

Financial Statements of

**PUBLIC SERVICE SUPERANNUATION PLAN**

Year ended March 31, 2016



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## INDEPENDENT AUDITORS' REPORT

To the Public Service Superannuation Plan Trustee Inc.

We have audited the accompanying financial statements of the Public Service Superannuation Plan, which comprise the statement of financial position as at March 31, 2016, the statements of changes in net assets available for benefits, changes in pension obligations and changes in surplus (deficit) for the year then ended, and notes, comprising 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.

### *Auditors' Responsibility*

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about 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 our 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, we consider 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 accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

### *Opinion*

In our opinion, the financial statements present fairly, in all material respects, the financial position of the Public Service Superannuation Plan as at March 31, 2016, and the changes in its net assets available for benefits, changes in its pension obligations and changes in surplus for the year then ended in accordance with Canadian accounting standards for pension plans.

Chartered Accountants  
June 21, 2016  
Halifax, Canada

# **PUBLIC SERVICE SUPERANNUATION PLAN**

Financial Statements

Year ended March 31, 2016

## Financial Statements

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# PUBLIC SERVICE SUPERANNUATION PLAN

Statement of Financial Position  
(in thousands of dollars)

March 31, 2016, with information for 2015

	2016	2015
<b>Net Assets Available for Benefits</b>		
<b>Assets</b>		
Cash	\$ 50,517	\$ 43,877
Contributions receivable:		
Employers'	4,588	6,721
Employees'	4,427	6,139
Receivable from pending trades	8,075	7,733
Accounts receivable	199	1,815
Due from administrator (note 14)	2,731	2,820
Accrued investment income	17,683	19,016
<u>Investments (notes 5)</u>	<u>5,464,074</u>	<u>5,478,685</u>
Total assets	5,552,294	5,566,806
<b>Liabilities:</b>		
Pension benefits payable	\$ -	\$ 615
Payable for pending trades	25,150	11,629
Due to administrator (note 14)	377	828
Accounts payable and accrued liabilities	4,503	6,638
<u>Investment liabilities (note 5)</u>	<u>10,666</u>	<u>8,033</u>
Total liabilities	40,696	27,743
Net assets available for benefits	5,511,598	5,539,063
Present value of university pension plan transfer deficit payments (note 8)	2,431	-
Present value of service purchases via instalment payments (note 7)	484	318
<u>Fair value of net assets available for benefits</u>	<u>\$ 5,514,513</u>	<u>\$ 5,539,381</u>
<b>Accrued Pension Obligation and (Deficit) Surplus</b>		
Accrued pension obligation (note 9)	\$ 5,563,552	\$ 5,200,853
(Deficit) Surplus:		
Funding (deficit) surplus (note 9)	(49,039)	338,528
	(49,039)	338,528
Commitments (note 10)		
<u>Accrued pension obligation and surplus (deficit)</u>	<u>\$ 5,514,513</u>	<u>\$ 5,539,381</u>

See accompanying notes to financial statements.

Approved:

Original signed by 'Ron Smith' Chair, Public Service Superannuation Trustee Inc.

Original signed by 'Doug Moodie' Vice Chair, Public Service Superannuation Trustee Inc.

# PUBLIC SERVICE SUPERANNUATION PLAN

Statement of Changes in Net Assets Available for Benefits  
(in thousands of dollars)

Year ended March 31, 2016, with information for 2015

	2016	2015
<b>Increase in Assets</b>		
Contributions (note 4)	\$ 185,496	\$ 186,957
University pension plan transfers (note 8)	127,836	-
Transfers from other pension plans	5,163	6,408
Special payments (note 8)	195	-
Interest on university pension plan transfer deficits (note 8)	124	-
Investment activities (note 5)	154,043	143,344
Change in market value of investments (note 5)	-	417,113
Total increase in assets	472,857	753,822
<b>Decrease in Assets</b>		
Benefits paid (note 11)	323,142	294,359
Transfers to other pension plans	3,525	2,771
Administrative expenses (note 12)	22,805	21,323
Change in market value of investments (note 5)	150,850	-
Total decrease in assets	500,322	318,453
Net (decrease) increase in net assets available for benefits	(27,465)	435,369
Net assets available for benefits, beginning of year	5,539,063	5,103,694
Net assets available for benefits, end of year	\$ 5,511,598	\$ 5,539,063

See accompanying notes to financial statements.

# PUBLIC SERVICE SUPERANNUATION PLAN

Statement of Changes in Pension Obligations  
(in thousands of dollars)

Year ended March 31, 2016, with information for 2015

	2016	2015
Accrued pension obligation, beginning of year	\$ 5,200,853	\$ 4,890,120
<b>Increase in accrued pension benefits:</b>		
Interest on accrued pension obligation	330,254	317,858
Contributions, special payments and transfers from other pension plans	318,690	193,365
Changes in actuarial assumptions	114,077	-
Net experience losses	-	149,114
	763,021	660,337
<b>Decrease in accrued pension benefits:</b>		
Benefits paid and transfers to other pension plans	326,667	297,130
Contributions in excess of current service cost	60,156	48,012
Net experience gains	13,499	-
Changes in actuarial assumptions	-	4,462
	400,322	349,604
Net increase in accrued pension benefits	362,699	310,733
Accrued pension obligation, end of year	\$ 5,563,552	\$ 5,200,853

Statement of Changes in Surplus (Deficit)  
(in thousands of dollars)

Year ended March 31, 2016, with information for 2015

	2016	2015
Surplus, beginning of year	\$ 338,528	\$ 213,978
Net (decrease) increase in net assets available for benefits	(27,465)	435,369
Net increase in present value of university pension plan transfer deficit payments	2,431	-
Net increase (decrease) in present value of service purchases via instalment payments	166	(86)
Net increase in accrued pension obligation	(362,699)	(310,733)
(Deficit) surplus, end of year	\$ (49,039)	\$ 338,528

See accompanying notes to financial statements.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements  
(in thousands of dollars)

Year ended March 31, 2016

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## 1. Authority and description of Plan:

The following description of the Public Service Superannuation Plan (the "Plan") is a summary only. For more complete information, reference should be made to the Plan legislative documents and agreements.

General:

The Plan is governed by the Public Service Superannuation Act (the "Act") as part of the Acts of Nova Scotia. It is a contributory defined benefit pension plan that covers employees of the Province of Nova Scotia (the "Province") and certain other public sector organizations. The Act established the Nova Scotia Public Service Superannuation Fund (the "Fund") for the purpose of crediting employer and employee contributions, investment earnings and meeting the Plan's obligations.

The detailed provisions of the Plan, including pension eligibility criteria and benefit formulas, are also contained in the Act and in the Regulations made under the Act.

Effective April 1, 2013, the Plan and the Fund transitioned to a new joint governance structure. The newly created Public Service Superannuation Plan Trustee Inc. ("PSSPTI") assumed fiduciary responsibility for the Plan and the Fund from the Minister of Finance and Treasury Board. As of April 1, 2013, the Minister of Finance and Treasury Board no longer has further legal liability for the Plan and the Fund. These changes are outlined in the 2012 Public Service Superannuation Act. That act repealed the existing Public Service Superannuation Act and replaced it with a new Public Service Superannuation Act.

The PSSPTI is responsible for the administration of the Plan and the investment management of the Fund assets. The investment of the Fund assets is guided by the Plan's Statement of Investment Policies & Goals (the "SIP&G") as written by the PSSPTI. The SIP&G sets out the parameters within which the investments are made. These parameters include permissible investments and the policy asset mix. The Investment Beliefs, also found within the SIP&G, state the general principles upon which the investments are made.

