

Financial statements

Shared Risk Plan for CUPE Employees of New Brunswick Hospitals

December 31, 2018

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Independent auditor's report

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To the Board of Trustees of the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals

Opinion

We have audited the financial statements of the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals which comprise the statement of financial position as at December 31, 2018, and the statements of changes in net assets available for benefits and changes in pension obligations for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In our opinion, the accompanying financial statements present fairly in all material respects, the financial position of the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals as at December 31, 2018, and its changes in net assets available for benefits and its changes in pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of our report. We are independent of the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada, and we have fulfilled our other ethical responsibilities in accordance with these requirements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Responsibilities of Management and Those Charged with Governance for the Financial Statements

Management is responsible for the preparation and fair presentation of these 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 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 Shared Risk Plan for CUPE Employees of New Brunswick Hospitals' ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals' financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our 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 our 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, we exercise professional judgment and maintain professional skepticism throughout the audit. We 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 our 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
 Shared Risk Plan for CUPE Employees of New Brunswick Hospitals' 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 Shared Risk Plan for CUPE Employees of New Brunswick Hospitals' ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals 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.

We 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 we identify during our audit.

Fredericton, Canada May 31, 2019 Grant Thornton LLP Chartered Professional Accountants

Grant Thornton LLP

Shared Risk Plan for CUPE Employees of New Brunswick Hospitals Statement of financial position

December 31	2018	2017
Assets		
Investments		
Short term instruments	\$ 1,129,963	\$ 1,603,051
Fixed income	424,827,197	447,830,722
Canadian equities	77,317,516	90,636,954
Foreign equities	122,474,077	135,854,446
Real estate	130,294,653	83,248,890
Infrastructure	110,202,326	92,559,988
Derivatives	(509,007)	1,438,321
Delivatives	(509,007)	1,430,321
	865,736,725	853,172,372
Receivables		
Employee contributions	2,944,974	2,468,074
Employer contributions	4,033,860	3,824,272
Accrued interest and dividends	4,756,627	3,259,358
	<u>11,735,461</u>	9,551,704
Prepaids	2,230	11,922
Prepaid – Pension Payroll	4,304,733	4,074,128
Cash	15,905,270	6,753,529
Total assets	897,684,419	<u>873,563,655</u>
Liabilities		
Accounts payable	723,227	495,473
Pensions and refunds payable	28,705	17,717
Pension commuted value payable	225,549	176,492
Marriage breakdowns	220,040	29,724
Marriago broakdowno		25,124
Total liabilities	977,481	719,406
Net assets available for benefits	896,706,938	872,844,249
Pension obligations (page 5 & note 8)	1,023,700,000	975,200,000
Deficiency	\$(126,993,062)	\$(102,355,751)

ON BEHALF OF THE BOARD OF TRUSTEES

See accompanying notes to the financial statements.

Shared Risk Plan for CUPE Employees of New Brunswick Hospitals Statement of changes in net assets available for benefits

Year ended December 31	2018	2017
Contributions		
Employer (note 3)	\$ 34,651,839	\$ 32,162,360
Employee (note 3)	30,895,016	28,684,522
Reciprocal transfers	587,030	482,259
	66,133,885	61,329,141
Investment income		
Interest	19,338,935	12,541,302
Dividends	12,879,253	16,871,693
Unrealized current period change in market		
value of investments	3,231,054	28,436,333
Realized (loss) gain on sale of investments	(23,049,753)	11,760,307
Securities lending	<u>41,936</u>	33,311
	<u>12,441,425</u>	69,642,946
	78,575,310	130,972,087
Expenses		
Benefit payments (note 4)	50,140,501	45,927,889
Administrative expenses (note 5)	4,572,120	4,314,098
	54,712,621	50,241,987
Increase in net assets available for benefits	23,862,689	80,730,100
Net assets available for benefits, beginning of year	872,844,249	792,114,149
Net assets available for benefits, end of year	\$ 896,706,938	\$ 872,844,249

Shared Risk Plan for CUPE Employees of New Brunswick Hospitals Statement of changes in pension obligations

Year ended December 31	2018	2017
Pension obligations, beginning of year	\$975,200,000	\$939,500,000
Change in pension obligations Benefits accrued Benefit payments Interest Cost of living increases Accrued pension benefit improvement Net transfers in Experience loss (gain)	34,500,000 (49,900,000) 43,600,000 18,300,000 500,000 400,000 1,100,000	32,200,000 (45,800,000) 41,600,000 13,700,000 1,100,000 400,000 (7,500,000)
Pension obligations, end of year	<u>48,500,000</u> \$ <u>1,023,700,000</u>	<u>35,700,000</u> \$ 975,200,000

December 31, 2018

1. Description of plan

The following description of the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals, (the Plan) is a summary only. For more information, reference should be made to the Plan Document.

