Financial Statements June 30, 2017 and 2018

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#### Management's Report

### Management's Responsibility for the Financial Statements

The financial statements have been prepared by management in accordance with Canadian accounting standards for pension plans and the integrity and objectivity of these statements are management's responsibility. Management is responsible for the notes to the financial statements and for ensuring that this information is consistent, where appropriate, with the information contained in the financial statements.

Management is responsible for implementing and maintaining a system of internal control to provide reasonable assurance that reliable financial information is produced.

The Teachers' Superannuation Commission is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Commission reviews internal financial reports on a regular basis and externally audited financial statements yearly.

The Auditor General conducts an independent examination, in accordance with Canadian generally accepted auditing standards and expresses her opinion on the financial statements. The Auditor General has full and free access to financial information and management of the Prince Edward Island Teachers' Superannuation Fund to meet as required.

On behalf of the Prince Edward Island Teachers' Superannuation Fund

Mr. Dan Campbell, CFA

Deputy Minister, Department of Finance

Mr. Terry Hogan

Manager, Pensions and Benefits

December 3, 2019

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### Prince Edward Island

### Office of the Auditor General

PO Box 2000, Charlottetown PE Canada C1A 7N8

## Île-du-Prince-Édouard

### Bureau du vérificateur général

C.P. 2000, Charlottetown PE Canada C1A 7N8

#### INDEPENDENT AUDITOR'S REPORT

### To the Commissioners of the Prince Edward Island Teachers' Superannuation Fund

I have audited the financial statements of the **Prince Edward Island Teachers' Superannuation Fund** which comprise the statements of financial position as at June 30, 2017 and June 30, 2018, and the statements of changes in net assets available for benefits and changes in pension obligation for the years then ended, and a summary of significant accounting policies and other explanatory information.

### Management's Responsibility 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.

### **Auditor's Responsibility**

My responsibility is to express an opinion on these financial statements based on my audit. I conducted the audit in accordance with Canadian generally accepted auditing standards. Those standards require that I comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements 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 entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall financial statement presentation.

I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my audit opinion.

#### Opinion

In my opinion, the financial statements present fairly, in all material respects, the financial position of the Fund as at June 30, 2017 and June 30, 2018, and the changes in its net assets available for benefits and its pension obligation for the years then ended in accordance with Canadian accounting standards for pension plans.

B. Jane MacAdam, FCPA, CA Auditor General

Charlottetown, Prince Edward Island December 3, 2019

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Statement of Financial Position June 30, 2017 and 2018

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	2018	2017
	\$	\$
Assets		
Cash	2,326,358	1,047,536
Investments (Note 3)	781,341,676	740,010,181
Note receivable (Note 5)	196,787,700	204,824,600
Receivables	,,	,
Contributions - employee	1,232,751	1,187,497
- employer	1,266,289	1,225,326
Accrued interest	3,639,846	3,697,796
Other	<u>261,600</u>	<u>298,246</u>
Total Assets	986,856,220	952,291,182
Liabilities		
Accounts payable and accrued liabilities	1,713,457	2,241,035
Remittances payable	864,943	831,037
Investment fees payable	<u>645,533</u>	<u>521,831</u>
Total Liabilities	3,223,933	3,593,903
Net Assets Available for Benefits	983,632,287	948,697,279
Accrued Pension Obligation (Note 4)	983,632,287	948,697,279
Net Surplus (Deficit)	-	

(The accompanying notes are an integral part of these financial statements.)

Approved on behalf of the Prince Edward Island Teachers' Superannuation Fund

Chairperson

Commissioner

Statement of Changes in Net Assets Available for Benefits for the years ended June 30, 2017 and 2018

	2018	2017
	\$	\$
Increase in Assets		
Investment income (Note 3(a))		
Interest	9,008,759	6,653,433
Dividends	27,383,870	24,147,758
Change in fair value of investments	<u> 16,798,960</u>	<u>50,424,400</u>
	53,191,589	81,225,591
Other interest income	7,947,601	8,169,951
Contributions		
Employee	12,047,989	11,452,033
Employer	12,047,989	11,452,033
Transfers from other plans	438,049	
Purchased service	256,003	308,543
1 410114004 00/1/00	85,929,220	112,608,151
Decrease in Assets		*
_ + + + + + + + + + + + + + + + + + + +	46,858,199	45,650,023
Benefits paid Operating expenses (Note 6)	3,293,075	2,868,308
Refunds	663,139	276,414
Transfers	179,799	90,925
1141151615	50,994,212	48,885,670
	50,994,212	40,000,070
Change in Net Assets	34,935,008	63,722,481
Net Assets Available for Benefits, beginning of year	948,697,279	884,974,798
Net Assets Available for Benefits, end of year	983,632,287	948,697,279

(The accompanying notes are an integral part of these financial statements.)

Statement of Changes in Pension Obligation for the years ended June 30, 2017 and 2018

		,
	2018	2017
	\$	\$
Accrued Pension Obligation, beginning of year	948,697,279	884,974,798
Change in Accrued Pension Obligation		
Interest accrued on benefits	50,436,775	47,605,112
Benefits accrued	16,660,994	15,986,124
Increase due to purchased service	694,052	308,541
Benefits paid	(47,701,137)	(46,017,362)
Loss on Plan amendment and benefit design changes <sup>1</sup>	-	2,100,200
Loss on experience, assumption changes and		
contingent indexation	<u> 14,844,324</u>	43,739,866
Change in Accrued Pension Obligation	34,935,008	63,722,481
Accrued Pension Obligation, end of year (Note 4)	983,632,287	948,697,279

<sup>&</sup>lt;sup>1</sup>Plan amendment includes a change to the minimum guaranteed death benefit, and a change to the spousal benefits.

(The accompanying notes are an integral part of these financial statements.)

Notes to Financial Statements June 30, 2017 and 2018

### 1. Plan Description

The following description of the Prince Edward Island Teachers' Superannuation Pension Plan (the Plan) is a summary only. For more complete information, reference should be made to the *Teachers' Superannuation Act* and *Regulations*.