Eligibility:

All employees of the Province (and other participating employers) as defined in accordance with the Plan provisions must join the Plan on the date of their employment.

Funding:

The Plan is funded by investment earnings and employee and matching employer contributions of 8.4% of salary up to the Year's Maximum Pensionable Earnings (the "YMPE") and 10.9% of salary above the YMPE. The YMPE is a figure set annually by the Canada Pension Plan (the "CPP").

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 1. Authority and description of Plan (continued):

Retirement benefits:

The basic pension formula is 2% multiplied by the number of years of pensionable service multiplied by the highest average pensionable salary of the best five years. Vesting occurs after two years. Pensions are integrated with the CPP benefits at age 65.

Plan members are eligible for a pension upon reaching any of the following criteria:

- age 50 with an age plus service factor of 80 – “Rule of 80” (age 55 with an age plus service factor of 85 for members first hired by a participating employer on or after April 6, 2010);
- age 55 with two years of service (reduced pension);
- age 60 with two years of service.

Death benefits:

Upon the death of a vested member, the surviving spouse is entitled to receive 66.67% of the member's pension benefit payable for life (60% for the surviving spouse of a member first hired by a participating employer on or after April 6, 2010). Eligible children are entitled to receive 10% of the member's pension benefit, payable until age 18 (or 25 while still in school).

Termination benefits:

Upon termination of employment, a vested member may choose to defer their pension until they satisfy one of the above eligibility criteria, or they may remove their funds from the plan in the form of a commuted value.

Refunds:

The benefit payable upon termination or death of a non-vested member, or upon death prior to retirement of a vested member with no eligible survivors, is a lump sum refund of the member's contributions with interest.

Indexing:

From January 1, 2011 to January 1, 2015, indexing of pensions in pay will be at a rate of 1.25% annually. Subject to the conditions specified in the Act, starting January 1, 2016, and through January 1, 2020, the annual rate of indexing will be 0.85% per year.



# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 2. Basis of preparation:

### (a) Basis of presentation:

The Plan adopted Canadian accounting standards for pension plans in Part IV of the Chartered Professional Accountants Canada (CPA) Handbook, Section 4600 Pension Plans ("Section 4600"), on March 1, 2011 with a transition date of March 1, 2010. Section 4600 provides specific accounting guidance on investments and pension obligations. For accounting policies that do not relate to either investments or pension obligations, the Plan must consistently comply with either International Financial Reporting Standards ("IFRS") in Part I of the CPA Canada Handbook or accounting standards for private enterprises in Part II of the CPA Canada Handbook. The Plan has elected to comply on a consistent basis with IFRS in Part I of the CPA Canada Handbook. To the extent that IFRS in Part I is inconsistent with Section 4600, Section 4600 takes precedence.

Consistent with Section 4600, investment assets are presented on a non-consolidated basis even when the investment is in an entity over which the Plan has effective control. Earnings of such entities are recognized as income is earned and as dividends are declared. The Plan's total investment income includes valuation adjustments required to bring the investments to their fair value.

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

These financial statements were authorized for issue by the Board of Trustees of the Public Service Superannuation Plan Trustee Inc. on June 23, 2016.

### (b) Basis of measurement:

The financial statements have been prepared on the historical cost basis except for financial instruments which are measured at fair value through the statement of changes in net assets available for benefits and derivative financial instruments which are measured at fair value. Units of holding companies held are measured at the fair value of the underlying assets.

### (c) Functional and presentation currency:

These financial statements are presented in Canadian dollars, which is the Plan's functional currency.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 2. Basis of preparation (continued):

### (d) Use of estimates and judgments:

The preparation of the financial statements in conformity with Section 4600 and IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the statement of financial position, the reported amounts of changes in net assets available for benefits and accrued pension benefits during the year. Actual results may differ from those estimates. Significant estimates included in the financial statements relate to the valuation of real estate, infrastructure and private equity investments and the determination of the accrued pension obligation.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future years affected.

## 3. Significant accounting policies:

### (a) Investment transactions, income recognition and transactions costs:

#### (i) Investment transactions:

Investment transactions are accounted for on a trade date basis.

#### (ii) Income recognition:

Income from investments is recorded on an accrual basis and includes interest, dividends and operating income/loss from real estate, as well as gains and losses that have been realized on disposal of investments and the unrealized appreciation and depreciation in the fair value of investments.

#### (iii) Transaction costs:

Brokers' commissions and other transaction costs are recorded in the statement of changes in net assets available for benefits when incurred.

### (b) Foreign currency translation:

Transactions denominated in foreign currencies are translated into Canadian dollars at the rates of exchange prevailing on the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies at the reporting date are retranslated into Canadian dollars at the exchange rate at that date.

Foreign currency differences arising on retranslation are recognized in the statement of changes in net assets available for benefits as a change in net unrealized gains (loss).

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 3. Significant accounting policies (continued):

### (c) Financial assets and liabilities:

#### (i) Non-derivative financial assets:

Financial assets are recognized initially on the trade date, which is the date that the Plan becomes a party to the contractual provisions of the instrument.

The Plan classifies all of its financial assets at fair value through the statement of changes in net assets available for benefits if it is classified as held for trading or is designated as such upon initial recognition. Financial assets are designated at fair value through the statement of changes in net assets available for benefits if the Plan manages such investment and makes purchase and sale decisions based on their fair value in accordance with the Plan's documented risk management or investment strategy. Upon initial recognition, attributable transaction costs are recognized in the statement of changes in net assets available for benefits as incurred. Financial assets are measured at fair value and changes therein are recognized in the statement of changes in net assets available for benefits.

#### (ii) Non-derivative financial liabilities:

All financial liabilities are recognized initially on the trade date at which the Plan becomes a party to the contractual provisions of the instrument.

Financial assets and liabilities are offset and the net amount presented in the statement of financial position, when and only when, the Plan has a legal right to offset the amounts and it intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

The Plan considers its amounts payable to be a non-derivative financial liability.

#### (iii) Derivative financial instruments:

Derivative financial instruments are recognized initially at fair value and attributable transaction costs are recognized in the statement of changes in net assets available for benefits as incurred. Subsequent to initial recognition, derivatives are measured at fair value, and all changes are recognized immediately in the statement of changes in net assets available for benefits.

Derivative-related assets and liabilities are presented in the statement of financial position. The net amount is presented in the statement of financial position, when and only when, the Plan has a legal right to offset the amounts and it intends either to settle on a net basis or to realize the asset and settle the liability simultaneously.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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### 3. Significant accounting policies (continued):

(d) 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.

As allowed under IFRS 13, if an asset or a liability measured at fair value has a bid and an ask price, the price within the bid-ask spread that is the most representative of fair value in the circumstances shall be used to measure fair value. The Plan uses closing market price as a practical expedient for fair value measurement.

When available, the Plan 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 Plan 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, discounted cash flow analyses and option pricing models.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e. the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets. When a transaction price provides the best evidence of fair value at initial recognition, the financial instrument is initially measured at the transaction price and any difference between this price and the value initially obtained from a valuation model is subsequently recognized in profit or loss on an appropriate basis over the life of the instrument but not later than when the valuation is supported wholly by observable market data or the transaction is closed out.