On July 1, 2012, the Pension Plan for CUPE Employees of New Brunswick Hospitals was converted to the Shared Risk Plan for CUPE Employees of New Brunswick Hospitals. This model, governed by the Board of Trustees, introduced changes to address the funding deficiency in the Plan. The Shared Risk Plan for CUPE Employees of New Brunswick Hospitals is reported as a continuation of the pre-existing Pension Plan for CUPE Employees of New Brunswick Hospitals. The shared risk model provides additional funding through increased member and employer contributions. It also introduces risk management procedures, funding goals and sharing of benefit risks to prudently manage the variability of funding results over time.

The shared risk pension model is not defined in existing accounting standards. Under current standards, a pension plan must be accounted for as either a defined contribution plan or a defined benefit plan. Determining the appropriate accounting treatment for these plans requires a high degree of professional judgement. Based on research performed, enabling legislation and specific plan documents, management has concluded that the defined benefit method represents appropriate accounting treatment for the Plan at this time.

(a) General

The Plan is a shared risk pension plan covering full-time, part-time and eligible casual/temporary employees (other than full-time part-time) who are members of CUPE and its Council of Hospital Unions, Local 1252.

(b) Plan funding

Contributions are made by the Plan members and the Employer to fund the benefits as determined under the provisions of the Plan Text Document and Funding Policy.

(c) Pension benefits

The Base Benefits described in Article V of the Plan Document (summarized below) are the intended benefits under this Plan. Notwithstanding any other provision of the Plan, the Funding Policy will allow or require the Board of Trustees to make changes to the Base Benefits. Such changes may be positive or negative and will affect all classes of plan members.

 For each year (or part year) of pensionable service on and after July 1, 2012: 1.4% X annualized pensionable earnings accrued during the year up to the YMPE for the year

PLUS

2.0% X annualized pensionable earnings accrued during the year in excess of the YMPE for the year

MULTIPLIED BY

Number of hours worked (and contributed) / 1,950 hours

December 31, 2018

1. Description of plan (continued)

II. For all pensionable service between January 1, 1997 and June 30, 2012: Pensionable service X 1.4% X best 5 year average earnings at June 30, 2012 up to the average YMPE

PLUS

Pensionable service X 2.0% X best 5 year average earnings at June 30, 2012 in excess of the average YMPE

III. For all pensionable service prior to January 1, 1997:

Pensionable service X 1.75% X best 5 year average earnings at June 30, 2012 up to the average YMPE

PLUS

Pensionable service X 2.0% X best 5 year average earnings at June 30, 2012 in excess of the average YMPE

All benefits (paid or payable) may be adjusted annually by any cost of living increases granted in accordance with the Funding Policy.

A member may elect a basic pension, providing a life pension with a guarantee period of 5 years, or one of four optional forms of pensions being: 1) life pension with a guarantee period of 10 years; 2) joint life and survivor pension at 60%; 3) joint life and survivor pension at 75%; 4) joint life and survivor pension at 100%.

Normal retirement age is 65 at which time unreduced pension benefits are available when a member becomes vested (i.e. attains 5 or more years of continuous employment, 2 or more years of pensionable service, or 2 or more years of plan membership, including membership in the Part-Time and Seasonal Pension Plan). Reduced benefits for vested members are available between age 55 and age 65. A member who elects to take an early retirement will also receive a temporary bridging benefit payable to age 65 equal to \$18 per month per year of pensionable service.

(d) Disability pensions

A disability pension is not provided for under the terms of the Plan.

(e) Death benefits

If a member dies prior to retirement and is not vested, the benefit payable to the member's surviving spouse (or the member's beneficiary if there is no spouse or the spouse has waived their entitlement to the benefit) is a refund of the member's own contributions with accumulated interest.

If a member dies prior to retirement and is vested, the member's surviving spouse (or the member's beneficiary if there is no spouse or the spouse has waived their entitlement to the benefit) will receive a lump sum equal to the termination value amount the member would have received if the member had terminated service just before death.

If a member dies after retirement, the death benefit payable is determined in accordance with the provisions of the form of pension selected by the member at the time of retirement.

December 31, 2018

1. Description of plan (continued)

(f) Benefits on termination

A member who is not vested and is terminated will receive a refund of the member's own contributions with accumulated interest.

