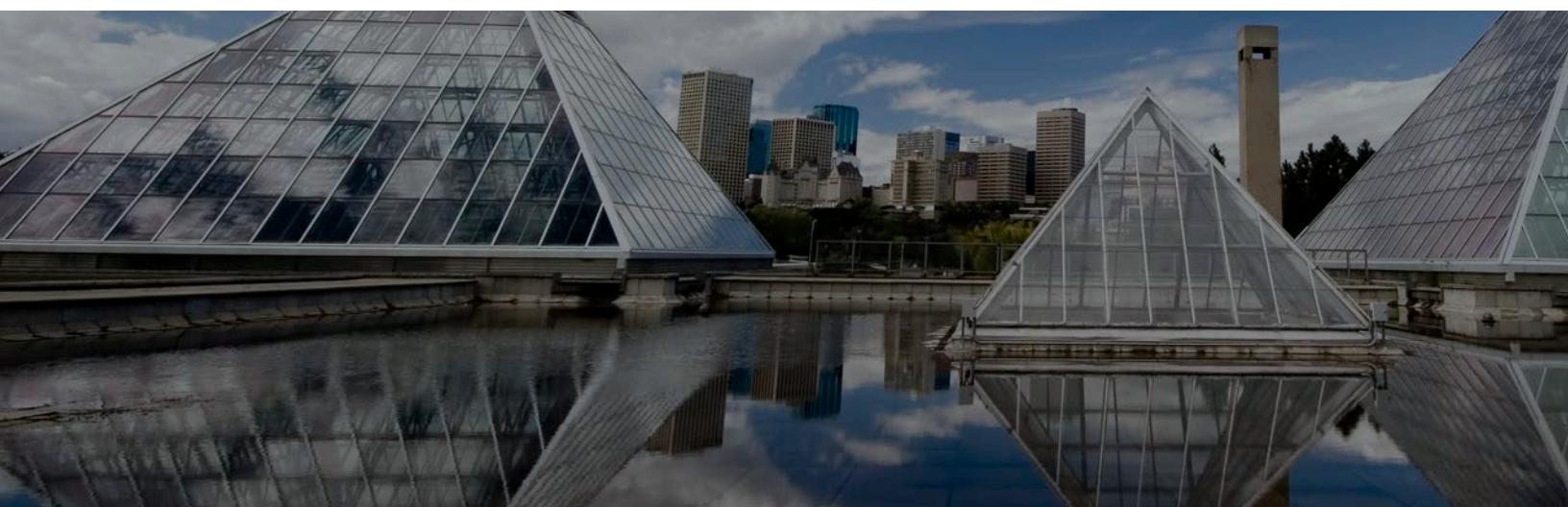
Given MEPP's long-term investment horizon, the asset mix included in the investment policy is structured to capture the historically higher rates of return from equities. At December 31, 2019 equities represent 56.7% of the Plan's total asset mix (2018: 50.3%). The equity asset class includes Canadian public equities, global and emerging market equities and private equities.

The chart below shows the growth over eight years of \$1,000 (Canadian) invested in major equity markets in Canada, global and emerging markets for the period December 31, 2011 to December 31, 2019. For example, \$1,000 invested on January 1, 2011, in the Canadian stock market represented by the S&P/TSX Composite Index would be worth approximately \$1,816 at December 31, 2019. An investment of \$1,000 (Canadian) in the global equity market would be worth \$2,985 and an investment in the emerging markets equity market would be worth \$1,887.



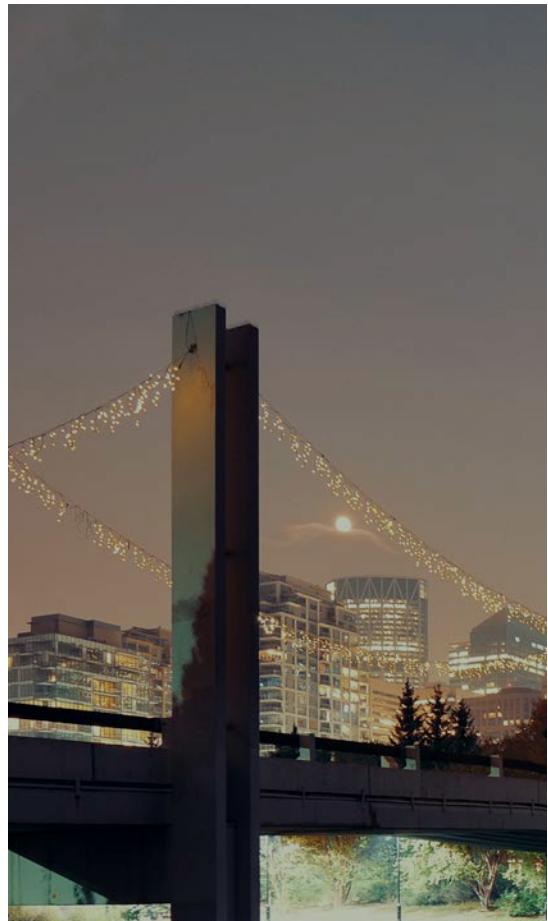
Canadian Equities

At December 31, 2019, Canadian equities represent 15.1% of MEPP's total investments (or \$850 million) compared to 12.4% (or \$626 million) at the end of the previous year. MEPP's Canadian equity investment is held primarily in AIMCo's Canadian Equities Master Pool. The Pool, in turn, invests in the Global Alpha Strategy (GLAS) and structured equity products that replicate Canadian public equities. The purpose of GLAS is to gain access to more markets than would be available if the pool were locked to specific countries or industries, providing more opportunities for value-add return (alpha). GLAS's investment portfolio is actively managed by AIMCo and includes directly held investments in public companies in the U.S and Europe, Australasia and Far East (EAFE) with smaller allocations to emerging markets and Canada. Non-Canadian exposure is swapped out to provide exposure to the S&P/TSX while still maintaining the alpha earned in GLAS.



In 2019, Canadian equity investments returned 20.8%, 2.1% worse than the benchmark gain of 22.9% based on the S&P/TSX Composite index.

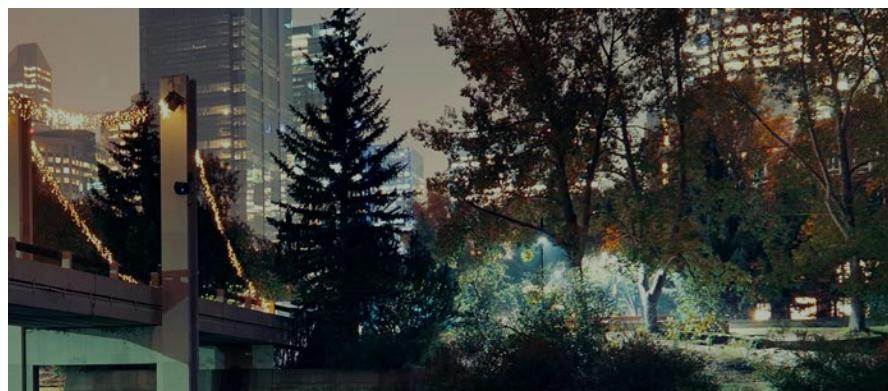
Canadian Public Equities		
	Actual Return	Benchmark Return
1 Year	20.8%	22.9%
4 Years	9.5%	10.3%
8 Years	8.6%	7.7%



Canadian Equities Master Pool Industry Exposure Relative to Benchmark December 31, 2019		
Sector	Benchmark TSX Composite Index %	Over (Under) Benchmark %
Communication services	5.5	(0.5)
Consumer discretionary	4.1	(0.0)
Consumer staples	3.9	0.1
Energy	17.0	(0.5)
Financials	32.1	(0.5)
Health Care	1.3	(0.1)
Industrials	11.0	(1.2)
Information technology	5.7	0.2
Materials	11.4	(0.1)
Real estate	3.5	0.1
Utilities	4.8	0.4