#### a) General

The Plan is a contributory defined benefit plan covering members as defined in the *Teachers' Superannuation Act*.

### b) Contributions

Under the Plan, members make contributions amounting to 8.3 percent of that part of the members' salary up to the amount of the year's maximum pensionable earnings (YMPE) as defined in the *Canada Pension Plan Act* and 10.0 percent on the amount that exceeds the YMPE. Participating employers match member contributions. Herein these are considered the Base Contributions. Effective January 1, 2017, variable contributions were introduced based on the funded benefits ratio as defined below (note that contribution changes by funded level are total and not cumulative).

Funded Benefits Ratio	Employee Contributions <sup>1</sup>	Participating Employer Contributions <sup>1</sup>
<100% <sup>2</sup>	Base Contributions plus 1%	Base Contributions plus 4%
100% to 110% <sup>3</sup>	Base Contributions plus 1%	Base Contributions plus 2%
110% to 135%	Base Contributions	Base Contributions
135% to 145% <sup>4</sup>	Base Contributions less 1%	Base Contributions less 2%
145% + <sup>5</sup>	Base Contributions less 1%	Base Contributions less 4%

Subject to the Income Tax Act Rules for maximum contributions.

#### c) Retirement Benefits

Pension Formula: The annual pension is based on the number of years of service times two percent of average salary with a reduction at age 65 for estimated Canada Pension Plan ("CPP") benefits. The reduction is referred to as a bridge pension and only payable to age 65. The bridge is based on the number of years of service times 0.7% of average salary to a maximum of the average CPP year's maximum pensionable earnings. For Service prior to December 31, 2013, average salary and year's maximum pensionable earnings is based on the best five-year average. For service commencing January 1, 2014, average salary and year's maximum pensionable earnings is based on career average.

<sup>&</sup>lt;sup>2</sup> If triggered, contributions based on funded benefits ratio <100% remain in effect until funded benefits ratio of ≥ 105% is attained.

<sup>3.</sup> If triggered, contributions based on funded benefits ratio <110% remain in effect until funded benefits ratio of ≥ 115% is attained.</p>

If triggered, contributions based on funded benefits ratio ≥135% remain in effect until funded benefits ratio of ≤ 130% is attained.

<sup>5.</sup> If triggered, contributions based on funded benefits ratio ≥145% remain in effect until funded benefits ratio of ≤ 140% is attained.

Notes to Financial Statements June 30, 2017 and 2018

#### 1. Plan Description (continued...)

### c) Retirement Benefits (continued...)

Pre-Retirement Indexation: Benefits earned during 2014 to 2016, were automatically indexed at 1.5 percent per annum. As this indexation is guaranteed, it is included in the Base Benefits, which are the Plan benefits prior to any future contingent indexation. In 2017 and beyond, pre-retirement indexation will only be awarded if the funded benefits ratio (as determined at the April 1st immediately prior to the calendar year in which indexation is to be awarded) is greater than 100 percent. If there are years that full indexation is not awarded, and if the funded benefits ratio subsequently reaches 115 percent, then a portion of Plan funds is available to make up for missed indexation in the past. The maximum indexation is 100 percent of the increase in the Average Industrial Wage ("AIW") in Canada. However, if in any year the assets available to be spent on inflation protection are not adequate to provide the full amount, partial indexation will be awarded.

Post-Retirement Indexation: For 2014 to 2016, post-retirement indexation was automatically awarded at 0.9 percent per annum. As this indexation is guaranteed, it is included in the Base Benefits. In 2017 and beyond, post-retirement indexation will only be awarded if the funded benefits ratio (as determined at the April 1st immediately prior to the calendar year in which indexation is to be awarded) is greater than 110 percent. If there are years that full post-retirement indexation is not awarded, and if the funded benefit ratio subsequently reaches 118 percent, then a portion of Plan funds is available to make up for missed past indexation on a go-forward basis (i.e. no retroactive payments). The maximum indexation is 100 percent of Consumer Price Index (CPI); however, if the Plan cannot afford that amount, partial indexation will be awarded. Indexation also applies to deferred vested benefits and is applied in the same manner as the post-retirement indexation.

Retirement Age: For pensionable service prior to January 1, 2019, the earliest unreduced retirement age remains at the earlier of 30 years of pensionable service (minimum of age 55) and attained age 60. For pensionable service after December 31, 2018, the earliest unreduced retirement age will be the earlier of 32 years of pensionable service (minimum of age 55) and attained age 62. The earliest retirement age is 55 with two years of continuous service.

### d) Disability Benefits

Disability benefits are available at any age to a member who retires from teaching service because of total and permanent disability provided the member contributed to the Plan for two or more years.

#### e) Death Benefits

Less than two years of continuous service: On the death of a member prior to completing two years of pensionable service, or after completing two years of service but leaving no surviving spouse or dependant children, the member's accumulated contributions with

Notes to Financial Statements June 30, 2017 and 2018

### 1. Plan Description (continued...)

#### e) Death Benefits (continued...)

interest will be refunded. Effective, January 1, 2017 the *Teachers' Superannuation Act* was amended so that one and a half times the member's accumulated contributions plus interest will be refunded.

Greater than or equal to two years of continuous service: If a member dies prior to retirement but after completing two years of service, the member's spouse is entitled to an immediate lifetime pension equal to 60 percent of the accrued, unreduced pension of the member at the time of death. In addition to the spousal pension, an allowance equal to ten percent of the members' or vested former members' pension entitlement at death prior to retirement is payable in respect of each dependent child, up to a maximum of four children, until the child is no longer a dependent child or upon the death of the dependent child.

If the spouse of the member dies before the member, or where having survived the member the surviving spouse dies leaving children by the member, the sixty percent pension that was payable to the spouse will be paid to the dependent child or the guardian of that child, if the member or vested former member is survived by only one dependent child, or the oldest dependent child or the guardian of that child.

#### f) Termination and Portability of Benefits

In the event of termination of employment for reasons other than retirement or death, a member may elect to receive either:

- a refund of the member's own contributions with interest; or
- if the member has completed at least two years of service, a deferred pension subject to the provisions outlined in the *Retirement Age* section above.

