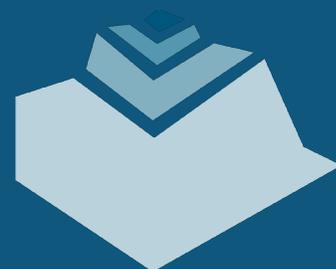


# TEACHERS' PENSION PLAN

NEWFOUNDLAND  
AND LABRADOR

## ANNUAL REPORT TO MEMBERS 2017



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## About the Teachers' Pension Plan

The Newfoundland and Labrador Teachers' Pension Plan is the second largest public sector pension plan in the Province. The Plan is a defined benefit registered pension plan that offers you a lifetime pension benefit when you retire. Your pension benefit is funded by contributions made by you and your employer, as well as investment income generated by the Plan's investment assets. This Annual Report details the Plan's investment performance and financial health at December 31, 2017.

## Contact Information



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# 2017...AT A GLANCE

## Overview



**Net Investment Assets**  
**\$3.4 billion**  
 as at December 31, 2017

**Rate of Return on Invested Assets in 2017**

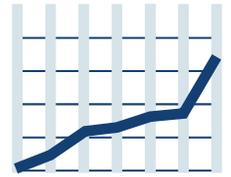
**11.3%**

Discount Rate

**6.0%**

Benchmark

**9.7%**



**+ Contributions of \$110.4M in 2017:**

**Members**

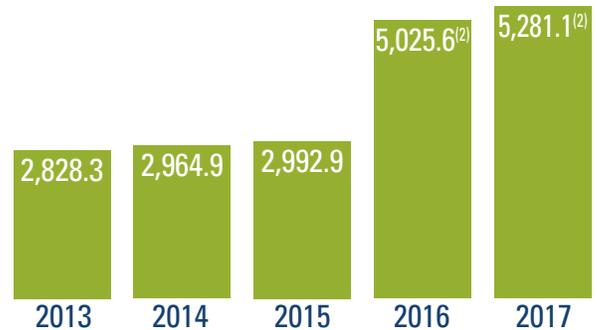
**\$57.1M**

**Employers**

**\$53.3M**

**– Benefits Paid in 2017<sup>(1)</sup> \$294.1M**

**Net Assets for Benefits: \$ millions**  
 (as at December 31)



**Accrued Benefit Obligations: \$ millions**  
 (as at December 31)



**Percentage of Accrued Pension Obligations Supported by Net Assets**  
 (as at December 31)



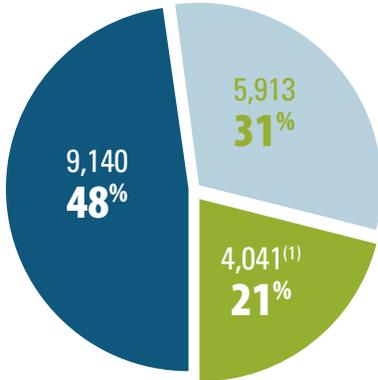
<sup>(1)</sup> Includes termination benefits (refunds and commuted value payments) of \$4.5 million

<sup>(2)</sup> Includes Promissory Note from the province

# 2017...AT A GLANCE

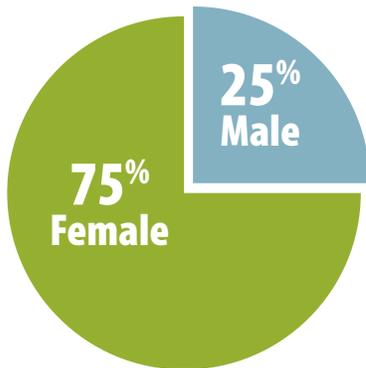
## 2017 Membership Facts

**Membership Profile 2017**  
(as at December 31)

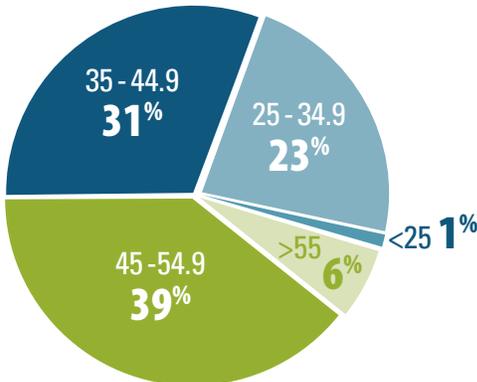


■ Retirees & Survivors
 ■ Active Members
 ■ Inactive Members

**Gender Profile of Active Members**



**Active Members by Age**



<sup>(1)</sup> Includes Plan members who are not regular contributors to the Plan and have not retired or removed their funds from the Plan.  
<sup>(2)</sup> From age 65 after CPP integration.