* totals may not add to 100% due to rounding

*100

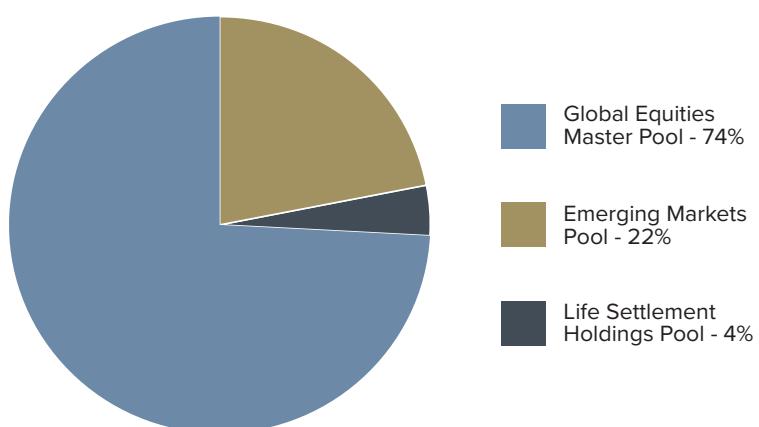


Foreign Public Equities

At December 31, 2019, foreign equities comprised 38.0% of total MEPP investments (or \$2,139 million), compared to 33.8% or \$1,711 million at the end of the previous year. MEPP's investment in foreign public equities includes investments in AIMCo's Global Equity Master Pool, the Emerging Markets Equity Pool and the Life Settlement Holdings (LSH) Pool.

In 2019, foreign public equities gained 18.7%, 0.8% worse than the benchmark gain of 19.5% based on the MSCI All World Country Index.

Summary of Foreign Equities by Pool Total \$1,711 million



Global Equities

Global equities include the Global Equities Master Pool and the LSH Pool. The Global Equity Master Pool invests in GLAS, providing exposure to a diverse market which intends on providing a higher rate of return than what could be earned investing solely in traditional global markets. The pool replicates exposure to global equity markets by investing in structured equity products using index swaps and futures contracts. The LSH Pool invests in discounted life insurance policies.

Global Equities Master Pool Industry Exposure Relative to Benchmark December 31, 2019		
Sector	Benchmark MSCI World Total Return Index %	Over (Under) Benchmark %
Communication Services	8.4	1.0
Consumer Discretionary	10.3	(0.0)
Consumer Staples	8.3	0.1
Energy	4.9	(0.4)
Financials	15.7	(0.5)
Health Care	13.0	(0.1)
Industrials	11.0	(1.1)
Information Technology	17.4	0.2
Materials	4.4	(0.1)
Real Estate	3.2	0.1
Utilities	3.4	0.3
		*100

* totals may not add to 100% due to rounding



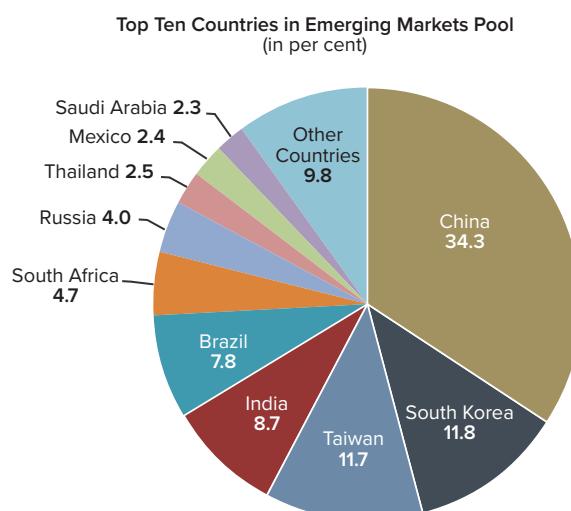
Global Equities Master Pool Regional Exposure Relative to Benchmark December 31, 2019		
Sector	Benchmark MSCI World Total Return Index %	Over (Under) Benchmark %
United States	63.3	0.0
Europe, Australasia & the Far East	33.3	(0.9)
Canada	3.4	0.0
Emerging Markets	0.0	0.7
		*100

* totals may not add to 100% due to rounding



Emerging Markets

MEPP's investment in AIMCo's Emerging Markets Pool makes up approximately 21.8% of the Plan's foreign equity investment. The Pool holds an investment in GLAS with the non-emerging market exposure being swapped out to the MSCI Emerging Markets Index. The Pool provides exposures to China, Brazil, South Korea, Taiwan, Russia, India and other countries. In 2019, the emerging markets portfolio gained 10.5%.



Private Equities

The Plan's investment in AIMCo's private equity pools comprised 3.5% (or \$200 million) of the total investment portfolio at December 31, 2019, compared to 4.1% (or \$206 million) the previous year. AIMCo's private equity pools include primarily merchant banking investments. Merchant banking transactions include expansion capital, acquisition financing, management buyouts, family succession, turnaround financings, project financings and leverage reductions.

In 2019, private equities lost 3.4% which was 11.6% worse than the market-based benchmark gain of 8.2%.

Inflation Sensitive

At December 31, 2019, the Plan's inflation sensitive portfolio comprised 29.8% (or \$1,677 million) of total investments up from 29.1% (or \$1,473 million) at the end of the previous year. The inflation sensitive portfolio consists of real estate, infrastructure, timberland and real returns bonds.

Real Estate

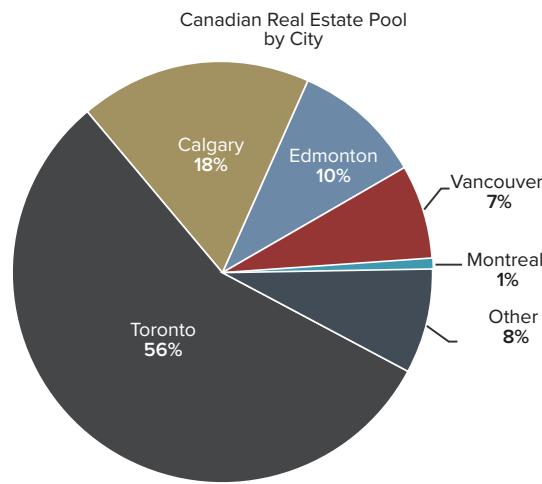
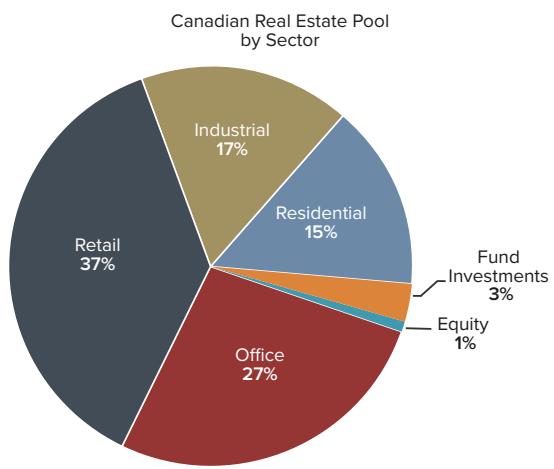
At December 31, 2019, the Plan's investment in AIMCo's Canadian and foreign private real estate pools comprised 13.1% (or \$735 million) of total investments, compared to 13.5% (or \$683 million) the previous year. The Canadian Private Real Estate Pool makes up 66% of the Plan's total real estate portfolio with the Foreign Private Real Estate Pool making up 34%.

The actual gain from the combined real estate portfolio in 2019 was 3.6%, 0.8% lower than the benchmark gain of 4.4%.