Where there are portability arrangements between the Plan and other plans, members may be able to carry certain pension benefits to those other plans or transfer contributions and service from those other plans to increase pension benefits under the Plan.

#### g) Marriage Breakdown

Upon application, the pension benefits to which a person is entitled may be divided between the person and the spouse or former spouse.

#### h) Income Tax

The Fund is a Registered Pension Plan as defined under the federal *Income Tax Act* and is not subject to taxation.

Notes to Financial Statements June 30, 2017 and 2018

### 2. Summary of Significant Accounting Policies

#### **Basis of Accounting**

The financial statements have been prepared in accordance with Canadian accounting standards for pension plans as outlined in the Chartered Professional Accountants of Canada (CPA) Handbook Section 4600, Pension Plans. For accounting policies that do not relate to either investments or pension obligations, the Fund has elected to comply on a consistent basis with International Financial Reporting Standards (IFRS) in Part I of the CPA Handbook. To the extent that IFRS in Part I is inconsistent with Section 4600, Section 4600 takes precedence.

Included in the determination of the accrued benefit obligation for pension retirement benefits is a liability for contingent indexation.

For years ended June 30, 2017 and June 30, 2018, the contingent indexation liability is calculated based on total plan assets less the accrued benefit obligation on base benefits assuming no further contingent indexation. This calculation does not incorporate the potential impact of future events such as contributions, gains and losses on asset returns, and new benefit accruals.

Significant judgment is involved in the accounting treatment of contingent indexation. Management recognizes that the contingent indexation liability represents a new challenge for pensions in Canada. Going forward, management will continue to monitor developments in the accounting standards and practices when assessing the most appropriate accounting treatment for plans with a contingent indexation liability component.

These financial statements are prepared on a going concern basis and present the aggregate financial position of the Fund as a separate reporting entity.

#### a) Use of Estimates and Measurement Uncertainty

The preparation of financial statements in conformity with Canadian accounting standards for pension plans requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the period. Items requiring the use of significant estimates include investments, accrued interest, accrued liabilities, and the accrued pension obligation.

Estimates are based on the best information available at the time of preparation of the financial statements and are reviewed annually to reflect new information as it becomes available. Measurement uncertainty exists in these financial statements. Actual results could differ from these estimates and the differences could be material.

Notes to Financial Statements June 30, 2017 and 2018

#### 2. Summary of Significant Accounting Policies (continued...)

### b) Foreign Currency Translation

Transactions denominated in foreign currencies are translated into Canadian dollars at the rate of exchange prevailing on the transaction date. The fair value of foreign investments and cash held at year-end are translated at the rates in effect at that date. The resulting gain or loss from changes in these rates is included in the current period change in fair value of investments.

#### c) Fair Value Measurement

Fair value is the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction on the measurement date.

When available, the Fund measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's length basis.

If a market for a financial instrument is not active, then the Fund establishes fair value using a valuation technique. Valuation techniques include using recent arm's length transactions between knowledgeable, willing parties (if available), reference to the current fair value of other instruments that are substantially the same, and/or discounted cash flow analysis.

### d) Financial Instruments

The Fund's financial instruments include cash, contributions and other receivables, accrued interest, notes receivable, investments, accounts payable, accrued liabilities, investment fees payable, and remittances payable. Due to their nature, the Fund's financial instruments, with the exception of investments, are carried at cost which approximates their fair values. Investments are carried at fair value and are subject to interest rate, credit, foreign currency, price, and liquidity risks as described in Note 3.

#### e) Investments

Investments represent a pool of assets held in a master trust and allocated to each member by units of participation. The Prince Edward Island Master Trust represents a contract between the members (contributors) and the trustee (Minister of Finance). All investments held by the Master Trust are classified as held for trading. Investments are designated at fair value through the statement of changes in net assets available for benefits. Investment purchase and sale decisions are based on their fair value in accordance with the Master Trust's Statement of Investment Policies and Procedures.

Notes to Financial Statements June 30, 2017 and 2018

### 2. Summary of Significant Accounting Policies (continued...)

### e) Investments (continued...)

#### (iii) Investment valuation (continued...)

available market quotes with appropriate adjustments for trading restrictions, the most recent round of financings, earnings-multiple analysis using comparable companies, or discounted cash flow analysis.

#### (iv) Transaction costs

Investment management fees are costs directly attributable to the external management of the assets. Fees incurred on the management of equity holdings in real estate and foreign infrastructure investments are paid directly as a reduction in the fair value of the investment. Fees incurred on the management of other investments are recorded as an investment expense.

#### f) Revenues and Expenses

Revenues and expenses are recorded on an accrual basis in the period in which the transaction or event that gave rise to the revenue or expense occurred.

### g) Accrued Pension Obligation

The value of the accrued pension obligation of the Fund is based on an annual actuarial valuation prepared on an accounting basis by an independent actuary using the projected unit credit method pro-rated on service and best estimate assumptions. The accrued pension obligation is measured in accordance with accepted actuarial methods using actuarial assumptions and methods adopted by the Fund.

#### 3. Investments and Derivatives

#### a) Investments

Investments consist of units held in the Master Trust. At year-end, there were 562,602.262 units held in the Master Trust (2017 - 532,695.209) with a fair value of \$1,388.80 (2017 - \$1,389.18) per unit.

Notes to Financial Statements June 30, 2017 and 2018

### 2. Summary of Significant Accounting Policies (continued...)

#### e) Investments (continued...)

Significant accounting policies for the pool of assets held in the Master Trust consist of:

#### (i) Investment transactions

Investment transactions are recognized on the transaction date. Distributions are recognized on the record date. Investments include receivables and payables at June 30, 2017 and June 30, 2018, for interest, dividends, and settled derivative contracts.

#### (ii) Income recognition

Income from investments is recorded on an accrual basis and includes interest and dividends as well as realized and unrealized gains and losses on investments.