**Average Age Working Teacher**



**Average Age Retired Teacher**



Average Age	2016	2017
Active Member	42.5	42.9
Retirees	68.6	69.2

Accrued Benefit Obligations	%
Retirees and Survivors	68.9
Active Members	29.6
Inactive Members	1.5
	<u>100.0</u>

**Over the next 5 years**



Retirees Over **100** Years of Age **7**

**Average pensionable earnings of active members**

**\$79,040**

**Retiree average lifetime pension**

**\$28,972<sup>(2)</sup>**

**68.9%**  
of accrued benefit obligations  
relate to retirees and survivors

**0.65**  
active members for one retiree

# 2017...AT A GLANCE

## 2017 Membership Facts

### 2017 Retirees

Average age  
at retirement

56.3



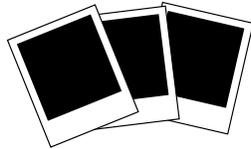
Average years  
of service for members  
retiring in 2017

29.0



Average number of years contributed to plan  
vs. expected years on pension

29.0 vs. 33.6



### MEMBERSHIP SNAPSHOT



#### Active members

2013

2014

2015

2016

2017

6,182

6,181

5,982

5,998

5,913

%

32.8%

32.5%

31.5%

31.5%

31.0%



#### Retirees and Survivors

8,552

8,732

8,853

8,994

9,140

%

45.5%

46.0%

46.6%

47.3%

47.9%



#### Inactive members

4,081

4,076

4,173

4,035

4,041

%

21.7%

21.5%

21.9%

21.2%

21.1%

#### Total

18,815

18,989

19,008

19,027

19,094

## Message from the Chair

On behalf of the Teachers' Pension Plan Corporation (the "TPPC" or the "Corporation"), I am pleased to present the annual report of the Teachers' Pension Plan (the "Plan" or the "TPP") for the fiscal year ended December 31, 2017. This report provides you with details on the financial health of the Plan and a comprehensive review of its investment activities.

While the TPPC is still in its early days, significant progress has been made to develop a Corporation that provides retirement security and outstanding service to Plan members.

The Plan experienced positive investment results in 2017, with the Plan's investment assets growing from approximately \$3.1 billion to \$3.4 billion. In 2017, the Plan's investment return was 11.3% compared to the discount rate of 6%, which is the long term rate to sustain the Plan. The 2017 investment return is also higher than the 7.3% result in 2016. The funded ratio, which includes the promissory note received from the Government of Newfoundland and Labrador on August 29, 2016, was 103.5% in 2017 compared to 98.2% in 2016. The increase in the funded ratio is primarily due to our investment returns exceeding the discount rate, contributions to the Plan exceeding the current service cost, and a gain resulting from the Plan's experience relative to the actuarial assumptions.

In 2017, we focused on the implementation of the interim asset mix approved by the Board in late 2016. During 2017 an

updated asset liability study was conducted, and in November 2017, the Board approved a new strategic asset allocation. The updated study confirmed that our investment priorities are well aligned with the maturity of the Plan and its significant monthly benefit payments. These priorities include reducing equity risk, focusing on less volatile asset classes, and increasing diversification of investments. During 2018 we will continue to work with our team to implement the required changes as we focus on the long-term sustainability of the Plan.

Plan members, of course, include those employees yet to retire and those who have retired after years of serving the teaching profession of Newfoundland and Labrador. The Board and management are committed to meeting its obligations to Plan members. We not only comply with legislation, but also take care to adhere to the well-established principles of pension administrators. We act in Plan members' best interest not only because we have a legal fiduciary duty to do so, but out of respect for Plan members and their service to the teaching profession.



**Paula McDonald**

## Pension Reform

A Pension Reform Agreement was reached between the Newfoundland and Labrador Teachers' Association ("NLTA") and the Government of Newfoundland and Labrador ("Government" or "Province") and signed on June 15, 2015. On March 15, 2016, a Joint Sponsorship Agreement ("JSA") was signed by the NLTA and Government. Under joint sponsorship, both Government and the NLTA are responsible for the Plan sustainability into the future. Both parties have appointed representatives to the Sponsor Body. The ultimate goal of the Pension Reform Agreement and the JSA is the creation of a world class TPPC to administer the TPP and its Pension Fund. The JSA sets out the responsibilities and duties of the Sponsor Body and the Corporation.

Key responsibilities of the Sponsor Body and the TPPC are:

### Sponsor Body

- Making amendments to the Plan design, including eligibility, benefits and contributions
- Deciding the frequency of actuarial valuations of the Plan
- Amending the actuarial assumptions and methods for the Plan
- Implementing the Funding Policy that has been agreed in the JSA

### The TPPC

- Fiduciary responsibility for the Plan and the investment assets
- Sets strategic direction and makes key decisions
- Responsible for the Plan's overall operations and investment decisions
- Sets policy framework and strategic direction for the investment assets
- Manages the day-to-day operations of the Plan investments and benefit administration

The assets of the Plan were transferred from the Province to the Teachers' Pension Fund under the trusteeship of the TPPC. The \$1.862 billion promissory note included in the Pension Reform Agreement was provided to the Corporation on August 29, 2016 and is an asset of the Plan.