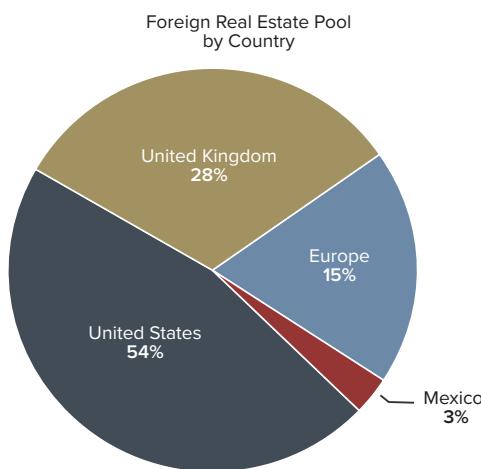
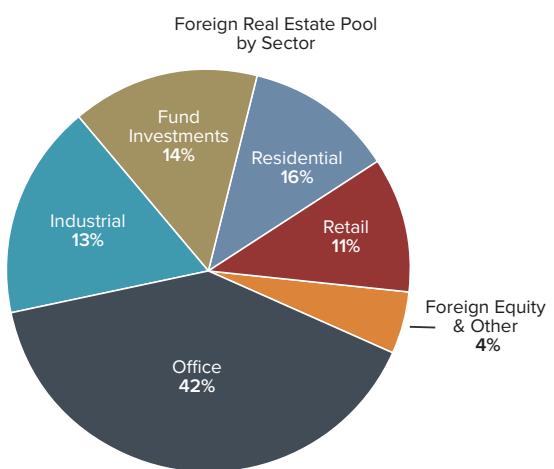
Canadian Real Estate

Investments in the Canadian Private Real Estate Pool are primarily in a mix of office, retail, industrial and residential properties in major Canadian urban areas including the greater Toronto area (GTA), Calgary, Edmonton, Vancouver, Ottawa and Montreal. The focus is on quality, featuring strong locations and tenants.



Foreign Real Estate

Investments in the Foreign Private Real Estate Pool are primarily a mix of office, retail, industrial and residential properties in developed global centres in Europe and North America.



Infrastructure

The Plan's investment in infrastructure comprises 11.4% (or \$642 million) of the total investment portfolio at December 31, 2019, up from 8.8% (or \$443 million) the previous year. AIMCo's infrastructure pools include projects that provide attractive returns plus inflation sensitivity with a long investment horizon. Infrastructure projects include transportation/logistics (e.g. toll roads, airports, ports and rail), power energy (e.g. contracted power generation and power transmission pipelines) and utilities (e.g. water, waste water and natural gas networks).

In 2019, infrastructure investments gained 10.3%, 4.1% greater than the benchmark gain of 6.2%.

Real Return Bonds

The Plan's investment in AIMCo's Real Return Bond Pool comprised 4.7% (or \$265 million) of the total investment portfolio at December 31, 2019, down from 6.6% (or \$334 million) the previous year. The Real Return Bond Pool includes bonds which pay a rate of return adjusted for inflation. The Pool is comprised of federal and provincial government bonds (95%) and corporate bonds (5%).

In 2019, real return bonds gained 8.3%, which was 0.3% better than the benchmark gain of 8.0%.

Timberland

During the previous year, MEPP began investing in timberland products. AIMCo's Timberlands 2 Pool focuses on investing in private timberland, long-term timber leases or harvesting rights and investment opportunities related to forestry, rural land and agriculture on a global basis. At December 31, 2019, the Pool held investments in Canada, Australia and the U.S, and earned a return of 8.0%, 1.8% better than the benchmark return of 6.2%.

Strategic Opportunities, Tactical Allocations and Currency Hedges

At December 31, 2019, the Plan's investment in AIMCo's Strategic Opportunities Pool comprised 0.6% of total investments, or \$36 million. The Pool consists of investments in infrastructure and hydropower in emerging market countries in Brazil and Colombia. In 2019, the Pool gained 20.3% (2018: loss of 2.2%).

At December 31, 2019, the Plan's investment in AIMCo's Tactical Asset Allocation Pool accounted for less than 0.1% of total investments or \$1.0 million. The Pool seeks to add value through various tilts and strategies and is used to adjust the asset mix without impacting the investment in different asset classes. The Pool holds derivative contracts including global equity index swaps and futures contracts, credit default, bond index and interest rate swaps and foreign exchange contracts. In 2019, the Pool posted a loss of 60.9% (2018: gain of 60.6%).

Proxy Voting

The Board considers proxy voting to be a key element of responsible investing and believes that thoughtful voting is a contributor to optimizing the long term value of investments. The proxy voting function is entrusted to AIMCo. Day-to-day research and mechanical functions have been outsourced to an independent advisor who specializes in providing proxy-related services to institutional investors. While AIMCo may review and utilize the recommendations of the research provider in making proxy voting decisions, they are in no way obligated to follow such recommendations.

Risk Management System

The Board accepts that in order to meet the return objectives of the Plan, it must take on risk in the assets in which it invests. The Board establishes the MEPP IP, setting a diverse asset mix to help improve the likelihood of achieving its desired results for a given level of risk.

Investment risk management is a central thesis for the investment manager, AIMCo. AIMCo seeks to measure and monitor both historic and possible future risks, allocating risk as a scarce resource to the most promising investment opportunities. AIMCo maintains a quantitative investment risk system designed to operate across all asset classes and a variety of risk types such as market risk, currency risk, and concentration risk.

The Board has established a series of limits on the risks to the Plan's funded status within its IP, which will be measured, monitored, and managed on this basis. As the ultimate risk to a pension plan is not being able to meet pension obligations, the Board monitors the risk of the Plan's liabilities in relation to the investment assets. AIMCo models the risk of both assets and theoretical liabilities and reports to the Board on a quarterly basis.



Appendix: Financial Statements

**The MEPP Financial Statements are prepared by the
Ministry of Treasury Board and Finance**

Management Employees Pension Plan

Financial Statements

Year Ended December 31, 2019

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Independent Auditor's Report

To the President of Treasury Board, Minister of Finance

Report on the Financial Statements

Opinion

I have audited the financial statements of the Management Employees Pension Plan, which comprise the statement of financial position as at December 31, 2019, and the statements of changes in net assets available for benefits and changes in pension obligation for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Management Employees Pension Plan as at December 31, 2019, and the changes in net assets available for benefits and changes in its pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for opinion

I conducted my audit in accordance with Canadian generally accepted auditing standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Management Employees Pension Plan, in accordance with the ethical requirements that are relevant to my audit of the financial statements in Canada, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Other information

Management is responsible for the other information. The other information comprises the information included in the Annual Report, but does not include the financial statements and my auditor's report thereon. The Annual Report is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

When I read the Annual Report, if I conclude that there is a material misstatement therein, I am required to communicate the matter to those charged with governance.

Responsibilities of management and those charged with governance for the financial statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with Canadian accounting standards for pension plans, and for such internal control as management determines is necessary to enable the preparation of the financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is responsible for assessing the Management Employees Pension Plan's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless an intention exists to liquidate or to cease operations, or there is no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Management Employees Pension Plan's financial reporting process.

Auditor's responsibilities for the audit of the financial statements

My objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes my opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

As part of an audit in accordance with Canadian generally accepted auditing standards, I exercise professional judgment and maintain professional skepticism throughout the audit. I also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Management Employees Pension Plan's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Management Employees Pension Plan's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Management Employees Pension Plan to cease to continue as a going concern.

- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

I communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that I identify during my audit.

[Original signed by W. Doug Wylie FCPA, FCMA, ICD.D]
Auditor General

June 1, 2020
Edmonton, Alberta

Statement of Financial Position

As at December 31, 2019

	(\$ thousands)	
	2019	2018
Net assets available for benefits		
Assets		
Investments (Note 3)	\$ 5,628,777	\$ 5,057,027
Contributions receivable		
Employers	3,705	3,837
Employees	2,678	2,784
Accounts receivable	1,837	1,691
Total Assets	<u>5,636,997</u>	<u>5,065,339</u>
Liabilities		
Accounts payable	1,429	4,007
Total Liabilities	<u>1,429</u>	<u>4,007</u>
Net assets available for benefits	<u><u>\$ 5,635,568</u></u>	<u><u>\$ 5,061,332</u></u>
Pension obligation and surplus		
Pension obligation (Note 5)	\$ 4,627,433	\$ 4,390,632
Surplus (Note 6)	1,008,135	670,700
Pension obligation and surplus	<u><u>\$ 5,635,568</u></u>	<u><u>\$ 5,061,332</u></u>

The accompanying notes are part of these financial statements.