All changes in fair value, other than interest and dividend income and expense, are recognized in the statement of changes in net assets available for benefits as part of the change in market value of investments.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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### 3. Significant accounting policies (continued):

Fair values of investments are determined as follows:

- (i) Fixed income securities, real return bonds and equities are valued at year-end quoted closing prices, where available. Where quoted prices are not available, estimated fair values are calculated using comparable securities.
- (ii) Short-term notes, treasury bills, repurchase agreements and term deposits maturing within a year are stated at cost, which together with accrued interest income approximates fair value given the short-term nature of these investments.
- (iii) Pooled fund investments include investments in fixed income, equities, real estate and commodities. Pooled funds are valued at the unit values supplied by the pooled fund administrator, which represent the Plan's proportionate share of underlying net assets at fair values determined using closing market prices. These net asset values are reviewed by management.
- (iv) Directly held real estate is valued based on estimated fair values determined by appropriate techniques and best estimates by management, appraisers, or both. Where external appraisers are engaged to perform the valuation, management ensures the appraisers are independent and compares the assumptions used by the appraisers with management's expectations based on current market conditions and industry practice to ensure the valuation captures the business and economic conditions specific to the investment.
- (v) Private fund investments include investments in private equity, real estate and infrastructure assets. The fair value of a private fund investment where the Plan's ability to access information on underlying individual fund investments is restricted, such under the terms of a limited partnership agreement, is equal to the value provided by the fund's general partner unless there is specific and objectively verifiable reason to vary from the value provided by the general partner.
- (vi) Derivatives, including futures, options, interest rate swaps, credit default swaps, and currency forward contracts, are valued at year-end quoted market prices, interest, spot and forward rates, where available. Where quoted prices are not available, appropriate alternative valuation techniques are used to determine fair value. The gains or losses from derivative contracts are included in the realized and unrealized gains or losses on investments.
- (viii) Absolute return strategy investments, comprised of hedge funds, are recorded at fair value based on net asset values obtained from each of the hedge funds' administrators. These net asset values are reviewed by management.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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### 3. Significant accounting policies (continued):

(e) Non-investment assets and liabilities:

The fair value of non-investment assets and liabilities are equal to their amortized cost value and are adjusted for foreign exchange where applicable.

(f) Receivable/payable from pending trades:

For securities transactions, the fair value of the receivable from pending trades and the payable from pending trades approximate their carrying amounts due to their short-term nature.

(g) Accrued pension benefit obligation:

The value of the accrued pension benefit obligation of the Plan is based on a going concern method actuarial valuation prepared by an independent firm of actuaries using the projected unit credit method as at December 31 and then extrapolated to March 31. The accrued pension benefit obligation and its extrapolation is measured in accordance with accepted actuarial methods using actuarial assumptions and methods adopted by the PSSPTI for the purpose of establishing the long term funding requirements of the Plan. The actuarial valuation and extrapolated accrued pension benefit obligation included in the financial statements is consistent with the valuation for funding purposes.

(h) Contributions:

Basic contributions from employers and members due to the Plan as at the end of the year are recorded on an accrual basis. Service purchases that include but are not limited to leaves of absence and transfers from other pension plans are recorded and service is credited when the purchase amount is received.

(i) Benefits:

Benefit payments to retired members, commuted value payments and transfers to other pension plans are recorded in the period in which they are paid. Accrued benefits are recorded as part of the accrued pension benefit obligation.

(j) Administrative expenses:

Administrative expenses, incurred for plan administration and direct investment management services, are recorded on an accrual basis. Plan administration expenses represent expenses incurred to provide direct services to the Plan members and employers. Investment management expenses represent expenses incurred to manage the Fund. Base external manager fees for portfolio management are expensed in investment management expenses as incurred.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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### 3. Significant accounting policies (continued):

(k) Actuarial value of net assets and actuarial value adjustment:

The actuarial value of net assets of the Plan is used in assessing the funding position of the Plan, including the determination of contribution rates. The actuarial value of net assets is determined by smoothing investment returns above or below the actuarial long-term rate of return assumption over a five-year period. The fair value of net assets is adjusted by the unrecognized actuarial value adjustment to arrive at the actuarial value of net assets.

(l) Income taxes:

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

(m) Adoption of new accounting standards:

The following standard is not yet effective for the year ended March 31, 2016, and has not been applied in preparing these financial statements.

- IFRS 9, Financial Instruments, introduces new requirements for the classification and measurement of financial assets. Financial assets are classified and measured based on the business model in which they are held and the characteristic of their contractual cash flows. The standard introduces additional changes relating to financial liabilities and amends the impairment model. The International Accounting Standards Board ("IASB") has determined the mandatory effective date for IFRS 9 will be for the annual periods beginning on or after January 1, 2018. The Plan will evaluate the impact of the change to the financial statements based on the characteristics of financial instruments outstanding at the time of adoption.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 4. Contributions:

	2016	2015
Employer:		
Matched current service	\$ 90,493	\$ 91,181
Matched past service	1,009	1,057
	<u>91,502</u>	<u>92,238</u>
Employee:		
Matched current service	90,503	91,298
Unmatched current service	453	337
Matched past service	1,009	1,057
Unmatched past service	2,029	2,027
	<u>93,994</u>	<u>94,719</u>
	<u>\$ 185,496</u>	<u>\$ 186,957</u>



# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 5. Investments and derivatives:

(a) The fair value of the Plan's investments and related income is summarized in the following table:

	As at March 31, 2016		As at March 31, 2015	
	Assets	%	Assets	%
<b>Investment assets</b>				
<b>Fixed income</b>				
Money market	\$ 106,474	1.9	\$ 124,306	2.3
Canadian bonds & debentures	673,297	12.3	677,922	12.4
Non-Canadian bonds & debentures	781,198	14.3	754,359	13.8
Canadian real return bonds	249,898	4.6	296,623	5.4
<b>Equities</b>				
Canadian	682,095	12.5	484,120	8.8
US	533,265	9.8	589,663	10.8
Global	648,764	11.9	913,192	16.7
<b>Real Assets</b>				
Real estate	622,446	11.4	582,138	10.6
Infrastructure	320,826	5.9	269,281	4.9
Commodities	130,005	2.4	160,643	2.9
<b>Absolute Return Strategies</b>				
Hedge funds	591,944	10.7	619,972	11.3
<b>Derivatives</b>				
Derivative-related receivables	123,862	2.3	6,466	0.1
	\$ 5,464,074	100.0	\$ 5,478,685	100.0
<b>Investment liabilities</b>				
<b>Derivatives</b>				
Derivative-related payables	(10,666)	100.0	(8,033)	100.0
	\$ (10,666)	100.0	\$ (8,033)	100.0
Net investments	\$ 5,453,408		\$ 5,470,652	

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 5. Investments and derivatives (continued):

As at March 31, 2016	Investment income	Changes in market value of investments and derivatives		
		Realized	Unrealized	Total
Fixed income	\$ 67,493	\$ 43,911	\$ (73,321)	\$ (29,410)
Equities	47,464	112,293	(190,963)	(78,670)
Real assets	39,365	13,216	6,738	19,954
Absolute return strategies	-	11,725	(20,977)	(9,252)
Derivatives	(972)	(168,234)	114,762	(53,472)
Other	693	-	-	-
<b>Total</b>	<b>\$ 154,043</b>	<b>\$ 12,911</b>	<b>\$ (163,761)</b>	<b>\$ (150,850)</b>