Government no longer guarantees the pension deficiency; rather, future deficits and surpluses will be shared equally by the sponsors – Government and Pension Plan members as represented by the NLTA.

A funding policy was established for the Plan under the Pension Reform Agreement and the JSA which prescribes a path to full funding by 2042 and thereafter.

## Plan Governance

The TPPC’s vision is to be an outstanding pension plan administrator and institutional investor, and its mission is to provide retirement security and outstanding service for our members – today and tomorrow.

Since our inception on August 31, 2016, the Plan has been overseen by independent, expert board members who are required to make decisions in the best interest of all beneficiaries of the Plan. In accordance with the JSA, the Plan sponsors each appointed four individuals to the TPPC Board of Directors. This governance structure is key to the Plan’s success.

### Board of Directors

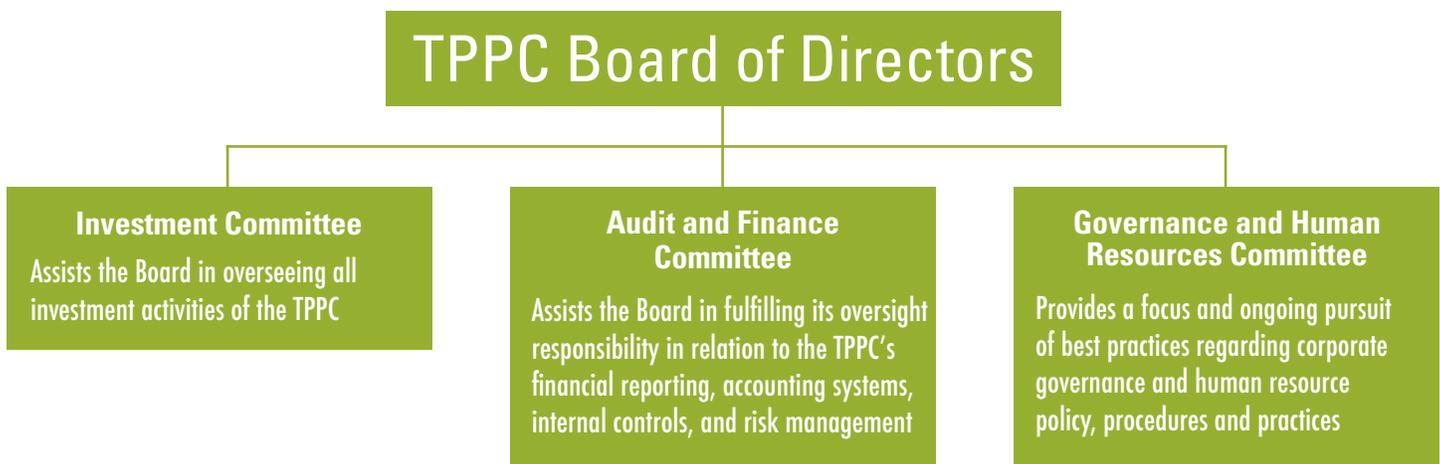
The eight Board members have fiduciary responsibilities and were selected based on specialized skills as outlined in the JSA. The Directors have experience in governance, investments, finance, human resources, pensions, customer service and related administration, risk management, stakeholder involvement and regulatory matters. The Directors’ responsibilities include, but are not limited to, acting independently of the Plan sponsors and making decisions in the best interest of all Plan beneficiaries.

The TPPC Board of Directors, a governing body separate from the Sponsor Body, was established as Trustee for the Teachers’ Pension Fund and oversees the management and prudent investment of the pension plan and direction of the TPPC. As the Plan Administrator and Trustee, we measure ourselves against best practices for governance, risk management, internal controls, stewardship and reporting.

A robust governance structure has been established by the Board. There are three standing committees:

- Investment Committee
- Audit and Finance Committee
- Governance and Human Resources Committee

The committees are responsible for providing expert advice to the Board, as per each committee’s respective Terms of Reference; such advice enables the Board to fulfill the TPPC’s corporate goals, objectives, and responsibilities.



## Membership of the Board of Directors and Committees as at December 31, 2017

### Paula McDonald

BComm, FCPA, FCA, CMA – Board Chair ★ ▲ ●

### Eric Thoms

BA, MBA, CPA, CMA – Board Vice-Chair, Audit and Finance Committee Chair ●

### Don Ash

BSc, BEd, MBA ★

### Robert Blais

BSc, FSA, FCIA ★ ▲

### Richard Dixon

BA, MIR, ICD.D – Governance and Human Resources Committee Chair

### Scott Perkin

BComm, LLB ▲ ●

### Janet Rabovsky

BA, MBA – Investment Committee Chair

### Gretchen Van Riesen

BSc ●

- ★ Member of the Investment Committee
- ▲ Member of the Audit and Finance Committee
- Member of the Governance and Human Resources Committee

## External Investment Committee Members

The Investment Committee also includes two external members who bring additional subject matter expertise to the Board and are as follows:

### James Clark

BSc, CPA, CA, CFA

### Colin Spinney

BBA, MBA, CPA, CMA

## Our Good Governance Practices

### Monitoring

This practice includes the quarterly review of investment performance and funded ratios, as applicable. Investment compliance checklists, service performance, service provider contracts, investment managers, and service level agreements are also monitored regularly.