Statement of Changes in Net Assets Available for Benefits

Year ended December 31, 2019

	(\$ thousands)	
	2019	2018
Increase in Assets		
Contributions (Note 7)	\$ 190,539	\$ 189,965
Investment income (Note 8)	673,623	89,985
Transfers from other plans, net	3,131	10,896
	867,293	290,846
Decrease in Assets		
Benefit payments (Note 10)	249,486	232,444
Investment expenses (Note 11)	41,060	33,128
Administrative expenses (Note 12)	2,511	2,537
	293,057	268,109
Increase in net assets		
Net assets available for benefits at beginning of year	574,236	22,737
Net assets available for benefits at end of year	5,061,332	5,038,595
	\$ 5,635,568	\$ 5,061,332

The accompanying notes are part of these financial statements.

Statement of Changes in Pension Obligation

Year ended December 31, 2019

	(\$ thousands)	
	2019	2018
Increase in pension obligation		
Interest accrued on opening pension obligation	\$ 264,316	\$ 257,772
Benefits earned	135,584	126,571
Net increase due to actuarial assumption changes (Note 5a)	87,275	154,675
	487,175	539,018
Decrease in pension obligation		
Benefits, transfers and interest	246,355	221,548
Net experience gains (Note 5b)	4,019	99,427
	250,374	320,975
Net increase in pension obligation	236,801	218,043
Pension obligation at beginning of year	4,390,632	4,172,589
Pension obligation at end of year (Note 5)	\$ 4,627,433	\$ 4,390,632

The accompanying notes are part of these financial statements.

Notes to the Financial Statements

Year ended December 31, 2019
(All dollar amounts in thousands, except per member data)

NOTE 1 SUMMARY DESCRIPTION OF THE PLAN

The following description of the Management Employees Pension Plan (the Plan) is a summary only. For a complete description of the Plan, reference should be made to the *Public Sector Pension Plans Act*, Revised Statutes of Alberta 2000, Chapter P-41 and the *Management Employees Pension Plan Alberta Regulation 367/93*, as amended. Unless otherwise stated, all terms that are not defined below have the meaning prescribed to them in the Plan. Should anything in Note 1 or the financial statements conflict with the legislation, the legislation shall apply.

a) GENERAL

The Plan is a contributory defined benefit pension plan for eligible management employees of the Province of Alberta and certain approved provincial agencies and public bodies. Members of the former Public Service Management Pension Plan who were active contributors at August 1, 1992, and have not withdrawn from the Plan since that date, continue as members of this Plan. The Plan is a registered pension plan as defined in the *Income Tax Act*. The Plan's registration number is 0570887. The President of Treasury Board and Minister of Finance is the legal trustee for the Plan and Alberta Treasury Board and Finance is management for the purpose of these financial statements. The Plan is governed by the Management Employees Pension Board (the Board). The Board has certain statutory functions with respect to the Plan, including but not limited to, setting general policy guidelines on investment and management of the Plan's assets and administration of the Plan, setting contribution rates, conducting actuarial valuations and recommending amendments to the Plan rules.

b) PLAN FUNDING

Current service costs and any actuarial deficiency (see Note 14) are funded by employees and employers at contribution rates, which together with investment earnings, are expected to provide for all benefits payable under the Plan. The contribution rates in effect at December 31, 2019 were 12.80% (2018: 12.80%) of the capped salary for employees and 17.20% (2018: 17.20%) for employers. The capped salary is set to ensure the benefit accrual is not greater than the defined benefit limit under the *Income Tax Act*.

The contribution rates are reviewed and approved at least once every three years by the President of Treasury Board and Minister of Finance, in consultation with the Board, based on recommendations of the Plan's actuary. As a result of this review, the contribution rate for employers will be reduced from 17.20% to 13.20% effective January 1, 2020 and the employee rate will remain the same at 12.80%.

c) RETIREMENT BENEFITS

The Plan provides a pension of 2.0% for each year of pensionable service based on the average of the highest five consecutive years of pensionable salary. Pensionable earnings after December 31, 1991 are capped to ensure the benefit accrual is not greater than the defined benefit limit under the *Income Tax Act*. The maximum combined pensionable service allowable under the Plan is 35 years.

Vested members are entitled to an unreduced pension on service before 1992 if they have attained age 55 and have at least five years of combined pensionable service.

Vested members are entitled to an unreduced pension on service after 1991 if they have either attained age 60, or age 55 and the sum of their age and years of combined pensionable service equals 80. Pensions on service after 1991 are reduced if the member is under age 60 and the 80 factor is not attained.

d) DISABILITY PENSIONS

Unreduced pensions may be payable to members who become totally disabled and retire early with at least five years of combined pensionable service. Reduced pensions may be payable to members who become partially disabled and retire early with at least five years of combined pensionable service.

Individuals who became members after June 30, 2007 and had no combined pensionable service prior to July 1, 2007 are not entitled to disability pensions.

e) DEATH BENEFITS

Death benefits are payable on the death of a member. If the member has at least five years of combined pensionable service and a surviving pension partner, the surviving pension partner may choose to receive either a survivor pension, or a lump sum payment. For a beneficiary other than a pension partner, or where combined pensionable service is less than five years, the benefits take the form of a lump sum payment.

f) TERMINATION BENEFITS AND REFUNDS TO MEMBERS

Members who terminate with at least five years of combined pensionable service and who are not immediately entitled to a pension may receive a refund of their contributions and interest on service prior to 1992 and the commuted value of their pension for service after 1991, with the commuted value being subject to locking-in provisions. Any service purchased by the member on an elective basis that was wholly funded by the member is not included in the commuted value and is instead refunded as contributions with interest. If the remaining member contributions fund more than 50% of the benefit earned after 1991, that excess is refunded to the member.

Members who terminate with fewer than five years of combined pensionable service receive a refund of their contributions plus interest. The refunds are accounted for as benefit payments on the statement of changes in net assets available for benefits.

g) PURCHASED SERVICE AND TRANSFERS

All elective service purchases are to be cost-neutral to the Plan. The actuarial present value of pension entitlements is paid when service is transferred out of the Plan under a transfer agreement. The cost to recognize service transferred into the Plan under a transfer agreement is the actuarial present value of the benefits that will be created as a result of the transfer.

h) COST-OF-LIVING ADJUSTMENTS

Pensions payable are increased each year on January 1st by an amount equal to 60% of the increase in the Alberta Consumer Price Index. The increase is based on the increase during the twelve-month period ending on October 31st in the previous year. The increase is prorated for pensions that became payable within the year.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES AND REPORTING PRACTICES**a) BASIS OF PRESENTATION**

These financial statements are prepared on the going concern basis in accordance with Canadian accounting standards for pension plans. The Plan has elected to apply International Financial Reporting Standards (IFRS) for accounting policies that do not relate to its investment portfolio or pension obligation. The statements provide information about the net assets available in the Plan to meet future benefit payments and are prepared to assist Plan members and others in reviewing the activities of the Plan for the year.

b) VALUATION OF INVESTMENTS

Investments are recorded at fair value. As disclosed in Note 3, the Plan's investments consist primarily of direct ownership in units of pooled investment funds ("the pools"). The pools are established by Ministerial Order 16/2014, being the Establishment and Maintenance of Pooled Funds, pursuant to the *Financial Administration Act* of Alberta, Chapter F-12, Section 45, and the *Alberta Investment Management Corporation Act* of Alberta, Chapter A-26.5, Section 15 and 20. Participants in pools include government and non-government funds and plans.

Contracts to buy and sell financial instruments in the pools are between the Province of Alberta and the third party to the contracts. Participants in the pools are not party to the contracts and have no control over the management of the pool and the selection of securities in the pool. Alberta Investment Management Corporation (AIMCo), a Crown corporation within the Ministry of Treasury Board and Finance, controls the creation of the pools and the management and administration of the pools including security selection. Accordingly, the Plan does not report the financial instruments of the pools on its statement of financial position.