As at March 31, 2015	Investment income	Changes in market value of investments and derivatives		
		Realized	Unrealized	Total
Fixed income	\$ 66,489	\$ 55,706	\$ 126,752	\$ 182,458
Equities	42,804	207,179	43,779	250,958
Real assets	32,405	(3,613)	15,725	12,112
Absolute return strategies	-	5,187	103,694	108,881
Derivatives	1,011	(125,585)	(8,879)	(137,464)
Other	635	137	31	168
<b>Total</b>	<b>\$ 143,344</b>	<b>\$ 136,011</b>	<b>\$ 281,102</b>	<b>\$ 417,113</b>

### (b) Derivatives:

Derivatives are financial contracts, the value of which is "derived" from the value of underlying assets or interest or exchange rates. Derivatives provide flexibility in implementing investment strategies. The Plan utilizes such contracts to enhance investment returns and for managing exposure to interest rate and foreign currency volatility.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 5. Investments and derivatives (continued):

Notional amounts of derivative contracts are the contract amounts used to calculate the cash flows to be exchanged. They represent the contractual amount to which a rate or price is applied for computing the cash to be paid or received. Notional amounts are the basis upon which the returns from, and the fair value of, the contracts are determined. They do not necessarily indicate the amounts of future cash flows involved or the current fair value of the derivative contracts. They are a common measure of volume of outstanding transactions but do not represent credit or market risk exposure. The derivative contracts become favourable (assets) or unfavourable (liabilities) as a result of fluctuations in either market rates or prices relative to their terms. The aggregate notional amounts and fair values of derivative contracts can fluctuate significantly.

Derivative contracts, transacted either on a regulated exchange market or in the over-the-counter ("OTC") market, directly between two counterparties include the following:

### Futures

Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margining. The futures contracts that the Plan enters into are as follows:

- Government futures - contractual obligations to either buy or sell at a fixed value (the contracted price) government fixed income financial instruments at a predetermined future date. They are used to adjust interest rate exposure and replicate government bond positions. Long future positions are backed with high grade, liquid debt securities.
- Money market futures - contractual obligations to either buy or sell money market financial instruments at a predetermined future date at a specified price. They are used to manage exposures at the front end of the yield curve. Futures are based on short term interest rates and do not require delivery of an asset at expiration. Therefore they do not require cash backing.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 5. Investments and derivatives (continued):

### Options

Options are contractual agreements under which the seller (writer) grants the purchaser the right, but not the obligation, either to buy (call option) or sell (put option), a security, exchange rate, interest rate, or other financial instrument or commodity at a predetermined price, at or by a specified future date. The seller (writer) of an option can also settle the contract by paying the cash settlement value of the purchaser's right. The seller (writer) receives a premium from the purchaser for this right. Purchased options are used to manage interest rate volatility exposures. Written options generate income in expected interest rate scenarios and may generate capital losses if unexpected interest rate environments are realized. Both written and purchased options will become worthless at expiration if the underlying instrument does not reach the strike price of the option. In the money portion of written options are covered by high grade, liquid debt securities.

Swaptions are contractual agreements that convey to the purchaser the right but not the obligation to enter into or cancel a swap agreement at a fixed future date or at any time within a fixed future period. The seller receives a premium from the purchaser for this right.

### Credit default swaps

Credit default swaps ("CDS") provide protection against the decline in value of the referenced asset as a result of specified events such as payment default or insolvency. The purchaser pays a premium to the seller of the CDS in return for payment related to the deterioration in the value of the referenced asset. The referenced asset for CDS is a debt instrument. They are used to manage credit exposure without buying or selling securities outright. Written CDS increase credit exposure (selling protection), obligating the Plan to buy bonds from counterparties in the event of a default. Purchased CDS decrease exposure (buying protection), providing the right to "put" bonds to the counterparty in the event of a default. Net long exposures are backed with high grade, liquid debt securities. Underlying credit exposures are continuously monitored.

### Interest rate swaps

Interest rate swaps involve contractual agreements between two counterparties to exchange fixed and floating interest payments based on notional amounts. They are used to adjust interest rate yield curve exposures and substitute for physical securities. Long swap positions increase exposure to long term interest rates and short positions decrease exposure. Long swap positions are backed with high grade, liquid debt securities.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 5. Investments and derivatives (continued):

### Currency forwards

Currency forwards are contractual obligations to exchange one currency for another at a specified price or settlement at a predetermined future date. Forward contracts are used to manage the currency exposure of investments held in foreign currencies. The notional amount of a currency forward represents the contracted amount purchased or sold for settlement at a future date. The fair value is determined by the difference between the market value and the notional value upon settlement.

The following table sets out the notional values of the Plan's derivatives and their related assets and liabilities as at March 31.

2016	Notional value	Fair value		Net
		Assets	Liabilities	
<b>Derivatives</b>				
Futures	\$ 214,823	\$ 255	\$ (344)	\$ (89)
Options	39,484	-	(33)	(33)
Credit default swaps	53,570	326	(6,522)	(6,196)
Interest rate swaps	105,964	33	(1,205)	(1,172)
Currency forwards	2,489,285	123,248	(2,562)	120,686
<b>Total</b>	<b>\$ 2,903,126</b>	<b>\$ 123,862</b>	<b>\$ (10,666)</b>	<b>\$ 113,196</b>
2015	Notional value	Fair value		Net
		Assets	Liabilities	
<b>Derivatives</b>				
Futures	\$ 196,526	\$ 1,163	\$ (925)	\$ 238
Options	3,387	-	(3)	(3)
Credit default swaps	35,466	580	(2,158)	(1,578)
Interest rate swaps	103,615	105	(79)	26
Currency forwards	2,357,106	4,618	(4,868)	(250)
<b>Total</b>	<b>\$ 2,696,100</b>	<b>\$ 6,466</b>	<b>\$ (8,033)</b>	<b>\$ (1,567)</b>

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 5. Investments and derivatives (continued):

The following table summarizes the contractual maturities of the Plan's derivatives and their related assets and liabilities as at March 31.

2016	Under 1 year	1 to 5 years	Over 5 years	Total
Futures	\$ (90)	\$ -	\$ -	\$ (90)
Options	(33)	-	-	(33)
Credit default swaps	2	(5,917)	(280)	(6,195)
Interest rate swaps	-	(1,118)	(54)	(1,172)
Currency forwards	120,686	-	-	120,686
	\$ 120,565	\$ (7,035)	\$ (334)	\$ 113,196

2015	Under 1 year	1 to 5 years	Over 5 years	Total
Futures	\$ 238	\$ -	\$ -	\$ 238
Options	(3)	-	-	(3)
Credit default swaps	(109)	(1,490)	21	(1,578)
Interest rate swaps	26	-	-	26
Currency forwards	(250)	-	-	(250)
	\$ (98)	\$ (1,490)	\$ 21	\$ (1,567)

Cash is deposited or pledged with various financial institutions as collateral in the event that the Plan was to default on payment obligations on its derivative contracts. On the statement of financial position collateral is represented as part of the net cash balance of the Plan.

The fair value of cash held or pledged with (due from) other financial institutions as collateral and or margin as at March 31, 2016 and March 31, 2015 is as follows.

	March 31, 2016	March 31, 2015
Collateral	\$ 9,315	\$ (952)
Margin	1,329	-
	\$ 10,644	\$ (952)

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 6. Financial instruments:

### (a) Fair value:

The fair values of investments and derivatives are as described in note 3(d). The fair values of other financial assets and liabilities, being cash, contributions receivable, receivable from pending trades, accounts receivable, due from administrator, accrued investment income, pension benefits payable, payable for pending trades and accounts payable and accrued liabilities payable approximate their carrying values due to the short term nature of these financial instruments.