### Risk Management

The Board has established a risk management framework that defines the risk tolerance for the Plan in matters of administration and investment. The framework guides the development of strategies to meet overall objectives. For all risks the Board provides oversight, and the various committees review management's assessment of pertinent risks on a quarterly basis.

### Policies

In carrying out their responsibilities, the Directors are guided by numerous policies including Code of Conduct and Privacy. All policies are reviewed annually to ensure they remain relevant and current with the environment in which the Plan operates.

### Audit

An annual audit is conducted by independent external auditors.



As the second largest public sector pension plan in the Province, our mission is to provide retirement security and outstanding services to our Plan members.

We begin and end by honouring our roots, richly grounded in the symbolism of our core values. Our brand identity embodies these as a reminder that our values will continue to guide us forward. The color choice, and the iconic and symbolic representations – including a literary reference, and another that draws strength from nature – were intentional in its design.

Like an open book, we are built from transparency and education, while being of the province's fabric: surrounded by sky and sea, our depth and stability is unwavering, as is our trust, loyalty, wisdom, faith and truth. Our quiet strength is built from the diverse expertise, skills and knowledge we possess, enabling us to govern the Plan and serve our members with excellence – a compelling reminder that there is more to us than initially meets the eye.

## Our Progress as a New Corporation

On August 31, 2016, a Service Level Agreement (“SLA”) was signed between the TPPC and the Province that enabled the Pensions Division, Department of Finance, to continue to provide pension services to Plan members until March 31, 2018. The SLA has been extended to September 30, 2018, for limited services, to ensure the Corporation has access to the necessary systems, pensioner payroll and contribution refund services, and information sharing arrangements until other agreements are negotiated. We effectively transitioned investment management services from the Department of Finance in January 2017 and investment services now reside exclusively with the TPPC.

As we worked towards becoming a separate corporation, we focused on activities that ensured the seamless transition of the pension administration and investment responsibilities from the Department of Finance. The three pillars of our transition and transformation planning were our people, processes and technology. Change management and project management have been at the forefront of our efforts.

The TPPC has been set up to operate as a cost effective, agile and nimble organization. The team is responsible for plan administration, investment management, information technology, accounting and finance, treasury management, human resources and risk management.

Our values are paramount in everything we do:

Integrity – We do the right thing.

Service – We make every interaction count.

Performance – We are driven to succeed.

Accountability – We take responsibility for our actions and results.

Partnership – We build strong and collaborative relationships.

The Board engaged Chair Paula McDonald as Chief Executive Officer from January 1, 2017 to August 31, 2019 to develop and implement the corporate strategy, transition services from the Province, recruit and develop a team, and develop a proactive organization.

Chief Investment Officer Lynn Healey, CPA, CA, and Chief Financial Officer Levi May, CPA, CA, were recruited and both joined the Corporation on September 5, 2017. They bring extensive corporate experience and financial expertise to the TPPC. Their teams are comprised of qualified professionals who have the knowledge, skills, information resources and expertise to fulfill their specialized functions. In addition to our team, we also select reputable external investment managers to execute our investment mandates

in accordance with our Statement of Investment Policies and Procedures. We also use other external service providers with specialized expertise, such as actuarial and investment consulting, as required. Effective July 1, 2017, Eckler Ltd. was hired as the Plan’s actuary and investment consultant.

The implementation of our new systems and processes are proceeding according to plan. The accounting system was implemented during November 2017 and the pension administration system during March 2018.

The Corporation is still in its infancy, although much progress and success has been made in its short existence. However, much more remains to be done to complete the development of a cost-effective first-class pension corporation that provides outstanding service to Plan members. The TPPC Board of Directors and staff will continue to communicate and work collaboratively with the Sponsor Body and the parties to achieve the overarching objective – retirement security for our Plan members.

# Investment Management – Discussion and Analysis

## Overview

The continued primary objective of the Plan is to ensure the Plan can meet the pension obligations as they come due and fulfill the funding requirements outlined in the JSA. This requires the assets to be invested in a way that balances risk and return and ensures the long-term sustainability of the Plan. The Plan is for all members – past, present and future – and the Plan’s investment strategy is focused on this goal.

## Statement of Investment Policies and Procedures

The investment strategy surrounding the Plan’s assets is governed by the TPPC’s Statement of Investment Policies and Procedures (the “SIPP”). The Board of Directors of the TPPC is responsible for approving the SIPP on an annual basis, and the most recent SIPP was approved by the Board of Directors in March 2018. The SIPP outlines the governance arrangements for the Plan, together with the asset allocation strategy, risk tolerance, permitted asset classes and risk constraints, conflict of interest policies, monitoring procedures, and the Plan’s socially responsible investing strategy.