The Plan becomes exposed to the financial risks and rewards associated with the underlying financial instruments in a pool when it purchases units issued by the pools and loses its exposure to those financial risks and rewards when it sells its units. The Plan reports its share of the financial risks in Note 4.

The fair value of units held by the Plan is derived from the fair value of the underlying financial instruments held by the pools as determined by AIMCo (see Note 3b). Investments in units are recorded in the Plan's accounts. The underlying financial instruments are recorded in the accounts of the pools. The pools have a market-based unit value that is used to distribute income to the pool participants and to value purchases and sales of the pool units. The pools include various financial instruments such as bonds, equities, real estate, derivatives, investment receivables and payables and cash.

The Plan's cut-off policy for valuation of investments, investment income and investment performance is based on valuations confirmed by AIMCo on the fourth business day following the year end. Differences in valuation estimates provided to Alberta Treasury Board and Finance after the year end cut-off date are reviewed by management. Differences considered immaterial by management are included in investment income in the following period.

Investments in pool units are recorded in the Plan's accounts on a trade date basis.

All purchases and sales of the pool units are in Canadian dollars.

Fair value is the amount of consideration agreed upon in an arm's length transaction between knowledgeable, willing parties who are under no compulsion to act.

c) INVESTMENT INCOME

- (a) Investment income is recorded on an accrual basis.
- (b) Investment income is reported in the statement of changes in net assets available for benefits and in Note 8 and includes the following items recorded in the Plan's accounts:
 - i. Income distributions from the pools, based on the Plan's pro-rata share of total units issued by the pools; and
 - ii. Changes in fair value of units including realized gains and losses on disposal of units and unrealized gains and losses on units determined on an average cost basis.

d) INVESTMENT EXPENSES

Investment expenses include all amounts incurred by the Plan to earn investment income, (see Note 11). Investment expenses are recorded on an accrual basis. Transaction costs are expensed as they are incurred.

e) VALUATION OF PENSION OBLIGATION

The value of the pension obligation and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries. The valuation is made at least every three years and results from the most recent valuation are extrapolated, on an annual basis, to year-end. The valuation uses the projected benefit method pro-rated on service and management's best estimate, as at the measurement date, of various economic and non-economic assumptions.

f) MEASUREMENT UNCERTAINTY

In preparing these financial statements, estimates and assumptions are used in circumstances where the actual values are unknown. Uncertainty in the determination of the amount at which an item is recognized in the financial statements is known as measurement uncertainty. Such uncertainty exists when there is a variance between the recognized amount and another reasonably possible amount, as there is whenever estimates are used.

Measurement uncertainty exists in the valuation of the Plan's pension obligation, private investments, hedge funds and real estate investments. Uncertainty arises because:

- i) the Plan's actual experience may differ, perhaps significantly, from assumptions used in the extrapolation of the Plan's pension obligation, and
- ii) the estimated fair values of the Plan's private investments, hedge funds and real estate investments may differ significantly from the values that would have been used had a ready market existed for these investments.

While best estimates have been used in the valuation of the Plan's pension obligation, private investments, hedge funds and real estate investments, management considers that it is possible, based on existing knowledge, that changes in future conditions in the short term could require a material change in the recognized amounts.

Differences between actual results and expectations in the Plan's pension obligation are disclosed as assumptions or other changes and net experience gains or losses in the statement of changes in pension obligation in the year when actual results are known.

Differences between the estimated fair values and the amount ultimately realized for investments are included in net investment income in the year when the ultimate realizable values are known.

g) INCOME TAXES

The Plan is a registered pension plan, as defined by the *Income Tax Act* (Canada) and, accordingly, is not subject to income taxes.

The Plan's investments are managed at the asset class level for purposes of evaluating the Plan's risk exposure and investment performance against approved benchmarks based on fair value. AIMCo invests the Plan's assets in accordance with the MEPP Investment Policy (IP) approved by the Plan's board. The fair value of the pool units is based on the Plan's share of the net asset value of the pooled fund. The pools have a market based unit value that is used to allocate income to participants of the pool and to value purchases and sales of pool units. AIMCo is delegated authority to independently purchase and sell securities in the pools and Plan, and units of the pools, within the ranges approved for each asset class (see Note 4).

Asset class	(\$ thousands)			
	Fair Value Hierarchy ^(a)		2019	2018
	Level 2	Level 3	Fair Value	Fair Value
Money market and fixed income				
Deposits and short-term securities	\$ 33,115	\$ -	\$ 33,115	\$ 30,060
Bonds, mortgages and private debt	402,033	290,654	692,687	968,215
	435,148	290,654	725,802	998,275
Equities				
Canadian	850,386	-	850,386	625,929
Foreign	2,052,869	86,545	2,139,414	1,710,732
Private	4	199,559	199,563	205,786
	2,903,259	286,104	3,189,363	2,542,447
Inflation sensitive				
Real estate	-	734,665	734,665	682,800
Infrastructure	-	641,851	641,851	443,408
Timberland	-	35,092	35,092	12,032
Real return bonds	265,157	-	265,157	334,326
	265,157	1,411,608	1,676,765	1,472,566
Strategic, tactical and currency investments *				
	1,183	35,664	36,847	43,739
Total investments	\$ 3,604,747	\$ 2,024,030	\$ 5,628,777	\$ 5,057,027

* This asset class is not listed separately in the IP as it relates to strategic investments and currency overlays made on an opportunistic and discretionary basis (see Note 4).

a) **Fair Value Hierarchy:** The quality and reliability of information used to estimate the fair value of investments is classified according to the following fair value hierarchy with level 1 being the highest quality and reliability.

- **Level 1** - fair value is based on quoted prices in an active market. Although the pools may ultimately hold publicly traded listed equity investments, the pool units themselves are not listed in an active market and therefore cannot be classified as Level 1 for fair value hierarchy purposes. Pool units classified by the Plan as Level 2 may contain investments that might otherwise be classified as Level 1.

- **Level 2** - fair value is estimated using valuation techniques that make use of market-observable inputs other than quoted market prices. This level includes pool units that hold public equities, debt securities and derivative contracts totaling \$3,604,747 (2018: \$3,229,720).
- **Level 3** - fair value is estimated using inputs based on non-observable market data. This level includes pool units that hold private mortgages, hedge funds, private equities and inflation sensitive investments totaling \$2,024,030 (2018: \$1,827,307).

Reconciliation of Level 3 Fair Value Measurement

	(\$ thousands)	
	2019	2018
Balance, beginning of year	\$ 1,827,307	\$ 1,314,165
Investment income *	139,611	148,920
Purchases of Level 3 pooled fund units	395,873	525,399
Sale of Level 3 pooled fund units	(338,761)	(161,172)
Level 3 transfers out	-	(5)
Balance, end of year	\$ 2,024,030	\$ 1,827,307

* Investment income includes unrealized losses of \$(2,463) (2018: \$106,080 gain).

b) Valuation of Financial Instruments recorded by AIMCo in the Pools

The methods used to determine the fair value of investments recorded in the pools are explained in the following paragraphs:

- **Money market and fixed income:** Public interest-bearing securities are valued at the year-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company. Private mortgages are valued based on the net present value of future cash flows. Cash flows are discounted using appropriate interest rate premiums over similar Government of Canada benchmark bonds trading in the market. Private debt and loans is valued similar to private mortgages.
- **Equities:** Public equities are valued at the year-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company. The fair value of hedge fund investments is estimated by external managers. The fair value of private equities is estimated by managers or general partners of private equity funds, pools and limited partnerships. Valuation methods may encompass a broad range of approaches. The cost approach is used to value companies without either profits or cash flows. Established private companies are valued using the fair market value approach reflecting conventional valuation methods including discounted cash flows and earnings multiple analysis.
- **Inflation sensitive:** The estimated fair value of private real estate investments is reported at the most recent appraised value, net of any liabilities against the real property. Real estate properties are appraised annually by qualified external real estate appraisers. Appraisers use a combination of methods to determine fair value including replacement cost, direct comparison, direct capitalization of earnings and discounted cash flows. Infrastructure investments are valued similar to private equity investments. Real return bonds are valued similar to public interest bearing securities.