#### (iii) Investment valuation

#### Equity and debt

Equity and debt investments are valued at fair value based on quoted market values. Changes in the market value of investments, including realized and unrealized gains and losses, are reflected in the financial statements as a change in the fair value of investments.

#### Equity investment in real estate

Investment in real estate is represented by an equity investment in a corporation that invests in real estate, participating mortgages, and property for development or resale. Properties within the corporation are valued annually by independent appraisers in accordance with generally accepted appraisal practices and procedures. The appraisal methodology followed is an income approach which is mainly based on discounted cash flows. In estimating future cash flows, certain assumptions are made with respect to future economic conditions and rates of return.

#### Pooled funds

Pooled funds are valued at the unit values supplied by the pooled fund administrator, which represents the Fund's proportionate share of underlying net assets at fair values determined using closing market prices.

#### **Derivative contracts**

The derivative contracts held by the Fund are stated at fair value and are valued using quoted market indices. Realized and unrealized gains or losses on investments from derivative contracts are included in the change in the fair value of investments.

#### Investment in foreign infrastructure

The Fund owns units in a foreign infrastructure partnership. The partnership invests in portfolio companies that own, operate, develop, manage, and support infrastructure assets. Fair value is based upon a number of factors, including readily

Notes to Financial Statements June 30, 2017 and 2018

#### 3. Investments and Derivatives (continued...)

### a) Investments (continued...)

Investments of the Master Trust consist of the following listed assets:

	<u>2018</u>	<u>%</u>	<u>2017</u>	<u>%</u>
	\$		\$	
Cash and Short-Term Investments	12,716,045	0.5	33,732,783	1.4
Long Core Plus Bond	187,258,532	7.4	140,581,913	5.9
Core Plus Bond	751,456,170	29.5	713,287,095	30.0
Canadian Equities	300,655,195	11.9	285,148,458	12.0
Global Equities	891,819,289	35.0	820,119,249	34.5
Canadian Real Estate	79,059,986	3.1	69,249,639	2.9
Global Real Estate	171,766,367	6.8	152,910,390	6.4
Global Infrastructure	153,368,341	6.0	144,048,610	6.1
Currency Overlay	<u>(5,893,616</u> )	(0.2)	20,756,720	0.8
Total	2,542,206,309	100.0	2,379,834,857	<u>100.0</u>
Fund's pro-rated share	30.7348%		31.0950%	
Fund investments*	<u>781,341,676</u>		<u>740,010,181</u>	

<sup>\*</sup>Rounded

Investment income and realized and unrealized gains (losses) of the Master Trust consist of the following:

	Change in		Change in
Investment	Fair Value of	Investment	Fair Value of
Income	Investments*	Income	Investments*
2018	2018	2017	2017
\$	\$	\$	\$
1,891,810	(165,370)	372,211	987
4,257,763	914,291	-	(490,193)
21,265,752	(16,467,072)	21,078,330	(13,919,277)
8,920,023	25,606,791	9,321,344	27,598,085
67,582,166	40,802,034	46,272,517	128,657,182
-	7,200,400	2,466,959	4,869,828
1,163,097	8,198,567	-	(665,426)
14,406,724	(4,063,173)	19,046,399	11,678,222
	(7,622,108)		<u>3,144,517</u>
119,487,335	54,404,360	98,557,760	160,873,925
<u>30.4573%</u>	30.8780%	31.2519%	31.3440%
36,392,629	16,798,960	30,801,191	50,424,400
	1,891,810 4,257,763 21,265,752 8,920,023 67,582,166 1,163,097 14,406,724 119,487,335 30,4573%	Investment   Fair Value of   Investments*   2018   \$   \$   \$   \$   \$   \$   \$   \$   \$	Investment Income         Fair Value of Investments*         Investment Income           2018         2018         2017           \$         \$         \$           1,891,810         (165,370)         372,211           4,257,763         914,291         -           21,265,752         (16,467,072)         21,078,330           8,920,023         25,606,791         9,321,344           67,582,166         40,802,034         46,272,517           7,200,400         2,466,959           1,163,097         8,198,567         -           14,406,724         (4,063,173)         19,046,399

<sup>\*</sup> Includes realized gains of \$58.1 million (2017 - gains of \$160.2 million) and unrealized losses of \$3.7 million (2017 - gains of \$0.7 million).
\*\* Rounded

Notes to Financial Statements June 30, 2017 and 2018

### 3. Investments and Derivatives (continued...)

### a) Investments (continued...)

Investments include amounts which investment managers of the Master Trust have invested in their own pooled funds. The fair values of these investments are as follows:

	2018 \$	<u>2017</u> \$
	Ψ	Ψ
Beutel, Goodman & Company Limited	30,679,394	32,579,245
Morgan Stanley Prime Property Fund	71,553,284	-
Baillie Gifford Overseas Limited	275,624,408	251,013,338
Bentall Kennedy (Canada) LP	-	17,390,053
Greystone Management Investments Inc.	79,059,986	51,859,586
Global Infrastructure Partners (GIP)	99,588,920	60,022,311
Goldman Sachs Asset Management	468,299,761	426,392,965
State Street Global Advisors Ltd.	30,494,231	152,910,390
Lazard Asset Management LLC	53,779,421	84,026,299
Wellington Global PERSP (CAD)	186,291,356	169,171,172
CBRE Global Investment Management	69,718,853	-
TD Asset Management	900,318,467	827,410,781
Royal Bank of Canada	<del></del>	<u>24,010,182</u>
Total	2,265,408,081	2,096,786,322
Fund's pro-rated share	<u>30.7348%</u>	<u>31.0950%</u>
Fund's pooled funds*	696,268,332	<u>651,966,176</u>

<sup>\*</sup>Rounded

#### b) Derivative Contracts

Derivative contracts are financial contracts, the value of which is "derived" from the value of underlying assets or exchange rates. Derivative contracts provide flexibility in implementing investment strategy.

Forward contracts are used to manage currency exposure and mitigate risk with respect to investments held in foreign currencies. The net notional amount of the currency forwards represents the volume of outstanding transactions and serves as the basis upon which the return and market value of the contract is determined.