## Team Structure

The TPPC has formed a dedicated investment team, comprised of the Chief Investment Officer and Investment Analyst, who work closely with the TPPC’s Chief Executive Officer, Chief Financial Officer and external investment consultant, Eckler Ltd., in developing and executing the Plan’s investment strategy. The Investment Committee of the TPPC’s Board of Directors is responsible for the oversight of all investment activities of the TPPC.

The Plan’s investment strategy is actively managed and the TPPC’s team oversees the activities of approximately 20 investment managers across each of the Plan’s strategic asset classes, with a diversified mix of investment philosophies and approaches.

The TPPC follows a disciplined approach of evaluating its investment managers prior to making an investment commitment decision, and in monitoring these managers on an ongoing basis. This due diligence includes assessing a variety of factors including, but not limited to, competitive advantage, historical performance (both on an absolute basis and relative to relevant benchmarks), portfolio characteristics, organizational structure, quality and strength of the team, how environmental, social and governance factors are considered in the manager’s investment

decisions, fee structures and competitiveness. Additional factors evaluated include whether reasonable rights and protections are offered to institutional investors, and an assessment of potential tax risks that may arise relating to investing in markets outside of Canada that could impact the Plan’s net investment return.

## Asset Mix – Target Asset Allocation

As asset allocation strategy is a critical component in planning for the long-term sustainability of a plan and in considering the return and risk profile of a plan’s investments. Asset Liability studies provide key inputs in establishing an asset allocation strategy; such studies help pension plan sponsors consider a pension plan’s ability to meet liabilities as they come due based on a range of market and economic environments and demographic assumptions. The goal of the selected asset mix arising from the study is to balance cost, return and risk of loss. The process is a critical risk management tool employed by the TPPC; it supports the TPPC Investment Committee and Board of Directors in calibrating its tolerance for return variability.

In late 2016, the TPPC completed an Asset Liability study and established an interim asset mix allocation that was focused on de-risking the Plan through further manager and asset class diversification and lower return volatility, while maintaining a return equal to or greater than the assumed actuarial discount rate. Throughout 2017, the TPPC was focused on implementation of the interim asset mix, which resulted in new mandates and commitments being made in the private debt and mortgages asset classes, and offsetting reductions in the Plan’s Canadian Equity, Global Equity, and Canadian Fixed Income investments.

During the second half of 2017, the TPPC updated the Asset Liability study. Key priorities through this process included maximizing the likelihood of the Plan being fully funded within thirty years, and not altering any pension benefits or contribution rates, all of which were key tenants through the pension reform process and the establishment of the JSA. These priorities translate into an overall continued objective of de-risking the Plan’s investment strategy.

The funding position of any plan is based on a measurement at a point in time, and given the inherent risks associated with any investment strategy (e.g., market volatility, interest rate risk, liquidity risk, credit risk, etc.), a plan’s funding position is continually subject to change. Accordingly, it is critical for plan sponsors to maintain focus on the long-term sustainability of its plan.

The results of the updated Asset Liability study culminated in the approval by the TPPC Board of Directors of a new strategic asset allocation in late 2017 (“Strategic Asset Allocation”), which largely validated the interim asset mix adopted at the end of 2016, subject to some slight further refinements and continued increasing allocations to non-traditional asset classes. The Strategic Asset Allocation maintains a return equal to or greater than the assumed actuarial discount rate of 6%. The following summarizes the Strategic Asset Allocation to be implemented over the next three to four years:

**Equities**

- Canadian Equity . . . . . 17.5%
- Global Equity . . . . . 17.5%
- Emerging Market Equity . . . . . 10.0%
- Private Equity . . . . . 5.0%

**Real Assets**

- Infrastructure . . . . . 7.5%
- Real Estate . . . . . 7.5%

**Fixed Income**

- Universe bonds . . . . . 12.5%
- Corporate bonds . . . . . 7.5%
- Mortgages . . . . . 7.5%
- Private Debt . . . . . 7.5%

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100.0%

The private debt and mortgages mandates secured in the first half of 2017 support and are consistent with the Strategic Asset Allocation.