- **Strategic, tactical and currency investments:** The estimated fair value of infrastructure investments held in emerging market countries are valued similar to private equities. For tactical asset allocations, investments in derivative contracts provides overweight or underweight exposure to global equity and bond markets, including emerging markets. Currency investments consist of directly held currency forward and spot contracts.
- **Foreign currency:** Foreign currency transactions in pools are translated into Canadian dollars using average rates of exchange. At year end, the fair value of investments in other assets and liabilities denominated in a foreign currency are translated at the year-end exchange rates.
- **Derivative contracts:** The carrying value of derivative contracts in a favourable and unfavourable position is recorded at fair value and is included in the fair value of pooled investment funds (see Note 4f). The estimated fair value of equity and bond index swaps is based on changes in the appropriate market-based index net of accrued floating rate interest. Interest rate swaps and cross-currency interest rate swaps are valued based on discounted cash flows using current market yields and exchange rates. Credit default swaps are valued based on discounted cash flows using current market yields and calculated default probabilities. Forward foreign exchange contracts and futures contracts are valued based on quoted market prices. Options to enter into interest rate swap contracts are valued based on discounted cash flows using current market yields and volatility parameters which measure changes in the underlying swap. Warrants and rights are valued at the year-end closing sale price or the average of the latest bid and ask prices quoted by an independent securities valuation company.

The Plan is exposed to financial risks associated with the underlying securities held in the pools created and managed by AIMCo. These financial risks include credit risk, market risk and liquidity risk. Credit risk relates to the possibility that a loss may occur from the failure of another party to perform according to the terms of a contract. Market risk is comprised of currency risk, interest rate risk and price risk. Liquidity risk is the risk the Plan will not be able to meet its obligations as they fall due.

The investment policies and procedures of the Plan are clearly outlined in the IP approved by the Board. The purpose of the IP is to ensure the Plan is invested and managed in a prudent manner in accordance with current, accepted governance practices incorporating an appropriate level of risk. The Board manages the Plan's return-risk trade-off through asset class diversification, target ranges on each asset class, diversification within each asset class, quality constraints on fixed income instruments and restrictions on amounts exposed to countries designated as emerging markets. Forward foreign exchange contracts may be used to manage currency exposure in connection with securities purchased in a foreign currency (see Note 4b).

Actuarial liabilities of the Plan are primarily affected by the long-term real rate of return expected to be earned on investments. In order to earn the best possible return at an acceptable level of risk, the Board has established the following asset mix policy ranges:

Asset Class	Target Asset Policy Mix	Actual Asset Mix			
		2019		2018	
		(\$ thousands)	%	(\$ thousands)	%
Money market and fixed income	10 - 30%	\$ 725,802	12.9	\$ 998,275	19.7
Equities	40 - 62%	3,189,363	56.7	2,542,447	50.3
Inflation sensitive	20 - 45%	1,676,765	29.8	1,472,566	29.1
Strategic, tactical and currency investments	(a)	36,847	0.6	43,739	0.9
		\$ 5,628,777	100.0	\$ 5,057,027	100.0

(a) In accordance with the IP, AIMCo may invest up to 2% of the fair value of the Plan's investments in strategic opportunities that are outside of the asset classes listed above. AIMCo may, at its discretion, invest the funds in currency overlays.

a) Credit Risk

i) Debt securities

The Plan is indirectly exposed to credit risk associated with the underlying debt securities held in the pools managed by AIMCo. Counterparty credit risk is the risk of loss arising from the failure of a counterparty to fully honour its financial obligations. The credit quality of financial assets is generally assessed by reference to external credit ratings. The credit rating of a debt security may be impacted by the overall credit rating of the counterparty, the seniority of the debt issue, bond covenants, maturity distribution and other factors. Credit risk can also lead to losses when issuers and debtors are downgraded by credit rating agencies usually leading to a fall in the fair value of the counterparty's obligations. Credit risk exposure for financial instruments is measured by the positive fair value of the contractual obligations with counterparties. The fair value of all investments reported in Note 3 is directly or indirectly impacted by credit risk to some degree. The majority of investments in debt securities have credit ratings considered to be investment grade. Unrated debt securities consist primarily of mortgages and private debt placements.

The following table summarizes the Plan's investment in debt securities by credit rating at December 31, 2019:

Credit rating	2019	2018
Investment Grade (AAA to BBB-)	72.5%	77.3%
Speculative Grade (BB+ or lower)	0.6%	0.3%
Unrated	26.9%	22.4%
	100.0%	100.0%

ii) Counterparty default risk - derivative contracts

The Plan is exposed to counterparty credit risk associated with the derivative contracts held in the pools. The maximum credit risk in respect of derivative financial instruments is the fair value of all contracts with counterparties in a favourable position (see Note 4f). AIMCo is responsible for selecting and monitoring derivative counterparties on behalf of the Plan. AIMCo monitors counterparty risk exposures and actively seeks to mitigate counterparty risk by requiring that counterparties collateralize mark-to-market gains for the Plan. Provisions are in place to allow for termination of the contract should there be a material downgrade in a counterparty's credit rating. The exposure to credit risk on derivatives is reduced by entering into master netting agreements and collateral agreements with counterparties. To the extent that any unfavourable contracts with the counterparty are not

settled, they reduce the Plan's net exposure in respect of favourable contracts with the same counterparty.

iii) Security lending risk

To generate additional income, the pools participate in a securities-lending program. Under this program, the custodian may lend investments held in the pools to eligible third parties for short periods. At December 31, 2019, the Plan's share of securities loaned under this program is \$229,391 (2018: \$278,167) and collateral held totals \$246,072 (2018: \$296,511). Securities borrowers are required to provide the collateral to assure the performance of redelivery obligations. Collateral may take the form of cash, other investments or a bank-issued letter of credit. All collateralization, by the borrower, must be in excess of 100% of investments loaned.

b) Foreign Currency Risk

The Plan is exposed to foreign currency risk associated with the underlying securities held in the pools that are denominated in currencies other than the Canadian dollar.

Foreign currency risk is the risk that the fair value or future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The fair values of investments denominated in foreign currencies are translated into Canadian dollars using the reporting date exchange rate. As a result, fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or negative effect on the fair value of investments. Approximately 42% (2018: 38%) of the Plan's investments, or \$2,381,772 (2018: \$1,912,672), are denominated in currencies other than the Canadian dollar, with the largest foreign currency exposure being to the US dollar, 19% (2018: 19%) and the Euro, 5% (2018: 4%).

If the value of the Canadian dollar increased by 10% against all other currencies, and all other variables are held constant, the potential loss to the Plan would be approximately 4.2% of total investments (2018: 3.8%).