A member who is vested, terminated, and who is not eligible to receive an immediate pension benefit may elect to receive a deferred pension commencing as early as age 55 or an amount equal to the termination value of the pension benefit as at the date of the member's termination. The termination value of the pension benefit is to be transferred on a locked-in basis to any registered retirement savings arrangement where the transfer is allowed under the *Pension Benefits Act* (the Act). Vested members who terminate their employment and are immediately eligible to receive a monthly pension benefit may elect an immediate or deferred pension.

(g) Income taxes

The Plan is a Registered Pension Plan as defined in the *Income Tax Act* and is not subject to taxes on income.

2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies

These financial statements have been prepared in accordance with Canadian accounting standards for pension plans.

Accounting standards for pension plans require entities to select accounting policies for accounts that do not relate to its investment portfolio or pension obligations in accordance with either Part I (International Financial Reporting Standards (IFRS)) or Part II (Canadian accounting standards for private enterprises (ASPE)) of the CPA Canada Handbook. The Plan applies Part II for such accounts on a consistent basis and to the extent that these standards do not conflict with the requirements of the accounting standards for pension plans.

(a) Basis of presentation

These financial statements present the aggregate financial position of the Plan as a financial reporting entity independent of the plan sponsors and plan members. These financial statements are prepared to assist plan members and others in reviewing the activities of the Plan for the fiscal period but they do not portray the funding requirements of the Plan or the benefit security of individual plan members.

(b) Financial instruments

Financial assets and financial liabilities are recognized when the Plan becomes a party to the contractual provisions of the financial instrument.

Financial assets are derecognized when the contractual rights to the cash flows from the financial assets expire, or when the financial asset and all substantial risks and rewards are transferred.

December 31, 2018

2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies (continued)

A financial liability is derecognized when it is extinguished, discharged, cancelled or expires.

All financial assets and financial liabilities are initially measured at fair value. Fair value is an estimate of the amount of consideration that would be agreed upon in an arm's-length transaction between knowledgeable, willing parties who are under no compulsion to act.

Financial assets and financial liabilities are subsequently measured as described below.

Cash and cash equivalents

Cash and cash equivalents are measured at amortized cost and are defined as cash on hand, demand deposits and short-term highly liquid investments that are readily convertible to known amounts of cash within three months of deposit.

Investment assets and investment liabilities

All portfolio investments are designated by the Plan as financial assets at fair value through profit or loss on initial recognition, and are recorded at fair value because the portfolio is managed and its performance is evaluated on a fair value basis, in accordance with the policies and directives that document the Plan's investment strategy and risk controls. The portfolio investments are held to provide for the pension obligations. The most relevant measure to assess whether the investments are sufficient to pay for the obligations is fair value.

Interest, dividend income, realized gains and losses and unrealized gains and losses on all portfolio investments are included in investment income. Interest and dividend income is recognized in the period earned. Realized gains and losses and unrealized gains and losses are recognized in the period in which they arise. All purchases and sales of securities classified as portfolio investments are recognized using trade-date accounting.

All investment assets and investment liabilities are measured at fair value at the date of the statement of financial position in accordance with IFRS 13 Fair Value Measurement in Part I of the CPA Canada Handbook. Fair values of investment assets and liabilities are determined as follows:

- 1. Short-term instruments are valued at cost plus accrued interest, which approximates fair value.
- 2. Fixed income securities are valued at closing bid prices. Where the bid price is not available, fair value is calculated using discounted cash flows based on current market yields of instruments with similar characteristics.
- 3. Equities are valued at close prices. If there is no current close or bid price, the next most recent available close or bid price will be used as the current price.
- 4. Pooled funds are valued at the unit value supplied by pricing providers. Where prices are not available from these pricing providers, they are priced manually on a monthend or more frequent basis using published sources and external data provided by external valuation companies which represent the Plan's proportionate share of underlying net assets at fair value determined using closing bid prices.

December 31, 2018

2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies (continued)

- 5. Real estate consists of investments in pooled funds. These funds invest in real estate, participating mortgages and property for development or resale. These investments are valued at the unit value supplied by the pooled fund administrators which represents the Plan's proportionate share of underlying net assets at fair value.
- 6. Infrastructure consists of an investment in a pooled fund. The investment is valued at the unit value supplied by the pooled fund administrator which represents the Plan's proportionate share of underlying net assets at fair value.
- 7. Derivatives consist of currency forwards which are financial contracts, the value of which is derived from the value of underlying assets, indices, interest rates or exchange rates.