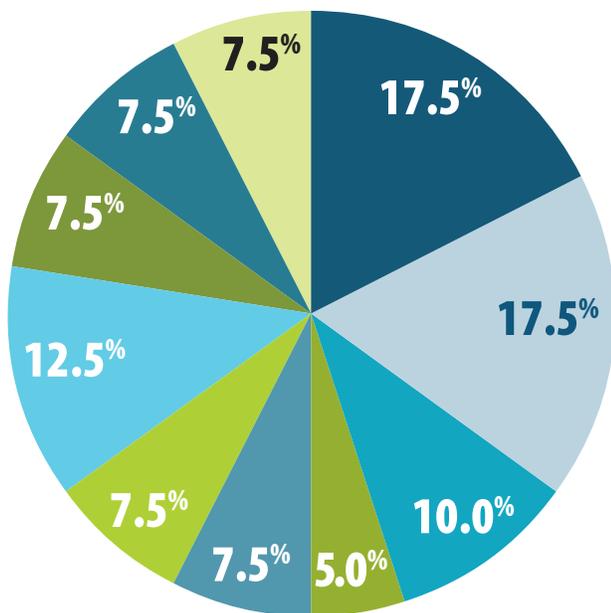
From a risk tolerance and risk constraints perspective, the TPPC’s SIPP permits the asset class allocations to deviate from the approved asset mix allocations by plus or minus 10% of the stated targets for public equity and Canadian bond asset classes, and by plus or minus 5% for the remainder of the asset classes. Ranges are important since markets do not move in tandem and allowing some flex in the allocation within the permitted ranges reduces unnecessary portfolio disruption and cost. The Board of Directors of the TPPC reserves the right to permit the asset mix allocations to vary temporarily above or below the stated ranges.

**Asset Mix – Actual Allocation**

The timelines to reach the Strategic Asset Allocation for certain private market investments, such as private equity, real estate, mortgages and private debt, will vary depending on market opportunities and conditions, and the ability of the investment managers retained by the TPPC to deploy capital commitments based on the TPPC’s risk parameters. As the TPPC redeploys capital to the various non-traditional asset classes, the overweighting within the Canadian and Global equity asset classes will be reduced as these asset classes also move towards the Strategic Asset Allocations.

The following summarizes the TPPC’s actual asset mix as at December 31, 2017 and December 31, 2016, with a comparison to the Strategic Asset Allocation:

**Strategic Asset Allocation**



Asset Class	Strategic Asset Allocation	At December 31, 2017	At December 31, 2016
<b>Equities</b>			
Canadian equity	17.5%	20.9%	24.9%
Global equity (Developed and Emerging Markets)	27.5%	37.9%	45.5%
Private equity	5.0%	0.7%	0.3%
<b>Real Assets</b>			
Real Estate	7.5%	3.5%	3.7%
Infrastructure	7.5%	7.2%	6.8%
<b>Fixed Income</b>			
Bonds (Universe and Corporate) & Money Market	20.0%	23.3%	18.8%
Mortgages	7.5%	5.7%	0.0%
Private Debt	7.5%	0.8%	0.0%

## 2017 Market Overview

Investors entered 2017 with caution due to continued uncertainty surrounding the fall-out from Brexit, the political and economic climate in the US post the election results and the direction of certain US fiscal and taxation policies. As the year unfolded, this uncertainty dissipated. In general, markets observed resilience in the face of political uncertainties and stretched capital market valuations.

During 2017, US equities, for the first time in history, closed the year without a losing month. A continued global recovery and loose central bank policy provided strong tailwinds for international equity markets as well; both developed and emerging equities outperformed US markets. The powerful rally that lifted equity markets in 2017 can be attributed in large part to strong global economic growth, as developed and emerging economies saw the first synchronized expansion since the 2008-2009 financial crisis.

The US equity market returned 14% to Canadian investors during 2017, and International-developed markets saw significantly improved returns in comparison to 2016, returning 17% (versus a 2% loss in 2016). International-developed markets were spurred on by a resilient Europe and economic policies of the current Japanese Prime Minister which have provided a positive climate for investing in Japan. The Emerging Markets returned 29% in 2017, supported to a large degree by investors who were seeking above trend growth and corporate profitability. The Canadian equity market returned 9.1%, largely driven by rebounding materials prices and improved results from the financial services sector, which benefited from increasing interest rates.

Relative to the US dollar, the Canadian dollar started the year at 74 cents and ended it at 80 cents, reflecting an appreciation of 8%. In comparison to other major currencies, the Canadian dollar appreciated by 3.2% relative to the Yen, but depreciated by 5.9% and 2.3%, respectively, relative to the Euro and Pound Sterling. Returns to Canadian investors in global equity markets were strong despite these currency fluctuations.

Crude oil prices ended the year just above \$60/barrel owing to stronger global demand and dwindling stockpiles. Rising oil prices failed to translate into returns for Canadian investors, as the Energy sector returned almost -7% in 2017.

Investors, hungry for yield and looking to avoid the impact of rising interest rates on their fixed income investments, continued to purchase corporate bonds which also benefited from the strong economic fundamentals. This led to spreads

on investment-grade debt to decline to levels not observed since before 2008/2009. The Bank of Canada delivered two rate hikes during the year, causing the yield curve to flatten and shift up as yields in the short end rose the full 50 basis points while the long end only increased by 5 basis points. Strong economic fundamentals and increasing Canadian household indebtedness supported higher interest rates, while concerns over NAFTA negotiations supported a more wait and see approach.