Fair value measurements recognized in the statement of financial position are categorized using a fair value hierarchy that reflects the significance of inputs used in determining the fair values.

Level 1: Fair value is based on 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: Fair value is based on valuation methods that make use of inputs other than quoted prices included in Level 1, that are observable for the asset or liability, 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 on a public exchange and public equities not traded in an active market.

Level 3: Fair value is based on valuation methods where inputs that are based on non-observable market data have a significant impact on the valuation. Level 3 primarily includes real estate, infrastructure, and private equity investments valued based on discounted future cash flow models which reflect assumptions that a market participant would use when valuing such an asset or liability.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

The following table illustrates the classification of the Plan's financial instruments using the fair value hierarchy as at March 31:

As at March 31, 2016	Level 1	Level 2	Level 3	Total
<b>Investment assets</b>				
<b>Fixed income</b>				
Money market	\$ 1,902	\$ 104,572	\$ -	\$ 106,474
Canadian bonds & debentures	3,367	669,930	-	673,297
Non-Canadian bonds & debentures	84,724	696,474	-	781,198
Canadian real return bonds	-	173,833	76,065	249,898
<b>Equities</b>				
Canadian	670,170	11,925	-	682,095
US	166,201	367,064	-	533,265
Global	648,764	-	-	648,764
<b>Real Assets</b>				
Real estate	-	185,922	436,524	622,446
Infrastructure	-	-	320,826	320,826
Commodities	-	130,005	-	130,005
<b>Absolute Return Strategies</b>				
Hedge funds	-	591,944	-	591,944
<b>Derivatives</b>				
Derivative-related receivables	255	123,607	-	123,862
	\$ 1,575,383	\$ 3,055,276	\$ 833,415	\$ 5,464,074
<b>Investment liabilities</b>				
<b>Derivatives</b>				
Derivative-related liabilities	\$ (344)	\$ (10,322)	\$ -	\$ (10,666)
Total	\$ (344)	\$ (10,322)	\$ -	\$ (10,666)
Net investments	\$ 1,575,039	\$ 3,044,954	\$ 833,415	\$ 5,453,408



# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

As at March 31, 2015	Level 1	Level 2	Level 3	Total
<b>Investment assets</b>				
<b>Fixed income</b>				
Money market	\$ 10,085	\$ 114,221	\$ -	\$ 124,306
Canadian bonds & debentures	207,892	470,030	-	677,922
Non-Canadian bonds & debentures	34,771	719,588	-	754,359
Canadian real return bonds	-	215,737	80,886	296,623
<b>Equities</b>				
Canadian	344,117	140,003	-	484,120
US	340,004	248,890	769	589,663
Global	913,192	-	-	913,192
<b>Real Assets</b>				
Real estate	-	178,221	403,917	582,138
Infrastructure	-	-	269,281	269,281
Commodities	-	160,643	-	160,643
<b>Absolute Return Strategies</b>				
Hedge funds	-	619,972	-	619,972
<b>Derivatives</b>				
Derivative-related receivables	1,163	5,303	-	6,466
	\$ 1,851,224	\$ 2,872,608	\$ 754,853	\$ 5,478,685
<b>Investment liabilities</b>				
<b>Derivatives</b>				
Derivative-related liabilities	\$ (925)	\$ (7,108)	\$ -	\$ (8,033)
Total	\$ (925)	\$ (7,108)	\$ -	\$ (8,033)
Net investments	\$ 1,850,299	\$ 2,865,500	\$ -	\$ 5,470,652

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

There were no significant transfers between level 1 and level 2 financial instruments during the year ended March 31, 2016.

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

Year ended March 31, 2016	Fixed income	Equity	Real assets	Total
Level 3 investments, April 1, 2015	\$ 80,886	\$ 769	\$ 673,198	\$ 754,853
Purchases	-	-	61,670	61,670
Sales	(778)	(595)	(17,477)	(18,850)
Realized gains (losses)	176	595	12,335	13,106
Unrealized gains (losses)	(4,219)	(769)	27,624	22,636
Level 3 investments, end of year	\$ 76,065	\$ -	\$ 757,350	\$ 833,415

  

Year ended March 31, 2015	Fixed income	Equity	Real assets	Total
Level 3 investments, April 1, 2014	\$ 74,810	\$ 53,187	\$ 522,895	\$ 650,892
Purchases	-	-	127,847	127,847
Sales	(745)	(53,222)	(5,837)	(59,804)
Realized gains (losses)	167	(956)	(4,411)	(5,200)
Unrealized gains (losses)	6,654	1,760	32,704	41,118
Level 3 investments, end of year	\$ 80,886	\$ 769	\$ 673,198	\$ 754,853

The total income from level 3 instruments held as at March 31, 2016 and 2015, respectively, was \$35,742 and \$35,918.

Fair value assumptions and sensitivity:

Level 3 financial instruments are valued using various methods. Listed real return bonds are valued by a third party using broker prices and comparable securities. Certain unlisted private equity, real estate and infrastructure funds are valued using various methods including overall capitalization method and discount rate method. Real estate subsidiaries are valued using the overall capitalization method and discount rate method and the valuations are significantly affected by non-observable inputs, the most significant of which are the capitalization rate and the discount rate.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

Significant unobservable inputs used in measuring fair value:

The table below sets out information about significant unobservable inputs used at March 31, 2016 in measuring financial instruments categorized as level 3 in the fair value hierarchy.

Description	Fair value at March 31, 2016	Valuation technique	Unobservable inputs
Unlisted real estate subsidiaries	319,210	Income approach technique: overall capitalization rate method and discounted cash flow method	Capitalization rates (2016: 4.30% to 8.00%, 2015: 4.40% to 7.90%), discount rates not available

The following analysis illustrates the sensitivity of the Level 3 valuations to reasonably possible capitalization rate assumptions for real estate properties where reasonably possible alternative assumptions would change the fair value significantly. The alternative capitalization rates are based on the volatility of the real estate properties. These sensitivities are hypothetical and should be used with caution. The impact of these alternative assumptions is independent of the impact of changes in other key variables.

	2016	2015
<u>Real estate subsidiaries</u>		
Increase in 25 basis points in capitalization rate	\$ (15,687)	\$ (20,761)
Decrease of 25 basis points in capitalization rate	22,577	22,659

Note 1: basis point is equal to 0.01%

The Plan does not have access to underlying information that comprises the fair market value of real return bonds, and certain private equity, real estate and infrastructure fund investments. The fair market value is provided by the general partner or other external managers. In the absence of information supporting the fair market value, no other reasonably possible alternative assumptions could be applied.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

### Significant investments

The Plan's investments, each having a fair value or cost exceeding one per cent of the fair market value or cost of net investment assets and liabilities as follows:

As at March 31	Number of investments	Fair value	2016 Cost	Number of investments	Fair value	2015 Cost
Public market investments	1	76,065	29,951	1	80,886	30,560
Private market investments	15	1,985,039	1,675,324	15	1,931,725	1,557,821
	16	2,061,104	1,705,275	16	2,012,611	1,588,381

The Plan's significant private market investments consist of fixed income and equity pooled funds, commodities, real estate, and infrastructure.