The following table summarizes the Plan's exposure to foreign currency investments held in the pools at December 31, 2019:

Currency ^(a)	(\$ thousands)			
	2019	2018	2019	2018
	Fair Value	Sensitivity	Fair Value	Sensitivity
U.S. dollar	\$1,085,107	\$ (108,511)	\$ 985,615	\$ (98,561)
Euro	276,053	(27,605)	214,698	(21,470)
British pound	175,065	(17,507)	161,387	(16,139)
Japanese yen	147,540	(14,754)	128,972	(12,897)
Hong Kong dollar	102,491	(10,249)	74,780	(7,478)
Chinese yuan	86,782	(8,678)	7,363	(736)
Brazilian real	66,561	(6,656)	42,386	(4,239)
Other foreign currency	442,173	(44,217)	297,471	(29,747)
Total foreign currency investments	\$2,381,772	\$ (238,177)	\$1,912,672	\$ (191,267)

(a) Information on specific currencies is disclosed when the current year fair value is greater than 1% of the Plan's net assets.

c) Interest Rate Risk

The Plan is exposed to interest rate risk associated with the underlying interest-bearing securities held in the pools managed by AIMCo. Interest rate risk relates to the possibility that the investments will change in value due to future fluctuations in market interest rates. In general, investment returns from bonds and mortgages are sensitive to changes in the level of interest rates, with longer term interest-bearing securities being more sensitive to interest rate changes than shorter-term bonds. If interest rates increased by 1%, and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 1.3% of total investments (2018: 1.9%).

d) Price Risk

Price risk relates to the possibility that pools units will change in value due to future fluctuations in market prices of equities held in the pools caused by factors specific to an individual equity investment or other factors affecting all equities traded in the market. The Plan is exposed to price risk associated with the underlying equity investments held in pools managed by AIMCo. If equity market indices (S&P/TSX, S&P500, S&P1500 and MSCI ACWI and their sectors) declined by 10%, and all other variables are held constant, the potential loss in fair value to the Plan would be approximately 6.9% of total investments (2018: 6.4%).

e) Liquidity Risk

Liquidity risk is the risk that the Plan will encounter difficulty in meeting obligations associated with its financial liabilities. Liquidity requirements of the Plan are met through income generated from investments, employee and employer contributions, and by investing in pools that hold publicly traded liquid assets traded in an active market that are easily sold and converted to cash. Units in pools that hold private investments like real estate, timberland, infrastructure and private equities are less easily converted to cash since the underlying securities are illiquid because they take more time to sell. These sources of cash are used to pay pension benefits and operating expenses, purchase new investments, settle derivative transactions with counterparties and margin calls on futures contracts. The Plan's future liabilities include the accrued pension benefits obligation and exposure to net payables to counterparties (Note 4f).

f) Use of Derivative Financial Instruments in Pooled Investment Funds

The Plan has indirect exposure to derivative financial instruments through its investment in units of the pools. AIMCo uses derivative financial instruments to cost effectively gain access to equity markets in the pools, manage asset exposure within the pools, enhance pool returns and manage interest rate risk, foreign currency risk and credit risk in the pools.

By counterparty	Number of counterparties	Plan's Indirect Share (\$ thousands)	
		2019	2018
Contracts in net favourable position (current credit exposure)	97	\$ 260,709	\$ 145,270
Contracts in net unfavourable position	9	(225,507)	(217,252)
Net fair value of derivative contracts	106	\$ 35,202	\$ (71,982)

NOTE 4**INVESTMENT RISK MANAGEMENT****CONTINUED**

- (i) Current credit exposure: The current credit exposure is limited to the amount of loss that would occur if all counterparties to contracts in a net favourable position totaling \$260,709 (2018: \$145,270) were to default at once.
- (ii) Cash settlements: Receivables or payables with counterparties are usually settled in cash every three months.
- (iii) Contract notional amounts: The fair value of receivables (receive leg) and payables (pay leg) and the exchange of cash flows with counterparties in pooled funds are based on a rate or price applied to a notional amount specified in the derivative contract. The notional amount itself is not invested, received or exchanged with the counterparty and is not indicative of the credit risk associated with the contract. Notional amounts are not assets or liabilities and do not change the asset mix reported in Note 3. Accordingly, there is no accounting policy for their recognition in the statement of financial position.

Types of derivatives used in pools	Plan's Indirect Share (\$ thousands)	
	2019	2018
Structured equity replication derivatives	\$ 20,841	\$ (39,050)
Foreign currency derivatives	15,594	(32,787)
Interest rate derivatives	(2,581)	(630)
Credit risk derivatives	1,348	485
Net fair value of derivative contracts	\$ 35,202	\$ (71,982)

- (i) Equity derivatives are structured to receive income from counterparties based on the performance of a specified market-based equity index, security or basket of equity securities applied to a notional amount in exchange for floating rate interest paid to the counterparty. Floating rate notes are held in equity pools to provide floating rate interest to support the pay leg of the equity derivatives. Rights, warrants, futures and options are also included as structured equity replication derivatives.
- (ii) Foreign currency derivatives include contractual agreements to exchange specified currencies at an agreed upon exchange rate and on an agreed settlement date in the future.
- (iii) Interest rate derivatives exchange interest rate cash flows (fixed to floating or floating to fixed) based on a notional amount. Interest rate derivatives primarily include interest rate swaps and cross currency interest rate swaps, futures contracts and options.
- (iv) Credit risk derivatives include credit default swaps allowing the pools to buy and sell protection on credit risk inherent in a bond. A premium is paid or received, based on a notional amount in exchange for a contingent payment should a defined credit event occur with respect to the underlying security.
- (v) At December 31, 2019, deposits in futures contracts margin accounts totaled \$7,877 (2018: \$17,672). Cash and non-cash collateral for derivative contracts pledged and received, respectively, totaled \$(26,495) (2018: \$(61,695)) and \$nil (2018: \$863).

NOTE 5**PENSION OBLIGATION****a) ACTUARIAL VALUATION AND EXTRAPOLATION ASSUMPTIONS**

An actuarial valuation of the Plan was carried out as at December 31, 2018 by Aon and was then extrapolated to December 31, 2019.

The actuarial assumptions used in determining the value of the pension obligation of \$4,627,433 (2018: \$4,390,632) reflect management's best estimate, as at the measurement date, of future economic events and involve both economic and non-economic assumptions. The non-economic assumptions include considerations such as mortality as well as withdrawal and retirement rates. The primary economic assumptions include the discount rate, inflation rate and salary escalation rate. The discount rate is determined by taking the plan specific asset allocation and applying the expected long term asset returns determined by an independently developed investment model; less expected

plan investment expenses; and an additive for diversification and rebalancing. It does not assume a return for active management beyond the passive benchmark.

The major assumptions used for accounting purposes were:

	2019	2018
	%	
Discount rate	6.00	6.10
Inflation rate	2.00	2.00
Salary escalation rate*	3.00	3.00
Mortality rate		2014 Canadian Pension Mortality Table (Public Sector)

* In addition to age specific merit and promotion increase assumptions.

The next actuarial valuation of the Plan is expected to be completed as at December 31, 2021. Any differences between the actuarial valuation results and extrapolation results as reported in these financial statements will affect the financial position of the Plan and will be accounted for as gains or losses in 2022.

b) NET EXPERIENCE GAINS

Net experience gains of \$4,019 (2018: \$99,427) reflect the results of the valuation as at December 31, 2018 extrapolated to December 31, 2019.

c) SENSITIVITY OF CHANGES IN MAJOR ASSUMPTIONS

The Plan's future experience will differ, perhaps significantly, from the assumptions used in the actuarial valuation and extrapolation. Any differences between the actuarial assumptions and future experience will emerge as gains or losses in future valuations and will affect the financial position of the Plan.

The following is a summary of the sensitivities of the Plan's deficiency and current service cost to changes in assumptions used in the actuarial extrapolation at December 31, 2019:

	(\$ thousands)		
	Changes in Assumptions	Increase in Plan Deficiency	Increase in Current Service Cost as a % of Pensionable Earnings *
	%	\$	
Inflation rate increase holding discount rate and salary escalation assumptions constant	1.0	324,800	1.7
Salary escalation rate increase holding inflation rate and discount rate assumptions constant	1.0	39,200	0.8
Discount rate decrease holding inflation rate and salary escalation assumptions constant	(1.0)	639,400	5.1

* The current service cost of accruing benefits (including 0.4% allowance for administration expenses) as a percentage of pensionable earnings is 22.1% at December 31, 2019.