## 2017 Performance Benchmarks

In addition to comparing performance against the Plan's assumed actuarial discount rate of 6%, the TPPC also compares its performance against relative benchmarks on a total-fund and individual asset class basis. This benchmarking process is critical as it allows TPPC Management, members of the Investment Committee and Board of Directors, the Sponsor Body, and Plan members to evaluate the effectiveness of the Plan's investment strategy and implementation. The TPPC's benchmarks are approved by the TPPC's Board of Directors, with the input of the TPPC's investment team and investment consultant.

On a total-fund basis and for each asset class, the Fund seeks to outperform the benchmark rates of return, and this outperformance is described as "value-add". A discussion of the Plan's performance will always be anchored back to a comparison to the assumed actuarial discount rate and the Plan's established policy benchmarks.

## 2017 Performance Overview

Total invested assets reached \$3.4 billion as at December 31, 2017, compared to approximately \$3.1 billion as at December 31, 2016. The Plan achieved a return on invested assets of 11.3% gross of investment management fees during 2017 (10.9% net of investment management fees), which exceeds the assumed actuarial discount rate of 6% and the Plan's policy benchmark of 9.7% for the year.

As the following graphic illustration shows, from a contribution to return perspective, all asset classes contributed positively to the Fund's 2017 return. The *Other* category is comprised of the newer asset classes of mortgages and private debt, as well as cash which is being maintained by the Fund for liquidity management purposes and to fund the current capital commitments made to the Fund's private equity, private debt, infrastructure and mortgages investment managers.

In comparison to the Plan's policy benchmark of 9.7%, the return of 11.3% resulted in a value-add to the Plan of 1.6% due to active management undertaken by the Plan's investment managers.

The Plan's return in 2017 benefited significantly from the overweighting in the Global Equity asset category and the strength of US and International markets during 2017. Global equities contributed the majority of the Plan's return and outperformance versus its policy benchmark.

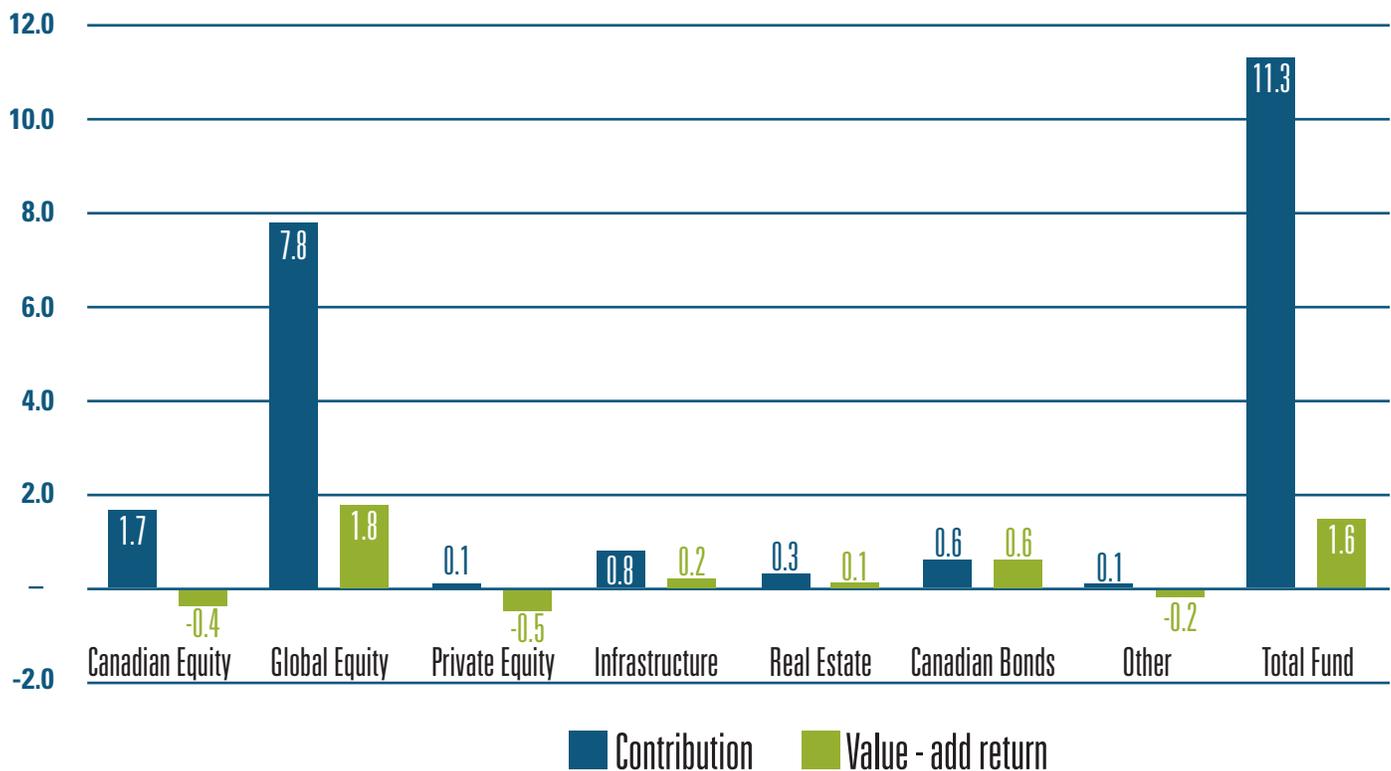
Canadian equities contributed 1.7% to the Plan's 2017 return but contrary to the performance of the Global Equity asset class, Canadian equities detracted from the Plan's value-add performance relative to its policy benchmark. This performance was primarily due to a combination of stock selection and sector allocation attributes of certain of the Plan's Canadian equity investment managers' strategies. The TPPC is closely monitoring the activities and strategies of these managers.