### (b) 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 interest rate volatility, market price fluctuations, credit risk, foreign currency risk and liquidity risk. The Plan has set formal goals, policies, and operating procedures that establish an asset mix among equity, fixed income, real assets, absolute return strategy investments and derivatives that requires diversification of investments within categories, and set limits on the size of exposure to individual investments and counterparties. Risk and credit committees have been created to regularly monitor the risks and exposures of the Plan. Trustee 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 Plan'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 Plan's assets and cash flows related to the Plan's liabilities. To properly manage the Plan's interest rate risk, appropriate guidelines on the weighting and duration for the bonds and other fixed income investments are set and monitored.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

The following table summarizes the contractual maturities of all financial assets at March 31, by the earlier of contractual re-pricing or maturity dates:

March 31, 2016	Under 1 year	1 to 5 years	5 to 10 years	Over 10 years	Total	Average yield (%) (1)
Money market	\$ 106,474	\$ -	\$ -	\$ -	\$ 106,474	-
Bonds & debentures	61,926	406,323	375,902	390,066	1,234,217	4.1
Real return bonds (2)	-	-	-	76,065	76,065	5.3
<b>Total</b>	<b>\$ 168,400</b>	<b>\$ 406,323</b>	<b>\$ 375,902</b>	<b>\$ 466,131</b>	<b>\$ 1,416,756</b>	<b>3.8</b>
Excluded pooled funds					394,111	
<b>Total fixed income</b>					<b>\$ 1,810,867</b>	

March 31, 2015	Under 1 year	1 to 5 years	5 to 10 years	Over 10 years	Total	Average yield (%) (1)
Money market	\$ 124,307	\$ -	\$ -	\$ -	\$ 124,307	-
Bonds & debentures	20,065	395,691	403,910	393,171	1,212,837	4.4
Real return bonds (2)	-	-	-	80,886	80,886	5.3
<b>Total</b>	<b>\$ 144,372</b>	<b>\$ 395,691</b>	<b>\$ 403,910</b>	<b>\$ 474,057</b>	<b>\$ 1,418,030</b>	<b>4.1</b>
Excluded pooled funds					435,180	
<b>Total fixed income</b>					<b>\$ 1,853,210</b>	

The fixed income maturity schedule is exclusive of pooled bond & pooled real return bond funds.

(1) The average effective yield reflects the estimated annual income of a security as a percentage of its year-end fair value.

(2) Real return bond yields are based on real interest rates. The ultimate yield will be impacted by inflation as it occurs.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

The fair value of the Plan's investments is affected by short-term changes in nominal interest rates. Pension liabilities are exposed to the long-term expectation of rate of return of the Fund as well as expectations of inflation and salary escalation.

Interest rate sensitivity:

The Plan's investments in fixed income and fixed income related derivatives are sensitive to interest rate movements. The following table represents the Plan's assets subject to interest rate changes, average duration due to a one percent increase (decrease) in interest rates and the change in fair value of those assets:

	March 31, 2016	March 31, 2015
Interest rate sensitive assets	\$ 1,409,264	\$ 1,416,714
Average duration for 1% increase in interest rates	(6.6)	(6.6)
Sensitivity to 1% increase in interest rates	\$ (92,387)	\$ (93,988)
Fair value after 1% increase in rates	\$ 1,316,877	\$ 1,322,726
Average duration for 1% decrease in interest rates	6.6	6.6
Sensitivity to 1% decrease in interest rates	\$ 92,387	\$ 93,988
Fair value after 1% decrease in rates	\$ 1,501,651	\$ 1,510,702

### (ii) Market price risk

Market 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. Market price risk does not include interest rate risk and foreign currency risk which are also discussed in this note. As all of the Plan's financial instruments are carried at fair value with fair value changes recognized in the statement of changes in financial position, all changes in market conditions will directly result in an increase (decrease) in net assets. Market price risk is managed by the Plan through the construction of a diversified portfolio of instruments traded on various markets and across various industries.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

Market sensitivity:

The Plan's investments in equities are sensitive to market fluctuations. The following table represents the change in fair value of the Plan's investment in public and private equities due to a ten percent increase (decrease) in fair market values as at March 31, 2016:

	March 31, 2016	March 31, 2015
Total equity	\$ 1,864,124	\$ 1,986,975
10% increase in market values	\$ 186,412	\$ 198,698
Fair value after 10% increase	\$ 2,050,536	\$ 2,185,673
10% decrease in market values	\$ (186,412)	\$ (198,698)
Fair value after 10% decrease	\$ 1,677,712	\$ 1,788,277

### (iii) Credit risk

Credit risk is the risk of loss in the event the counterparty to a transaction fails to discharge an obligation and causes the other party to incur a loss. Credit risk is generally higher when a non-exchange traded financial instrument is involved because the counterparty for traded financial instrument is not backed by an exchange clearing house. Credit risk associated with the Plan is regularly monitored and analyzed through risk and credit committees.

Fixed income:

The Plan's Fixed Income Program includes two main sectors: the Government Sector and the Corporate Sector. One benefit to managing these two pieces separately is to provide the opportunity to access physical government bonds when required. When markets are at their utmost distress these may be the only securities available for liquidation. Managing the Corporate Sector and the Government Sector separately allows for the adjustment of credit risk within the Fixed Income Program by changing the allocation between these two sectors-increasing the Government Sector through periods of market duress and increasing the Corporate Sector through periods of stability. This approach also allows the active management of the Corporate Sector and taking active decisions where returns can be maximized. In order to minimize the exposure to credit risk, a comprehensive investment policy has been developed. There were no significant concentrations of credit risk in the portfolio in 2016.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

The Fund is exposed to credit risk from the following interest earning investments:

	March 31, 2016	March 31, 2015
<b>Canadian</b>		
Governments	\$ 460,873	\$ 540,978
Corporate	172,783	116,138
<b>Non-Canadian</b>		
Governments	86,626	59,227
Corporate	696,474	701,687
	<b>\$ 1,416,756</b>	<b>\$ 1,418,030</b>
Excluded pooled funds	394,111	435,180
<b>Total fixed income</b>	<b>\$ 1,810,867</b>	<b>\$ 1,853,210</b>

The credit risk schedule is exclusive of pooled bond and pooled real return bond funds.

Derivatives:

The Plan is exposed to credit-related losses in the event counterparties fail to meet their payment obligations upon maturity of derivative contracts. The Plan limits derivative contract risk by dealing with counterparties that have a minimum "A" credit rating. In order to mitigate this risk, the Plan:

- i) Deals only with highly rated counterparties, 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; and
- ii) Credit risk represents the maximum amount that would be at risk as at the reporting date if the counterparties failed completely to perform under the contracts, and if the right of offset proved to be non-enforceable. Credit risk exposure on derivative contracts is represented by the receivable replacement cost of contracts with counterparties, less any prepayment collateral or margin received, as at the reporting date.



# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

Securities lending:

The Plan engages in securities lending to enhance portfolio returns (note 13). Through a securities lending program at the Plan's custodian, the Plan lends securities for a fee to approved borrowers. Credit risk associated with securities lending is mitigated by requiring the borrowers to provide high quality collateral. In the event that a borrower defaults completely or in part, the custodian will replace the security at its expense. Regular reporting of the securities lending program ensures that its various components are continuously being monitored.

### (iv) Foreign currency risk

Foreign currency risk is the risk that the value of future cash flows of a financial instrument will fluctuate because of changes in foreign exchange rates. The Plan primarily invests in financial instruments and enters into transactions denominated in various foreign currencies, other than its measurement currency. Consequently, the Plan is exposed to 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 Plan's investment and non-investment assets or liabilities denominated in currencies other than the Canadian dollar. Foreign currency risk is hedged by using foreign exchange forward contracts. A policy of hedging up to 100% of the currency exposure helps to mitigate this risk.