The details of derivative contracts outstanding are as follows:

	<u>2018</u> \$	<u>2017</u> \$
Notional Amount	<u>565,472,867</u>	501,483,998
Fair Value	(5,893,616)	20,756,720

Notes to Financial Statements June 30, 2017 and 2018

#### 3. Investments and Derivatives (continued...)

#### c) Fair Value Disclosure

Fund investment assets recorded at fair value have been categorized based upon a fair value hierarchy on significant inputs used in measuring fair value. The following fair value hierarchy tables present information about the Fund's assets measured at fair value on a recurring basis at June 30, 2017 and June 30, 2018.

The three levels of the fair value hierarchy are as follows:

Level 1: Inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that the investment manager has the ability to access at the measurement date. Level 1 primarily includes publicly listed investments.

Level 2: Inputs other than quoted prices that are observable either directly or indirectly, including inputs in markets that are not considered to be active. Level 2 primarily includes debt securities and derivative contracts not traded in an open market.

Level 3: Inputs that are unobservable. There is little, if any, market activity. Inputs into the determination of fair value require significant management judgment and/or estimation. Level 3 primarily consists of foreign infrastructure investments.

The following tables illustrate the classifications of the Fund's financial instruments using the fair value hierarchy as at June 30.

	2018				
	Level 1	Level 2	Level 3	<u>Total</u>	
	\$	\$	\$	\$	
Cash and Short-Term Investments	12,716,045	-	_	12,716,045	
Long Core Plus Bond	be .	187,258,532	_	187,258,532	
Core Plus Bond	-	751,456,170	-	751,456,170	
Canadian Equities	300,655,195	-	-	300,655,195	
Global Equities	891,819,289	_	_	891,819,289	
Canadian Real Estate	-	79,059,986	*	79,059,986	
Global Real Estate	•	171,766,367	-	171,766,367	
Global Infrastructure	53,779,421	-	99,588,920	153,368,341	
Currency Overlay		(5,893,616)		<u>(5,893,616</u> )	
Totals	<u>1,258,969,950</u>	<u>1,183,647,439</u>	99,588,920	2,542,206,309	
Total financial assets at fair value				2,542,206,309	
Fund's pro-rated share				30. <u>7348%</u>	
Fund investments*				<u>781,341,676</u>	

<sup>\*</sup>Rounded

Notes to Financial Statements June 30, 2017 and 2018

### 3. Investments and Derivatives (continued...)

### c) Fair Value Disclosure (continued...)

	2017			
	Level 1	Level 2	Level 3	<u>Total</u>
	\$	\$	\$	\$
Cash and Short-term Investments	33,732,783	-	•	33,732,783
Long Core Plus Bond		140,581,913	-	140,581,913
Core Plus Bond	-	713,287,095	_	713,287,095
Canadian Equities	285,148,458	-		285,148,458
Global Equities	820,119,249	-	-	820,119,249
Canadian Real Estate	-	69,249,639	-	69,249,639
Global Real Estate	<del></del>	152,910,390	-	152,910,390
Global Infrastructure	84,026,299	to:	60,022,311	144,048,610
Currency Overlay		20,756,720		20,756,720
Totals	1,223,026,789	1,096,785,757	60,022,311	2,379,834,857
Total financial assets at fair value			-	2,379,834,857
Fund's pro-rated share				31.0950%
Fund investments*				<u>740,010,181</u>

<sup>\*</sup> Rounded

There were no significant transfers between any financial instruments during the years ended June 30, 2017 and June 30, 2018.

The following table details changes in fair value measurement in Level 3 of the fair value hierarchy:

	<u>2018</u>	<u>2017</u>
	\$	\$
Level 3 investments, July 1	60,022,311	34,754,819
Net purchases	33,697,734	20,331,544
Realized gains	24,337	**
Unrealized gains	3,730,717	5,481,064
Foreign exchange gains (losses)	<u>2,113,821</u>	(545,116)
Level 3 investments at fair value	99,588,920	60,022,311
Fund's pro-rated share	<u>30.7348%</u>	<u>31,0950%</u>
Level 3 investments, June 30*	<u>30,608,443</u>	<u>18,663,937</u>

<sup>\*</sup>Rounded

### d) Investment Risk Management

Risk management relates to the understanding and active management of risks associated with all areas of the business and the associated operating environment. Investments are primarily exposed to foreign currency, interest rate, price, credit, and liquidity risks. The Fund has set formal goals, policies, and operating procedures that establish an asset mix among equity and fixed income, require diversification of investments within categories, and set limits on the size of exposure to individual

Notes to Financial Statements June 30, 2017 and 2018

#### 3. Investments and Derivatives (continued...)

### d) Investment Risk Management (continued...)

investments and counter parties. Risk and credit considerations are periodically assessed in consultation with external consultants, the Department of Finance, and the Master Trust Investment Advisory Committee. Plan sponsor oversight, procedures, and compliance functions are incorporated into Fund processes to achieve consistent controls and to mitigate operational risk.

#### (i) Interest Rate Risk

Interest rate risk refers to the fact that the Fund's financial position will change with market interest rate changes as fixed income securities are sensitive to changes in nominal interest rates. Interest rate risk is inherent in the management of a pension plan due to prolonged timing differences between cash flows related to the Fund's assets and liabilities.

Assuming all other variables are held constant, a one percentage point change in nominal interest rates would change the fair value of the Fund by \$24.6 million (2017 - \$22.9 million).

	Value of Fixed Income <u>Securities</u> \$	Weighted Average <u>Duration</u> yrs	Percentage Point Change	Impact on Fair Value of the <u>Master Trust</u> \$	Fund's Pro-rated <u>Share</u> %	Pro-rated Impact on Fair Value <u>of the Fund</u> \$
2017	853.9 m	8.63	1	73.7 m	31.0950	22.9 m
2018	938.7 m	8.51	1	79.9 m	30.7348	24.6 m

### (ii) Price Risk

Price risk is the risk of fluctuation in market values of investments from influences specific to a particular investment or from influences on the market as a whole. Price risk is managed by the Fund through the use of diversified investment portfolios traded on various markets and across various industries. Assuming all other variables are held constant, a 10 percent change in market values of all public equities would change the fair value of the Fund by \$44.4 million (2017 - \$41.3 million).