NOTE 6 SURPLUS

	(\$ thousands)	
	2019	2018
Surplus at beginning of year	\$ 670,700	\$ 866,006
Increase in net assets available for benefits	574,236	22,737
Net increase in pension obligation	(236,801)	(218,043)
Surplus at end of year	\$ 1,008,135	\$ 670,700

NOTE 7 CONTRIBUTIONS

	(\$ thousands)	
	2019	2018
Current service		
Employers	\$ 107,868	\$ 106,945
Employees	80,443	80,105
Past service		
Employers	747	685
Employees	1,481	2,230
	\$ 190,539	\$ 189,965

NOTE 8 INVESTMENT INCOME

The following is a summary of the Plan's investment income (loss) by asset class:

	(\$ thousands)			
	Income	Change in Fair Value	2019 Total	2018 Total
Money market and fixed income	\$ 35,602	\$ 24,076	\$ 59,678	\$ 28,360
Equities				
Canadian	88,597	53,267	141,864	(63,168)
Foreign	166,117	173,742	339,859	(28,918)
Private	16,072	(16,526)	(454)	34,722
	270,786	210,483	481,269	(57,364)
Inflation sensitive				
Real estate	37,669	(5,451)	32,218	72,304
Infrastructure	38,439	29,362	67,801	44,665
Timberland	53	1,285	1,338	297
Real return bonds	12,866	10,391	23,257	2,068
	89,027	35,587	124,614	119,334
Strategic, tactical and currency investments				
	6,607	1,455	8,062	(345)
	\$ 402,022	\$ 271,601	\$ 673,623	\$ 89,985

The change in fair value includes realized and unrealized gains and losses on pool units and currency hedges. Realized and unrealized gains and losses on pool units total \$14,044 and \$256,851 respectively (2018: \$(12,727) and \$(164,114) respectively). Realized and unrealized gains and losses on currency hedges total \$(238) and \$944 respectively (2018: \$(818) and \$(729) respectively).

Income earned in pooled investment funds is distributed to the Plan daily based on the Plan's pro rata share of units issued by the pool. Income earned by the pools is determined on an accrual basis and includes interest, dividends, security lending income, realized gains and losses on sale of securities determined on an average cost basis and income and expense on derivative contracts.

NOTE 9 INVESTMENT RETURNS, CHANGE IN NET ASSETS AND PENSION OBLIGATION

The following is a summary of investment returns (losses), and the annual change in net assets compared to the annual change in the pension obligation and the per cent of pension obligation supported by net assets:

	2019	2018	2017	2016	2015					
	in per cent									
Increase in net assets attributed to:										
Investment income										
Policy benchmark return on investments	13.3	0.6	9.2	5.8	8.4					
Value added (lost) by AIMCo	(0.8)	0.5	0.9	0.7	2.4					
Time weighted rate of return, at fair value ^(a)	12.5	1.1	10.1	6.5	10.8					
Other sources ^(b)	(1.1)	(0.7)	(0.8)	0.2	0.5					
Per cent change in net assets ^(c)	11.4	0.4	9.3	6.7	11.3					
Per cent change in pension obligation ^(c)	5.4	5.2	(0.9)	4.6	5.7					
Per cent of pension obligation supported by net assets	122	115	121	110	107					

(a) All investment returns are provided by AIMCo and are net of investment expenses. The annualized total return and policy benchmark return (PBR) on investments over five years is 8.1% (PBR: 7.4%), ten years is 9.1% (PBR: 8.5%) and twenty years is 6.7% (PBR: 6.4%). The Plan's actuary estimates the long-term net investment return on assets for funding purposes to be 5.2% (2018: 5.5%).

(b) Other sources includes employee and employer contributions and transfers from other plans, net of benefit payments, transfers to other plans and administration expenses.

(c) The percentage change in net assets and the pension obligation is based on the amounts reported on the statement of changes in net assets available for benefits and the statement of changes in pension obligation.

NOTE 10 BENEFIT PAYMENTS

	(\$ thousands)	
	2019	2018
Retirement benefits	\$ 220,466	\$ 208,494
Disability pensions	259	258
Termination benefits	23,669	19,331
Death benefits	5,092	4,361
	\$ 249,486	\$ 232,444

NOTE 11 INVESTMENT EXPENSES

	(\$ thousands)	
	2019	2018
Amounts charged by AIMCo for:		
Investment costs ^(a)	\$ 24,784	\$ 21,538
Performance based fees ^(a)	14,926	10,480
GST	1,298	1,058
	<u>41,008</u>	<u>33,076</u>
Amounts charged by Treasury Board and Finance for :		
Investment accounting and Plan reporting	52	52
Total investment expenses	\$ 41,060	\$ 33,128
Increase in expenses ^(a)	23.9%	15.3%
Increase in average investments under management	5.9%	4.7%
(Decrease) increase in value of investments attributed to AIMCo	(0.8%)	0.5%
Investment expenses as a percent of dollar invested	0.8%	0.7%
Investment expenses per member	<u>\$ 3,324</u>	<u>\$ 2,715</u>

(a) Investment expenses are charged by AIMCo on a cost-recovery basis. Please refer to AIMCo's financial statements for a more detailed breakdown of the types of expenses incurred by AIMCo. Amounts recovered by AIMCo for investment costs include those costs that are primarily non-performance related including external management fees, external administration costs, employee salaries and incentive benefits and overhead costs. Amounts recovered by AIMCo for performance based fees relate to external managers hired by AIMCo.

The per cent increase in investment costs and performance based fees is 24.0% (2018: 16.3%).

NOTE 12 ADMINISTRATIVE EXPENSES

	(\$ thousands)	
	2019	2018
General administration costs	\$ 2,222	\$ 2,254
Board costs	42	62
Actuarial fees	69	66
Other professional fees	178	155
	<u>2,511</u>	<u>2,537</u>
Member service expenses per member	<u>\$ 203</u>	<u>\$ 208</u>

General Administration and the Board costs were paid to Alberta Pensions Services Corporation (APS) on a cost-recovery basis.

The Plan's share of APS's operating and plan specific costs was based on cost allocation policies approved by the President of Treasury Board and Minister of Finance.

NOTE 13 TOTAL PLAN EXPENSES

Total Plan expenses of investment expenses per Note 11 and member service expenses per Note 12 are \$43,571 (2018: \$35,665) or \$3,527 (2018: \$2,923) per member and 0.77% (2018: 0.70%) of net assets under administration.

NOTE 14 CAPITAL

The Plan defines its capital as the funded status. In accordance with the *Public Sector Pension Plans Act*, the actuarial surplus or deficit is determined by an actuarial funding valuation performed, at a minimum, every three years. The objective is to ensure that the Plan is fully funded over the long term through the management of investments, contribution rates and benefits. Investments, the use of derivatives and leverage are based on an asset mix and risk policies and procedures that are designed to enable the Plan to meet or exceed its long-term funding requirement within an acceptable level of risk, consistent with the Plan's IP approved by the Board.

The Plan's asset values are determined on the fair value basis for accounting purposes. However, for funding valuation purposes, asset values are adjusted for fluctuations in fair values to moderate the effect of market volatility on the Plan's funded status. Actuarial asset values for funding valuation purposes amounted to \$5,376,892 at December 31, 2019 (2018: \$5,056,826).

In accordance with the *Public Sector Pension Plans Act*, the actuarial deficiency determined by the December 31, 2018 actuarial funding valuation is being funded by special payments currently totaling 4.96% of pensionable earnings shared between employees and employers until December 31, 2019 and 0.00% thereafter.

The special payments have been included in the contribution rates in effect at December 31, 2019 (see Note 1b).

NOTE 15 SUBSEQUENT EVENT - DECLINE IN FAIR VALUE OF INVESTMENTS

The fair value of the Plan's investments is subject to significant market volatility due to the current economic crisis stemming from the global pandemic COVID-19 virus. In the three months subsequent to December 31, 2019, the Plan's investments declined by an estimated 14.2% or \$800,898. To the extent that investments of the Plan may not recover these market-related losses during the remaining nine months of 2020, the funded status of the Plan would experience a correlated decline. The impact to investments between March 31, 2020 and the date of financial statement approval is indeterminable.

NOTE 16 COMPARATIVE FIGURES

Comparative figures have been reclassified to be consistent with 2019 presentation.

NOTE 17 RESPONSIBILITY FOR FINANCIAL STATEMENTS

These financial statements were approved by the Deputy Minister of Treasury Board and Finance based on information provided by APS, AIMCo and the Plan's actuary, and after consultation with the Board.