The Plan's currency policy allows for the management of risk through hedging strategies that are implemented through the purchase of forward currency contracts. The forward currency contracts offset the Plan's foreign currency exposure, hence reducing the Plan's foreign currency risk.

The Plan's investment and non-investment assets and liabilities that are held in the Fund are represented as unhedged and hedged currency exposure as at March 31 in the following table:

	March 31, 2016 Unhedged	March 31, 2016 Hedged
Canadian dollar	\$ 2,363,928	\$ 4,186,329
United States dollar	2,414,588	1,268,063
Euro	218,697	(14,983)
British pound sterling	136,415	(62,796)
Japanese yen	79,052	42,001
Other	169,988	84,738
	<u>\$ 5,382,668</u>	<u>\$ 5,503,352</u>

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 6. Financial instruments (continued):

	March 31, 2015 Unhedged	March 31, 2015 Hedged
Canadian dollar	\$ 2,456,093	\$ 4,157,156
United States dollar	2,429,300	1,231,067
Euro	218,332	(26,200)
British pound sterling	158,400	(920)
Japanese yen	81,652	44,775
Other	185,251	122,899
	<b>\$ 5,529,028</b>	<b>\$ 5,528,777</b>

After the effect of hedging, and without change in all other variables, a ten percent increase (decrease) in the Canadian dollar against all other currencies would (decrease) increase the fair value of the Plan's investment and non-investment assets and liabilities held in the Fund, respectively.

The following table below represents these changes in the Plan's investment and non-investment assets and liabilities held in the Fund as at March 31:

	2016	2015
Fund assets and liabilities	\$ 5,503,353	\$ 5,528,777
10% increase in Canadian dollar	(119,729)	(279,107)
Fund assets and liabilities after increase	\$ 5,383,624	\$ 5,249,670
10% decrease in Canadian dollar	146,336	341,688
Fund assets and liabilities after decrease	\$ 5,649,689	\$ 5,870,465

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 6. Financial instruments (continued):

### (v) Liquidity risk:

Liquidity risk is the risk that the Plan does not have sufficient cash to meet its current payment liabilities and acquire investments in a timely and cost effective manner. Liquidity risk is inherent in the Plan's operations and can be impacted by a range of situation specific and market wide events including, but not limited to, credit events and significant movements in the market. Cash obligations are fulfilled from contributions to the Plan, cash income of the Plan and planned dispositions of Plan assets as required. Cash requirements of the Plan are reviewed on an ongoing basis to provide for the orderly availability of resources to meet the financial obligations of the Plan. The Plan's cash management policy ensures that the quality and liquidity of the investment vehicles within the cash portfolios are consistent with the needs of the Plan.

Approximately 51% of the Plan's investments are in liquid securities traded in public markets, consisting of fixed income and equities. Pooled funds consisting of exchange traded equities are approximately 11% of the Plan's investments and are liquid within 30 days or less. Although market events could lead to some investments becoming illiquid, the diversity of the Plan's portfolios should ensure that liquidity is available for benefit payments. The Plan also maintains cash on hand for liquidity purposes and for payment of Plan liabilities. At March 31, 2016, the Plan had cash in the amount of \$50,517; March 31, 2015 \$43,877).

## 7. Present value of service purchases via instalment payments:

The present value of service purchases via instalment payments of \$484 (March 31, 2015 - \$318) represents the present value of outstanding employee and employer contributions as at March 31, 2016 that are due as a result of service purchases that are being paid for through payroll deductions. The liabilities associated with this service are already recognized in the accrued pension benefit obligation.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## **8. University pension plan transfers:**

On May 4, 2015, the University Pension Plan Transfer Act (Bill No. 102) was proclaimed to facilitate the transfer of university pension plans to the Plan. The University Pension Plan Transfer Act allows the Trustee to enter into an agreement with a university to transfer, in whole or in part, assets and liabilities of a designated plan to the Plan and to allow the members, the survivors of the members, the post-transfer employees of the transferring university and the survivors of the post-transfer employees to participate in the Plan.

The Trustee's guiding principle throughout this transfer process is that it must be beneficial to the long-term sustainability of the Plan and cost-neutral to the Plan and Plan members. On July 1, 2015, a university pension plan transferred into the Plan. The Plan received a cash transfer and recovered certain transfer-related costs. At the time of transfer, there was a deficit in assets to the transfer liability. The transfer deficit is to be paid to the Plan via monthly special payments plus interest. The university pension plan transfer deficit payments receivable as at March 31, 2016 were \$2,431. The liabilities associated with these deficit payments are recognized in the accrued pension benefit obligation.

## **9. Accrued pension obligation:**

The actuarial present value of the accrued pension obligation is an estimate of the value of pension obligations of the Plan in respect of benefits accrued to date for all active and inactive members including pensioners and survivors. As the experience of the Plan unfolds, and as underlying conditions change over time, the actual value of accrued benefits payable in the future could be materially different than the actuarial present value.

Actuarial valuations of the Plan are conducted annually, and provide an estimate of the accrued pension obligation (Plan liabilities) calculated using various economic and demographic assumptions, based on membership data as at the valuation date. The Plan's consulting actuaries, Mercer, performed a valuation as at December 31, 2015 and issued their report in June 2016. The report indicated that the Plan had a funding excess of \$44,869 (December 31, 2014 – funding excess of \$123,655).

The actuarial valuation calculates liabilities for each member on the basis of service earned to date and the employee's projected five-year highest average salary at the expected date of retirement or on the pension in pay, for retired members and survivors. The projected unit credit method was adopted for the actuarial valuation to determine the current service cost and actuarial liability. Under this method, the cost of providing benefits to an individual member will increase as the individual member ages and gets closer to retirement.

The assumed increases in the real rate of pensionable earnings (i.e. increase in excess of the assumed inflation rate) are dependent on the attained age of the members. These rates are based

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 9. Accrued pension obligation (continued):

on recent experience of the Plan and current expectations for future years.

Demographic assumptions are used to estimate when future benefits are payable to members and beneficiaries, including assumptions about mortality rates, termination rates, and patterns of early retirement. Each of these assumptions is updated periodically, based on a detailed review of the experience of the Plan and on the expectations for future trends. The major assumptions used are as follows:

	Valuation December 31, 2015	Valuation December 31, 2014
Inflation	2.00% per annum	2.00% per annum
Salary increase	1.50% per annum for 2 years, 2.50% per annum thereafter plus merit ranging from 0.00% to 2.50%	1.50% per annum for 3 years, 2.50% per annum thereafter plus merit ranging from 0.00% to 2.50%
Total rate of return on assets (i.e. discount rate)	6.15% per annum	6.35% per annum
Average retirement age	<ul style="list-style-type: none"> <li>• 10% at age 59;</li> <li>• 20% at age 60;</li> <li>• 10% at each age 61-64;</li> <li>• 50% at each age 65-69;</li> <li>• 100% at age 70</li> </ul>	<ul style="list-style-type: none"> <li>• 10% at age 59;</li> <li>• 20% at age 60;</li> <li>• 10% at each age 61-64;</li> <li>• 50% at each age 65-69;</li> <li>• 100% at age 70</li> </ul>
	However, 20% each year after EURD, if it is greater	However, 20% each year after EURD, if it is greater
	40% at 35 years of service	40% at 35 years of service
Mortality	120% of CPM 2014 Publ with generational mortality using 100% of CPM-B	120% of CPM 2014 Publ with generational mortality using 100% of CPM-B

The accrued pension obligation as at March 31 is determined by an extrapolation performed by the Plan's actuary of the Plan's liabilities from December 31 of the immediately preceding calendar year, as reflected in the actuarial valuation. The following table reflects the extrapolated funding (deficit) surplus as at March 31, 2016 and as at March 31, 2015.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 9. Accrued pension obligation (continued):

	2016 Extrapolated	2015 Extrapolated
Actuarial value of assets	\$5,514,513	\$ 5,539,381
Accrued pension obligation	5,563,552	5,200,853
Funding (deficit) surplus	\$ (49,039)	\$ 338,528

## 10. Commitments:

The Plan has committed capital to investment in infrastructure over a definitive period of time. The future commitments are generally payable on demand based on the capital needs of the related investment. The table below indicates the capital amount committed and outstanding as at March 31, 2016.