	Value of Public <u>Equities</u>	Percentage Change	Impact on Fair Value of the <u>Master Trust</u>	Fund's Pro-rated Share	Pro-rated Impact on Fair Value of the Fund
	Þ	%	\$	%	\$
2017	1,327.4 m	10	132.7	31.0950	41.3 m
2018	1,443.3 m	10	144.3	30.7348	44.4 m

Notes to Financial Statements June 30, 2017 and 2018

### 3. Investments and Derivatives (continued...)

#### d) Investment Risk Management (continued...)

#### (iii) Credit Risk

Credit risk is the risk of loss in the event the counter party to a transaction fails to discharge an obligation and causes the other party to incur a loss. Credit risk associated with the Fund is periodically assessed in consultation with external consultants, the Department of Finance, and the Master Trust Investment Advisory Committee.

#### **Fixed Income**

The Fund is exposed to credit risk from interest earning investments at June 30 as follows:

	2018 ( <u>millions)</u> \$	2017 ( <u>millions)</u> \$
Federal government	70.5	80.2
Provincial government	350.4	292.8
Corporate	503.2	441.1
Government agencies	<u> 14.6</u>	<u>39.4</u>
Total investment credit risk exposure	938.7	853.5
Fund's pro-rated share	<u>30.7348%</u>	<u>31.0950%</u>
Fund's investment credit risk exposure	288.5	265.4
Provincial government promissory note	<u> 196.8</u>	204.8
Fund's total credit risk exposure	<u>485.3</u>	<u>470.2</u>

All fixed income investments are considered to have low credit risk.

### **Security Lending**

The Fund participates in a Securities Lending Program whereby it lends securities for a fee to approved borrowers. To alleviate the credit risk, borrowers must provide collateral with a value of 105 percent when the value of the securities lent is denominated in a different currency and 102 percent when denominated in the same currency. The market value of the collateral is monitored by the custodian at least daily to ensure that the security thresholds are maintained. In addition, security loans are allocated across various borrowers within the program and the Fund holds indemnification coverage which mitigates the credit and market risk on the collateral.

Notes to Financial Statements June 30, 2017 and 2018

### 3. Investments and Derivatives (continued...)

#### d) Investment Risk Management (continued...)

#### (iii) Credit Risk (continued...)

The fair value of the security loans outstanding and collateral held is as follows:

	<u>2018</u> \$	<u>2017</u> \$
	Ψ	,
Total security loans outstanding	46,144,752	66,981,783
Fund's pro-rated share	<u>30.7348%</u>	<u>31.0950%</u>
Fund's security loans outstanding	<u>14,182,497</u>	<u>20,827,985</u>
Total collateral held	49,217,196	70,331,176
Fund's pro-rated share	30.7348%	<u>31.0950%</u>
Fund's collateral held	<u>15,126,807</u>	21,869,479

#### **Derivatives**

The Fund is exposed to credit related losses in the event of non performance by counter parties to derivative financial instruments. In order to mitigate this risk, the Fund deals only with highly rated counter parties, with whom International Swap and Derivative Association agreements have been executed, normally major financial institutions with a minimum credit standard of "A" rating, as supported by a recognized credit rating agency.

Credit risk represents the maximum amount that would be at risk as at the reporting date if the counter parties failed completely to perform under the contracts and if the right of offset proved to be non enforceable. Credit risk exposure on derivative financial instruments is represented by the receivable replacement cost of contracts with counter parties, less any prepayment collateral or margin received as at the reporting date.

#### (iv) Foreign Currency Risk

Foreign currency risk is the risk that the value of the future cash flow of the financial instrument will fluctuate because of changes in foreign exchange rates. Consequently, the Fund is exposed to the risk that the exchange rates of the various currencies may change in a manner that has an adverse effect on the value of the portion of the Fund's assets denominated in currencies other than the Canadian dollar. Foreign currency exposure arises from the holding of investments denominated in foreign currencies. A strategy of hedging a portion of the currency exposure is used to mitigate this risk.

Notes to Financial Statements June 30, 2017 and 2018

### 3. Investments and Derivatives (continued...)

### d) Investment Risk Management (continued...)

### (iv) Foreign Currency Risk (continued...)

The Fund's unhedged currency exposure from net investment assets as at June 30, 2017 and June 30, 2018 is summarized in the following table:

	2018	2017
	<u>(millions)</u>	(millions)
•	\$	\$
Currency		
China	21.2	16.1
Euro Zone	22.1	24.8
United Kingdom	24.6	22.7
India	10.0	8.3
Japan	85.5	93.0
Sweden	24.0	16.5
Taiwan	29.6	13.5
United States	178.5	213.1
South Africa	11.3	10.8
Other	<u>62.5</u>	37.5
Total	469.3	456.3
Fund's pro-rated share	<u>30.7348%</u>	<u>31.0950%</u>
Fund's foreign currency exposure	<u> 144.2</u>	<u>141.9</u>

After the effect of hedging, and without a change in all other variables, a 10 percent change in the Canadian dollar against all other currencies would change the fair value of the Fund by \$14.4 million (2017 - \$14.2 million).

### (v) Liquidity Risk

Liquidity risk is the risk of not meeting the cash obligations of the Fund in an efficient manner. Cash obligations are fulfilled from contributions to the Fund, cash income of the Fund, and dispositions of Fund assets as required. Cash requirements of the Fund are reviewed on an ongoing basis to provide for the orderly availability of resources to meet the financial obligations of the Fund.

The Fund's cash management policy ensures that the quality and liquidity of the investment vehicles within the portfolio are consistent with the needs of the Fund.

Notes to Financial Statements June 30, 2017 and 2018

### 4. Accrued Pension Obligation

#### a) Actuarial Valuation

The present value of the accrued pension obligation was determined using the projected unit credit method pro-rated on services and management's best estimate, as at the valuation date, of future economic events and involves economic and non-economic assumptions. The non-economic assumptions include considerations such as mortality and retirement rates. The primary economic assumptions include the return on investment, discount, inflation, and salary escalation rates.