Transaction costs are not included in the fair value of investment assets and investment liabilities either on initial recognition or on subsequent re-measurement. Transaction costs are included in the statement of changes in net assets available for benefits as part of expenses incurred in the period.

Investment income including changes in the fair value of investment assets and investment liabilities are presented in the statement of changes in net assets available for benefits.

Contributions and other receivables

Contributions and other receivables are measured at amortized cost using the effective interest method. Discounting is omitted where the effect of discounting is immaterial. A provision for impairment is made and an impairment loss is recognized in profit and loss when there is objective evidence that the Plan will not be able to collect all of the amounts due. The carrying amount of the receivable is reduced through use of an allowance account. Impaired debts are written off against the allowance account when they are assessed as uncollectible. Carrying value of other receivables approximates their fair value because of the short term nature of the instruments.

Financial liabilities

Financial liabilities are measured subsequently at amortized cost using the effective interest method. Financial liabilities includes payables and accruals.

(c) Pension contributions

Contributions from Members and the Employer are recorded in the period that payroll deductions are made, and accrued up to year-end for payroll periods that extend to the subsequent fiscal year.

(d) Pension obligations

Based on current accounting standards, the Plan is being accounted for as a defined benefit plan established for members. It is important to note that there are currently no clear accounting standards for shared risk plans. The CPA Canada Handbook Accounting Standards for pension plans (Section 4600) applies to defined benefit or defined contribution plans, not shared risk plans.

December 31, 2018

2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies (continued)

The pension obligations recognized in the statement of financial position are the actuarial present value of accrued pension benefits determined by using the accrued benefit (or unit credit) actuarial cost method in accordance with the requirement of paragraph 14(7)(a) of Regulation 2012-75 under the Act.

(e) Investment income

Income from investments is recognized on an accrual basis and includes dividend income (recognized on ex-dividend date) and interest income gross of investment manager fees.

Realized and unrealized gains or losses on investments

Realized gains or losses on sale of investments are the difference between the proceeds received and the average cost of investments sold.

Unrealized gains or losses on investments represent the difference between the carrying value at the year end and the carrying value at the previous year end or purchase value during the year, less the reversal of previously recognized unrealized gains and losses in respect of disposals during the year.

(f) Translation of foreign currencies

Transactions denominated in foreign currencies are translated into Canadian dollars at exchange rates prevailing on the transaction date. Investments and other monetary assets and liabilities denominated in foreign currencies are translated into Canadian dollars at exchange rates prevailing on the year-end date with any resulting foreign exchange gain or loss included in income.

(g) Estimation uncertainty

When preparing the financial statements, management undertakes a number of judgments, estimates and assumptions about recognition and measurement of assets, liabilities, revenue and expenses. The actual results are likely to differ from the judgments, estimates and assumptions made by management, and will seldom equal the estimated results. Information about the significant judgments, estimates and assumptions that have the most significant effect on the recognition and measurement of assets, liabilities, revenue and expenses are discussed below.

Fair value of financial instruments

Management uses valuation techniques in measuring the fair value of financial instruments where active market quotes are not available. Details of the assumptions used are given in the notes regarding financial assets and liabilities. In applying the valuation techniques management makes maximum use of market inputs, and uses estimates and assumptions that are, as far as possible, consistent with observable data that market participants would use in pricing the instrument. Where applicable data is not observable, management uses its best estimate about the assumptions that market participants would make. These estimates may vary from the actual prices that would be achieved in an arm's length transaction at the reporting date.

December 31, 2018

2. Statement of compliance with Canadian accounting standards for pension plans and summary of significant accounting policies (continued)

Pension obligations

An independent actuary estimates the pension obligation using assumptions established by the actuary, in accordance with Canadian Institute of Actuaries' standards; however, the actual outcome may vary due to estimation uncertainties. The estimate of \$1,023,700,000 (2017 - \$975,200,000) is based on the following demographic assumptions: rates of retirement, mortality and rates in terminations. The economic assumption used in the estimate is the rate of return on assets (which is also used as the discount rate).