	Committed	Outstanding
Non-Canadian infrastructure	270,000 USD	95,247 USD
Non-Canadian infrastructure	15,000 GBP	9,988 GBP
Non-Canadian real estate	25,000 USD	3,450 USD
Non-Canadian real estate	20,000 EUR	10,314 EUR

## 11. Benefits:

	2016	2015
Benefits paid to retired members	\$ 272,397	\$ 249,634
Benefits paid to survivors	35,881	34,743
Refunds paid to terminated members	14,864	9,982
	\$ 323,142	\$ 294,359

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 12. Administrative expenses:

The Plan is charged by its service providers, including Nova Scotia Pension Services Corporation, a related entity, for professional and administrative services. The following is a summary of these administrative expenses:

	2016	2015
Plan administration:		
Office and administration services	\$ 4,735	\$ 3,651
Legal services	85	54
Actuarial services	529	140
Audit fees	36	39
Other professional services	22	20
Recovery of university pension plan transfer costs (note 8)	(276)	-
	5,131	3,904
Investment expenses:		
Investment management fees	13,669	13,493
Transaction costs	968	1,150
Custody services	511	520
Advisory & consulting services	420	262
Information services	182	176
	15,750	15,601
HST	1,924	1,818
	\$ 22,805	\$ 21,323

The Plan's administrator, Nova Scotia Pension Services Corporation, annually reviews the resources required to service the Plan. The allocation of office and administrative expenses is reviewed and approved by the Nova Scotia Pension Services Corporation Board of Directors and the Plan Trustee before the beginning of each fiscal year.

Investment management and performance fees included in the unrealized gains / (losses) on investment vehicles consisting of pooled funds, limited partnerships and holding companies are estimated at \$19,236 (2015 - \$21,800). These fees are not direct expenses of the Plan and therefore are not included in administrative expenses.

# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## 13. Securities lending:

The Plan participates in a securities lending program where it lends securities that it owns to third parties for a fee. For securities lent, the Plan receives a fee and the borrower provides readily marketable securities of higher value as collateral which mitigates the credit risk associated with the program. When the Plan lends securities, the risk of failure by the borrower to return the loaned securities is alleviated by such loans being continually collateralized. The securities lending agent also provides indemnification if there is a shortfall between collateral and the lent security that cannot be recovered. The securities lending contracts are collateralized by securities issued by, or guaranteed without any limitation or qualification by, the government of Canada or the governments of other countries.

The following table represents the estimated fair value of securities that were loaned out and the related collateral:

	March 31, 2016		March 31, 2015	
Securities on loan	\$	466,997	\$	541,266
Collateral held	\$	498,353	\$	591,650

## 14. Related party transactions:

Investments held by the Plan include debentures of the Province of Nova Scotia. The total fair value of these investments is \$3,822 (0.1% of total assets) as at March 31, 2016 (2015 - \$15,641 (0.3% of total assets)).

The Plan's administrator, Nova Scotia Pension Services Corporation, an entity co-owned by Teachers' Pension Plan Trustee Inc. and Public Service Superannuation Plan Trustee Inc. for the purpose of providing pension plan administration and investment services, charges the Plan, at cost, an amount equal to the expenses incurred in order to service the Plan. The administration expense charged to the Plan, including HST, for the year ending March 31, 2016 was \$5,850 (2015 - \$4,683).

As Nova Scotia Pension Services Corporation operates on a cost recovery basis, the Plan advances or loans cash to its administrator, as required to pay upcoming expenses or to purchase capital assets. The amount due to the Plan was \$2,731 (2015 - \$2,820) at March 31, 2016. The amount due to Nova Scotia Pension Services Corporation at March 31, 2016 for expenses was \$377 (2015 - 828).



# PUBLIC SERVICE SUPERANNUATION PLAN

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

## 15. Interest in subsidiaries:

The Plan's subsidiaries were created for the purposes of providing investment earnings from real estate, infrastructure and other investment arrangements. The Plan's subsidiaries are presented on a non-consolidated basis. The following table shows the fair values of the Plan's subsidiaries as at March 31, 2016 and 2015:

Subsidiary	Purpose	Ownership %	2016 Fair value	2015 Fair value
NT Combined Investments Inc.	Equities	52	\$ 367,064	\$ 248,890
PSS Investments RE Inc.	Real estate	100	249,620	226,947
PSS Investments II Inc.	Real estate	100	140,490	148,745
PSS Investments CS Inc.	Infrastructure	100	138,289	106,363
PSS Investments ES Inc.	Real estate	100	46,414	28,225
PSS Investments IV Inc.	Infrastructure	100	32,330	24,065
HV Combined Investments Inc.	Hedge funds	63	26,147	27,012
PSS Investments III Inc.	Infrastructure	100	26,115	25,435
PSS Investments CS II Inc.	Infrastructure	100	6,593	2,057

The Plan either has 100% controlling interest or significant influence over its subsidiaries' cash flows. Funding is made via capital investment from the Plan. Certain subsidiaries have commitments that must be funded directly through capital investment by the Plan. These amounts are included in the Plan's commitments (note 10). Financing is provided as required via shareholder loan and is payable on demand to the Plan.

## 16. Capital management:

The main objective of the Plan is to sustain a certain level of net assets in order to meet the Plan's pension obligations. The PSSPTI (note 1) manages the contributions and benefits as required by the Public Service Superannuation Act and its related Regulations. The PSSPTI approves and incurs expenses to administer the commerce of the Plan in accordance with the Act.

Under the direction of the PSSPTI, the Plan provides for the short term financial needs of current benefit payments while investing members' contributions for the longer term security of pensioner payments. The PSSPTI exercises duly diligent practices and has established written investment policies and procedures, and approval processes. Operating budgets, audited financial statements, yearly actuarial valuations and reports, and as required, the retention of supplementary professional, technical and other advisors, are part of the Plan's governance structure.

The Plan fulfils its primary objective by adhering to specific investment policies outlined in its SIP&G, which is reviewed annually by PSSPTI. The Plan manages net assets by engaging knowledgeable investment managers who are charged with the responsibility of investing existing funds and new funds (current year's employee and employer contributions) in accordance with the SIP&G. Increases in net assets are a direct result of investment income generated by investments held by the Plan and contributions into the Plan by eligible employees and participating employers. The main use of net assets is for benefit payments to eligible Plan members.

# **PUBLIC SERVICE SUPERANNUATION PLAN**

Notes to Financial Statements (continued)  
(in thousands of dollars)

Year ended March 31, 2016

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## **17. Comparative information:**

Certain 2015 comparative information have been reclassified to conform to the financial statement presentation adopted for the current year.