The most recent actuarial valuations for accounting purposes, prepared by the actuarial consulting firm Morneau Shepell, disclosed a base benefit liability of \$807,541,000 as at April 1, 2018 and \$791,749,100 as at April 1, 2017.

The actuarial valuations on April 1, 2018 and April 1, 2017 were based on data as at September 1<sup>st</sup> of the previous year and the actuarial liability was then extrapolated to April 1<sup>st</sup>, based on current period benefit cost, benefit payments and interest and adjusted for changes in actuarial assumptions. As at April 1, 2017, this represents a change in methodology from the previous valuation. An actuarial valuation of the Teachers' Superannuation Fund is performed annually as at April 1<sup>st</sup> and is required to be completed by December 31<sup>st</sup> of each year.

The total accrued benefit obligation as at April 1, 2017 and 2018, consists of the following:

	<u>2018</u>	<u>2017</u>
Base benefit liability	\$807,541,000	\$791,749,100
Contingent indexation liability <sup>1</sup>	<u>162,606,300</u>	142,618,400
Total accrued benefit obligation	<u>\$970,147,300</u>	\$934,367,500

<sup>&</sup>lt;sup>1</sup> The contingent indexation liability is calculated based on total plan assets less the accrued benefit obligation assuming no future contingent indexation. This calculation does not incorporate the potential impact of future events such as contributions, gains or losses on investments, and new benefit accruals.

Notes to Financial Statements June 30, 2017 and 2018

### 4. Accrued Pension Obligation (continued...)

### a) Actuarial Valuation (continued...)

The assumptions for the most recent performed valuations are as follows:

	2018	2017	2016
Inflation	2.15%	2.20%	2.25%
Discount Rate	5.60%	5.25% for 10 years, 5.85% thereafter	5.40% for 10 years, 5.90% thereafter
Expected Rate of Return of Plan Assets	5.60%	5.25% for 10 years, 5.85% thereafter	5.40% for 10 years, 5.90% thereafter
Salary Escalation	Basic increase of 2.65% per annum + promotional scale	Basic increase of 2.70% per annum + promotional scale	Basic increase of 2.75% per annum + promotional scale
Pre-Retirement Indexation	0.70% per annum for 2018, 2.65% per annum for 16 years, 0% thereafter	1.06% per annum for 2017, 2.70% per annum for 15 years, 0% thereafter	1.50% per annum for 2016, 2.75% per annum for 12 years, 0% thereafter
Post-Retirement Indexation (includes deferred pensioners)	1.52% per annum for 2018, 2.15% per annum for 7 years, 0% thereafter	0.70% per annum for 2017, 2.20% per annum for 5 years, 0% thereafter	0.90% per annum for 2016, 2.25% per annum for 4 years, 0% thereafter
Mortality	Same	Same	CPM2014Publ with future improvements based on CPM Scale B and adjustments of 1.0 for males and 0.95 for females
Termination	Same	Same	Tenure-based scale
Retirement Age	Same	Same	Service and age - based scale
Proportion Married	Same	Males: 80% Females: 75%	Age and gender - based scale
Age Difference for Spouses	Same	Same	Males 2 years older than female spouses

Notes to Financial Statements June 30, 2017 and 2018

### 4. Accrued Pension Obligation (continued...)

### b) Extrapolation

The accrued benefit obligations at June 30, 2018 and June 30, 2017 are estimated by the Fund, based on extrapolations of the April 1, 2018 and April 1, 2017 actuarial valuations, respectively. The total accrued benefit obligations at June 30, 2018 and June 30, 2017 consist of the following:

	<u>2018</u>	<u>2017</u>
Base benefit liability	\$811,131,968	\$794,644,189
Contingent indexation liability	<u> 172,500,319</u>	<u> 154,053,090</u>
Total accrued benefit obligation	\$983,632,287	<u>\$948,697,279</u>

#### c) Sensitivity of Changes in Major Assumptions

The Fund's future experience may differ from the assumptions used in the actuarial valuation and the extrapolation. Any differences between the actuarial assumptions and future experience could be significant and will emerge as experience gains or losses in future valuations which will affect the financial position of the Fund.

### 5. Funding Policy

a) Prior to plan amendments in 2014, the province was committed to make payments if the assets of the Fund were insufficient to provide for pension payments as they became due. In addition, a funding policy existed which required the province to make special contributions when the Fund's funded level declined below 90 percent.

Special contributions made under this funding policy were as follows:

(i) As a result of an unfunded liability at July 1, 2011, the province made a special contribution through the signing of a \$80,369,000 promissory note. The note, issued December 11, 2012, is held by the Fund and is receivable in ten equal annual instalments of \$8,063,900 beginning April 1, 2013. Interest on the note is accrued from April 1, 2012, at a rate of 2.9 percent per annum, and is receivable semi-annually on April 1 and October 1.

Notes to Financial Statements June 30, 2017 and 2018

### 5. Funding Policy (continued...)

#### a) (continued...)

The following is a schedule of principal and interest payments as disclosed in the promissory note:

<u>Principal Payments</u>		<u>Interes</u>	<u>t Payments</u>
Date of Payment	Principal Payment \$	<u>April 1</u> \$	October 1 \$
April 1, 2012	-	_	1,165,351
April 1, 2013	8,036,900	1,165,351	1,048,815
April 1, 2014	8,036,900	1,048,815	932,281
April 1, 2015	8,036,900	932,281	815,746
April 1, 2016	8,036,900	815,746	699,210
April 1, 2017	8,036,900	699,210	582,675
April 1, 2018	8,036,900	582,675	466,140
April 1, 2019	8,036,900	466,140	349,605
April 1, 2020	8,036,900	349,605	233,070
April 1, 2021	8,036,900	233,070	116,535
April 1, 2022	<u>8,036,900</u>	<u>116,535</u>	
	<u>80,369,000</u>	<u>6,409,428</u>	<u>6,409,428</u>

- b) As part of the plan amendments in 2014, the province's requirement to make payments if the assets of the Fund were insufficient to provide for pension payments as they became due was removed and the funding policy was rescinded.
  - Effective April 1, 2016, if the funded benefits ratio of the Plan falls below 100 percent (of base benefits) and, after reflecting the future contributions as described in Note 1(b), the Plan is still not projected to achieve a funded benefits ratio of at least 100 percent within five years, the province is required to make an additional contribution equal to one fifth of the additional amount required to restore the funded benefits ratio to 100 percent within five years. This is reviewed on an annual basis and the contribution amount will be subject to change each year.