3. Contributions		
=	<u>2018</u>	<u>2017</u>
Employer contributions Regular Past service	\$ 34,599,682 <u>52,157</u>	\$ 32,142,611 19,749
	\$ 34,651,839	\$ 32,162,360
Employee contributions Regular Past service	\$ 30,831,400 <u>63,616</u>	\$ 28,641,930 42,592
	\$ 30,895,016	\$ 28,684,522
4. Benefit payments		
	<u>2018</u>	<u>2017</u>
Retirement benefits Termination benefits Survivor benefits Reciprocal transfers Marriage breakdowns	\$ 45,730,786 2,529,379 1,404,034 237,806 238,496	\$ 43,074,263 1,590,812 1,093,817 107,343 61,654
	\$ 50,140,501	\$ 45,927,889

December 31, 2018

5. Administrative expenses	<u>2018</u>	<u>2017</u>
Investment management	\$ 2,207,401	\$ 1,853,633
Administration	1,248,055	1,334,637
Actuarial and consulting	196,476	171,204
Performance measurement	66,800	64,935
Transaction cost	41,668	39,852
Custodial	44,884	42,780
Legal & regulatory	54,832	53,598
Board of trustees	196,958	149,199
Accounting & audit	22,930	29,582
Compliance reporting	9,250	20,251
HST, net of rebates	482,866	554,427
	\$ 4,572,120	\$ 4,314,098

6. Related party transactions

The Plan is related to the Province of New Brunswick including its departments, agencies, school districts, regional health authorities, crown corporations and other crown entities. The Board of Trustees determines the amounts of contributions to and payments from the Plan.

Investments

As at December 31, 2018, the Plan held approximately \$5.9M of Province of New Brunswick securities through ownership of pooled funds.

As at December 31, 2017, the Plan held approximately \$5.4M of Province of New Brunswick securities through ownership of pooled funds.

7. Funding Policy

As a result of the conversion to a shared risk plan, a funding policy was established at inception in accordance with section 100.4(1)(b) of the Act.

The funding policy is the tool used by the Board of Trustees to manage the risks inherent in a shared risk plan. The funding policy provides guidance and rules regarding decisions that must, or can, be made by the Board of Trustees around funding levels, contributions and benefits.

December 31, 2018

7. Funding Policy (continued)

The Funding Policy describes the timing and the actions that the Board of Trustees must take, or consider, as applicable, based on the results of the funding policy actuarial valuation of the Plan and the application of the required risk management procedures to the Plan.

The funding policy sets out a primary and two secondary risk management objectives as follows:

- (a) The primary risk management goal is to achieve a 97.5% probability that base benefits will not be reduced over the following 20 years.
- (b) The secondary objectives are:
 - I. On average provide contingent indexing on base benefits (all members) that are in excess of 75% of consumer price index (CPI) over the next 20 years.
 - II. Achieve at least 75% probability that the ancillary benefits described in the Plan text conversion can be provided over the next 20 years.

The above risk management objectives are measured using an asset liability model with future economic scenarios developed using a stochastic process.

The funding policy sets out the decisions to be made by the Board of Trustees. These decisions are based on the 15-year open group funded ratio calculated as the sum of the present value of excess contributions plus the market value of the going concern assets divided by the funding policy liabilities. Depending upon the result, these decisions may involve either a funding deficit recovery plan or a funding excess utilization plan that will ensure future changes to contribution rates and benefits are made within the constraints of the above risk management objectives.

The funding deficit recovery plan is triggered if the open group funded ratio of the Plan falls below 100% for two successive plan year ends. The summarized actions that must be taken, in order of priority are:

- 1. Increase contributions rates up to a maximum of 1.0% of earnings; then
- 2. Change early retirement rules for post-conversion service for members who are not yet eligible to retire and receive an immediate pension under the terms of the Plan to a full actuarial reduction for retirement before age 65; then
- 3. Change early retirement rules for pre-conversion service for members who are not yet eligible to retire and receive an immediate pension under the terms of the Plan to a full actuarial reduction for retirement before age 60: then
- 4. Reduce base benefit accrual rates for future service after the date of implementation of the deficit recovery plan by no more than 5%; then
- 5. Reduce base benefits on a proportionate basis for all members regardless of membership status for both past and future service in equal proportions.

The funding excess utilization plan is triggered when the open group funded ratio exceeds 105%. If base benefits and/or ancillary benefits have been reduced, all excess available for utilization must first be used to reinstate those reductions. Afterwards, the following actions are to be taken in the following order of priority and no action can be taken until the immediately preceding action in the list below is fully implemented:

December 31, 2018

7. Funding Policy (continued)

- 1. Provide indexing of base benefits and accrued benefit bridge up to the full CPI since the last date where full CPI was achieved; then
- 2. Provide further increases in base benefits of members who were not in receipt of a pension such that the base benefits are upgraded to the final five year average; then
- Provide a further increase to retired members such that a final average formula is
 reasonably replicated for each retired member at their retirement and indexed to full
 CPI thereafter subject to any limitation imposed under *Income Tax Act*.
- 4. Provide a lump sum payment respecting a reasonable estimate of missed past increased payments up to the levels of benefits arising out of steps 2 and 3; then,
- 5. Provide a further increase to benefits of member who were not in receipt of a pension at the funding policy valuation date that triggered the action up to the rate of increase in the average wage; then
- 6. Establish a reserve to cover the next 10 years of potential contingent indexing; then
- 7. Apply a contribution adjustments of up to 2%, then
- 8. Improve the normal form of pension for all the members who are not in receipt of pension; then
- 9. Improve the bridge pension for all members eligible for a bridge pension whether or not in pay; then
- 10. Improve the early retirement rules for service after June 30, 2012, provided that the Board of Trustees considers life expectancy experience as it develops.

8. Pension obligations

The present value of accrued pension benefits was calculated using the accrued benefit (or unit credit) actuarial cost method in accordance with the requirement of paragraph 14(7)(a) of Regulation 2012-75 under the Act.

The pension obligations are equal to the present value of benefits earned by members for services on or before December 31, 2018. The pension obligations do not take into account the impact of any future salary increases or the impact of any future cost-of living adjustments that may be granted by the Board of Trustees in accordance with the Plan terms and the Funding Policy.

The actuarial assumptions used in the funding policy valuation reflect current economic conditions and the adoption of the shared risk model under the Act. An actuarial valuation was performed by Morneau Shepell as of December 31, 2017 and then extrapolated to December 31, 2018.

Significant long-term assumptions used in the extrapolation are:

	<u>2018</u>	<u>2017</u>
Interest	4.50%	4.50%
Mortality	2014 Public Sector Mortality Table (CPM2014Publ) projected with Improvement Scale B (CPM-B) with size adjustment factors of 131% for males and 123% for females.	2014 Public Sector Mortality Table (CPM2014Publ) projected with Improvement Scale B (CPM-B) with size adjustment factors of 131% for males and 123% for females.

December 31, 2018

8. Pension obligations (continued)

The next actuarial valuation for funding purposes, which was not complete as at the date of this report, is to be performed as of December 31, 2018.

9. Financial instruments

In the normal course of business, the Plan is exposed to a variety of financial risks: credit risk, interest rate risk, currency risk, liquidity risk and other price risk. The value of investments within the Plan's portfolio can fluctuate on a daily basis as a result of changes in interest rates, economic conditions and market news related to specific securities within the Plan. The level of risk depends on the Plan's investment objectives and the type of securities it invests in.

There has been no change in how the Plan manages those risks from the previous year.

Credit risk

Credit risk is the risk that the counterparty to a financial instrument will fail to discharge an obligation or commitment that it has entered into with the Plan. Where the Plan invests in debt instruments, this represents the main concentration of credit risk. The market value of debt instruments includes consideration of the credit worthiness of the issuer, and accordingly, represents the maximum credit risk exposure of the Plan. All transactions executed by the Plan in listed securities are settled/paid for upon delivery to the custodian. The risk of default is considered minimal, as delivery of securities sold is only made once the custodian has received payment. Payment is made on a purchase once the securities have been received by the custodian. The trade will fail if either party fails to meet its obligation.

As at December 31, 2018, the Plan invested in debt instruments with the following credit ratings:

	Percenta	ge of value
Debt instrument by credit rating	<u>2018</u>	<u>2017</u>
AAA	22.36%	20.01%
AA	8.89%	9.68%
A	34.38%	39.91%
BBB	16.12%	13.11%
BB	8.57%	7.45%
В	7.97%	8.48%
CCC	1.14%	0.91%
Non-rated	0.57%	0.45%

Credit ratings are obtained from Standard & Poor's, Moody's, Fitch or Dominion Bond Rating Services. Where one or more rating is obtained for a security, the lowest rating has been used. Non-rated debt instruments includes cash and short-term investments.

Management believes that the Plan is not exposed to significant credit risks on its other receivables.

December 31, 2018

9. Financial instruments (continued)

Interest rate risk

Interest rate risk arises from the possibility that changes in interest rates will affect future cash flows or fair values of financial instruments. Interest rate risk arises when the Plan invests in interest-bearing financial instruments. The Plan is exposed to the risk that the value of such financial instruments will fluctuate due to changes in the prevailing levels of market interest rates.

As at December 31, 2018, the Plan's exposure to debt instruments by maturity and the impact on net assets had the yield curve shifted in parallel by 25 basis points with all other variables held constant ("sensitivity analysis"), is as follows:

Debt instruments by maturity date		<u>2018</u>	<u>2017</u>
Less than 1 year	\$	34,819,676	\$ 16,087,493
1-5 years		62,821,860	66,922,233
Greater than 5 years		304,824,108	349,098,989
Unclassified	_	2,179,079	6,520,879
	\$	404,644,723	\$ 438,629,594
Sensitivity	\$	9,950,966	\$ 11,810,471

In practice actual trading results may differ from the above sensitivity analysis and the difference could be material.