In addition, the province committed to make a one-time transitional contribution (transitional government funding amount) to the Plan on or before December 31, 2014 such that, if that contribution had been made on January 1, 2014, the total assets of the Fund would have equalled:

- 122 percent of the total liabilities of the Fund excluding the liabilities for salary indexing and pension indexing for any year after 2013; plus
- 100 percent of the liabilities for salary indexing and pension indexing for 2014, 2015, and 2016.

**Principal Payments** 

Notes to Financial Statements June 30, 2017 and 2018

### 5. Funding Policy (continued...)

January 1, 2028

January 1, 2029

#### b) (continued...)

The transitional government funding amount was contributed to the Fund by the Province of Prince Edward Island through the signing of a \$164,640,100 promissory note. The note, issued December 22, 2014, is held by the Fund and is receivable in seven equal annual instalments of \$23,520,014 beginning January 1, 2023. Interest on the note is accrued from January 1, 2014 at a rate of 4.14 percent per annum and is receivable semi-annually on January 1 and July 1.

**Interest Payments** 

486,865

40,896,601

973,729

486,865

40,896,601

The following is a schedule of principal and interest payments as disclosed in the promissory note:

Date of Payment	Principal Payment \$	<u>January 1</u> \$	<u>July 1</u> \$
January 1, 2014	-	_	3,408,050
January 1, 2015	-	3,408,050	3,408,050
January 1, 2016	-	3,408,050	3,408,050
January 1, 2017	-	3,408,050	3,408,050
January 1, 2018	-	3,408,050	3,408,050
January 1, 2019	-	3,408,050	3,408,050
January 1, 2020		3,408,050	3,408,050
January 1, 2021	-	3,408,050	3,408,050
January 1, 2022	_	3,408,050	3,408,050
January 1, 2023	23,520,014	3,408,050	2,921,186
January 1, 2024	23,520,014	2,921,186	2,434,321
January 1, 2025	23,520,014	2,434,321	1,947,457
January 1, 2026	23,520,014	1,947,457	1,460,593
January 1, 2027	23,520,014	1,460,593	973,729

Subsection 9(5) of the *Teachers Superannuation Act* stipulates that none of the above promissory notes may be cancelled or recalled by the province prior to maturity unless the province contributes to the Fund assets equal to or greater than the value of the promissory notes on the date of cancellation or recall. The notes are non-transferrable.

23,520,014

23,520,016

164,640,100

Notes to Financial Statements June 30, 2017 and 2018

### 6. Operating Expenses

The Fund is charged with administrative and operating expenses. The following is a summary of these expenses.

		<u>2018</u> \$	<u>2017</u> \$
Administrative expenses	<ul><li>pension section</li><li>investment section</li></ul>	341,208 <u>56,994</u> 398,202	312,319 <u>60,572</u> 372,891
Consulting fees Actuarial fees Investment expenses		346,622 75,181	407,984 101,138
Custodian Monitoring Management		28,412 50,211 <u>2,394,447</u> 3,293,075	58,697 125,328 <u>1,802,270</u> 2,868,308

### 7. Related Party Transactions

The Province of Prince Edward Island is the sponsor of the Plan. At the financial statement date, the province has committed to the funding requirements as defined by the Funding Policy (Note 5). As a participating employer, the province contributes regular bi-weekly employee and eligible prior period service contributions. Employer contributions receivable from the province as at June 30, 2018, totalled \$1,262,023 (2017 - \$1,221,609).

The province provides pension and investment administration services to the Fund. A portion of the province's costs relating to these services is recovered annually from the Fund. Costs recovered for the pension section totalled \$289,680 (2017 - \$265,166) and recoveries related to the investment section totalled \$56,994 (2017 - \$60,572). Other costs recovered by the province totalled \$37,698 (2017 - \$42,485).

Total notes, special contribution and interest receivable from the province at June 30, 2018, was \$200,427,546 (2017 - \$208,522,396).

### 8. Capital Management

The main objective of the Fund is to sustain a level of net assets in order to meet the pension obligations of the Fund. The Plan sponsor manages the contributions received and benefits issued as required by the *Teachers' Superannuation Act*.

Notes to Financial Statements June 30, 2017 and 2018

#### 8. Capital Management (continued...)

In an effort to utilize economies of scale, contributions for the province's three registered pension plans are pooled and invested together in the province's Master Trust. Each pension plan holds units of the Master Trust in proportion to the value of contributions made. The Province has developed a Statement of Investment Policies and Procedures (SIP&P) to provide the framework for how the Master Trust's assets are to be invested, monitored, and evaluated. Assets are managed by engaging knowledgeable, external investment managers who are charged with the responsibility of investing new and existing funds in accordance with the SIP&P. A Master Trust Investment Advisory Committee exists for the purpose of protecting the pension fund assets, monitoring asset mix, reviewing costs, reviewing investment returns, and assessing investment manager performance, as well as providing advice to the Minister of Finance who serves as Trustee for the province's three registered pension plans.

#### 9. Commitments

The Master Trust has entered into an arrangement with Global Infrastructure Partners (GIP). GIP is an independent infrastructure fund manager that invests in high quality infrastructure assets in the energy, transport, water, and waste sectors. The Master Trust has committed to invest \$35 (US) million in its GIP II Fund; \$31.8 (US) million has been invested as of the audit report date. The Master Trust Fund has committed to invest \$75 (US) million in its GIP III Fund; \$56.4 (US) million has been invested as of the audit report date.

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