Liquidity risk

Liquidity risk is the risk that the Plan will not be able to meet its obligations as they fall due. Management believes that cash flows generated from its investment assets and monthly contributions will be sufficient to cover its normal operating expenditures. The Plan monitors cash flows to ensure there is sufficient cash on hand to meet forecasted pension benefit payments, operating expenses and other financial obligations.

Other price risk

Other price risk is the risk that the market value or future cash flows of financial instruments will fluctuate because of changes in market prices (other than those arising from interest rate risk or currency risk). All investments represent a risk of loss of capital. The Plan's Statement of Investment Policies and Goals requires a mix of asset classes and diversification that is intended to mitigate market and price risk. The maximum risk resulting from financial instruments is determined by the market value of the financial instruments. The Plan's overall market positions are monitored on a daily basis by its portfolio managers. Financial instruments held by the Plan are susceptible to market price risk arising from uncertainties about future prices of the instruments.

The statement of financial position classifies securities by asset class.

December 31, 2018

9. Financial instruments (continued)

The impact on net assets of the Plan due to a one percent change in the benchmark, with all other variables held constant as at December 31, 2018 is estimated to be 0.99% or \$8.9 million (2017 - 1.09% or \$9.5 million). For the purpose of this calculation, historical portfolio returns were compared to the historical index return of an average asset mix commitment.

The historical results may not be representative of the future results, and accordingly the impact on net assets could be materially different.

Fair value disclosure

Investments are classified in a hierarchy of three levels depending on the inputs used to determine fair value. The hierarchy gives the highest priority to quoted prices in active markets for identical assets or liabilities and the lowest priority to unobservable inputs used in determining the fair value. If different levels of inputs are used to measure the fair value of an investment, the classification is based on the lowest level input used. The three levels of the fair value hierarchy are as follows:

Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities;

Level 2 - inputs other than quoted prices included in Level 1 that are observable for the assets or liabilities, either directly or indirectly; and

Level 3 - inputs for the assets or liabilities that are not based on observable market data.

Currency risk

Currency risk is the risk that the value of a financial instrument will fluctuate due to changes in foreign exchange rates. Currency risk arises from financial instruments (including cash and cash equivalents) that are denominated in a currency other than Canadian dollars, which represents the functional currency of the Plan. In the current year, the Plan mitigated currency risk through the use of forward foreign exchange currency contracts. Forward foreign exchange currency contracts are agreements between two parties, traded over the counter and not on an organized exchange, to purchase or sell currency against another currency at a future date and price. Forward foreign exchange currency contracts are used to hedge against changes in foreign exchange rates.

December 31, 2018

9. Financial instruments (continued)

The Plan is exposed to the following currencies:

	2	018	<u>20</u>	<u>17</u>
	Currency Percentage of		Currency	Percentage of
	Exposure (\$)	Assets (%)	Exposure (\$)	Assets (%)
US dollar	154,433,226	17.49%	157,020,157	18.24%
Euro	10,428,710	1.18%	11,510,587	1.34%
Pounds sterling	10,679,037	1.21%	12,377,740	1.44%
Indian Rupee	8,119,377	0.92%	8,293,762	0.96%
Japanese yen	6,074,804	0.69%	7,811,183	0.91%
South Korean Won	6,222,155	0.70%	6,048,798	0.70%
Swiss franc			5,961,846	0.69%
Indonesian Rupiah	5,655,672	0.64%	5,912,341	0.69%
Brazilian Real	5,958,564	0.67%	5,707,965	0.66%
Mexican Peso	5,999,955	0.68%	5,449,109	0.63%
Other	23,910,208	2.71%	23,014,937	2.68%

This amount is based on the market value of the Plan's financial instruments. Other financial assets and financial liabilities that are denominated in foreign currencies do not expose the Plan to significant currency risk.

As at December 31, 2018, if the Canadian dollar strengthened or weakened by one percent in relation to the respective exchange rates, with all other variables held constant, net assets would have increased or decreased, respectively, by approximately \$2,374,817 (2017 - \$2,491,084). The plan uses forward foreign exchange currency contracts to reduce its exposure to fluctuations in foreign exchange rates. As at December 31, 2018, the amount of currency subject to forward foreign exchange currency contracts is \$128,093,000 (2017 - \$120,789,000)

In practice, actual trading results may differ from the above sensitivity analysis and the difference could be material.

The following fair value hierarchy table presents the Plan's assets measured at fair value on a recurring basis as of December 31, 2018 (in \$ millions):

	Level 1	Level 2	Level 3	<u>2018</u> Total Fair Value	Level 1	Level 2	Level 3	2017 Total Fair Value
Fixed income	\$ -	\$ 424.8 4.7	-	\$ 424.8	\$ 1.1	\$ 446.8 7.3	•	\$447.9
Canadian equities Foreign equities	72.6 72.2	50.3	-	77.3 122.5	83.3 76.8	59.1	-	90.6 135.9
Real estate Infrastructure	-	-	130.3 110.2	130.3 110.2	-	-	83.2 92.6	83.2 92.6
Derivatives		(0.5)	-	(0.5)		1.4	92.0	1.4
Total	\$ 144.8	\$ 479.3	\$ 240.5	\$864.6	\$ 161.2	\$ 514.6	\$ 175.8	\$ 851.6

December 31, 2018

9. Financial instruments (continued)

A reconciliation of the changes during the year for those investments that are measured at fair value using level 3 input are as follows:

	<u>2018</u>	<u>2017</u>
Balance beginning of year Purchases Distributions Investment Income Expenses Realized gain Change in unrealized gains	\$ 175,808,878 65,300,119 (28,717,110) 5,448,019 (1,017,370) 11,819,261 11,855,181	\$ 139,299,161 25,565,898 (4,565,898) 5,722,025 (887,430) 391,399 10,283,723
Balance end of year	\$ 240,496,978	\$ 175,808,878

There are three investments classified as level 3:

- (1) A limited partnership interest in a fund investing in Canadian real estate with a market value of \$90.4 million (2017 \$83.2 million). This is an open-end fund with no active market for its units and no published net asset value as of December 31, 2018, and is therefore classified as a level 3 investment in the fair value heirachy.
- (2) A limited partnership interest in a fund investing in global infrastructure assets with a market value of \$110.2 million (2017 \$92.5 million). This is an open-end fund with no active market for its units and no published net asset value as of December 31, 2018, and is therefore classified as a level 3 investment in the fair value hierarchy.
- (3) A limited partnership interest in a fund investing in global real estate with a market value of \$39.9 million (2017 nil). This is an open-end fund with no active market for its units and no published net asset value as of December 31, 2018, and is therefore classified as a level 3 investment in the fair value hierarchy.

10. Capital management

The Plan employs a capital management plan, a Statement of Investment Policies and Goals (SIP&G), that is reviewed annually by the Board of Trustees. The SIP&G formulates investment principles and guidelines which are appropriate to the needs and objectives of the pension plan.

The overall objectives in investing the assets of the Plan are to preserve and enhance the value of capital through adequate diversification in high quality investments and achieve the highest investment return that can be obtained with the assumption of an acceptable degree of risk.

December 31, 2018

10. Capital management (continued)

The Plan's investment in equities must be well diversified across industry sectors and capitalization ranges. Investments in domestic bonds must be diversified by sector and subject to minimum quality constraints. Global fixed income investments must be well diversified across industry sectors, geographical areas and capitalization ranges and also adhering to minimum quality constraints.

The SIP&G's investment guidelines outline that the Plan's assets shall be invested in fixed income, equity, real estate and infrastructure securities in such proportions as may be established from time to time by the Trustees. The portfolio will be invested as follows: 25.50% Canada long bonds, 9% Canada universe bonds, 7.5% U.S. high yield bonds, 7.5% global government bonds, 10% Canadian equity, 15% foreign equity, 10% Canadian real estate, 5% global real estate, 10% infrastructure and 0.5% cash and cash equivalents.

As of December 31, 2018, the plan holdings were invested in accordance with the asset mix in the SIP&G (after considering the commitment in Note 11).

11. Commitment

The plan has unfunded committed investments at December 31, 2018 of US \$5.7 million (approximately \$7.7 Canadian) to its global real estate manager.

12. Indemnification

Pursuant to the Agreement and Declaration of Trust, the Plan provides a first lien and charge against the assets of the Plan as indemnification to the Board of Trustees against any liability incurred, including defence costs. The Plan may be required to compensate these individuals in the event of a claim being made against them. The contingent nature of these indemnification obligations prevents the Plan from making a reasonable estimate of the maximum potential payments that may be required. The Plan has not received any claims or made any payments pursuant to such indemnifications.

13. Comparative figures

Comparative figures have been adjusted to conform to changes in the current year presentation.