Considering the impact of the promissory note, which is viewed to be equivalent to a fixed income investment of the Plan, the 2017 return was 9.4% gross of investment management fees.

### Looking Ahead to 2018

As we move into 2018, the TPPC will maintain its focus on long-term sustainability, diversification and de-risking of the Plan. The TPPC has begun the implementation of the Strategic Asset Allocation. A new investment manager has been retained for a real estate mandate, and considerable effort is being focused on identifying investment managers for dedicated Emerging Markets equity and private debt mandates. Identifying opportunities and new relationships will be a critical element of the implementation plan supporting the Strategic Asset Allocation. The Plan remains committed to its focus on due diligence in respect of new relationships and opportunities and implementing the Strategic Asset Allocation in a measured and balanced manner.

### Total Fund - Invested Assets Investment Performance - 2017



## Financial Reporting

The Financial Reporting section highlights certain aspects of the financial statements that management views as key to understanding the financial position and operations of the Plan.

Included in the pages preceding the financial statements are three letters that outline the responsibility of management, the auditors, and the actuaries.

- **Management's Responsibility for Financial Reporting** – identifies management's responsibility for preparation of financial statements. The financial statements are prepared according to Canadian accounting standards for pension plans. The board has ultimate responsibility for the financial statements and is assisted in its responsibility by the Audit and Finance Committee.
- **Auditors' Report to the Administrator** – the formal opinion issued by an external auditor on the financial statements.
- **Actuaries' Opinion** – identifies that actuarial methods are appropriate, data is sufficient and reliable, and the assumptions are in accordance with accepted actuarial practices. The actuarial valuation is based on membership data, actuarial and accounting standards, and long-term interest rates.

### Financial Position as at December 31, 2017

(As at December 31) (millions of dollars)	2017	2016
Net assets available for benefits	\$ 5,281	\$ 5,026
Accrued benefit obligation	5,103	5,117
Surplus (Deficit)	\$ 178	\$ (91)
Funded Ratio	103.5%	98.2%

The financial statement valuation measures the fair value of the Plan's net assets available for benefits and pension liabilities at a point in time. The financial statement valuation provides a snapshot of the financial health of the Plan and it does not assume any future contributions and does not project the cost of benefits that members have not yet earned. Therefore, the financial statement valuation is not considered an indication of the long-term sustainability of the plan.

The financial statement valuation is prepared in accordance with guidance from Chartered Professional Accountants of

Canada (CPA Canada). The pension liabilities, prepared by an independent actuary, take into account pension credit earned to date by all Plan members and contributions already received by the Plan. Valuation of investments, estimates and pension liabilities are described further in the notes to the financial statements.

The Plan ended 2017 with a financial statement surplus of \$178 million compared to a deficit of \$91 million at December 31, 2016. The surplus represents the difference between the net assets available for benefits of \$5,281 million and accrued benefit obligation at year end of \$5,103 million. This results in a funded ratio of 103.5% at December 31, 2017 compared to 98.2% at December 31, 2016.

The improvement in funded ratio was a result of three main factors:

1. Investment return of 11.3% exceeded the discount rate of 6.0%. This resulted in investment income and interest on the promissory note from the Government of Newfoundland and Labrador of \$456 million exceeding the interest on accrued benefits of \$301 million.
2. Plan experience, relative to actuarial assumptions, resulted in a net gain of \$96 million.
3. Contributions received by the Plan of \$110 million exceeded the current service cost (the cost of benefits accrued during the year) of \$87 million.

### Net assets available for benefits

(As at December 31) (millions of dollars)	2017
Net assets available for benefits, beginning of year	\$ 5,026
Investment income	346
Interest earned on promissory note	110
Contributions	110
Benefits paid	(294)
Investment related expenses	(10)
Management fees	(5)
Non-refundable HST	(2)
Increase in net assets available for benefits	255
Net assets available for benefits, end of year	\$ 5,281

Net assets available for benefits increased during the year by \$255 million. This increase was a result of increases from investment income of \$346 million, interest earned on promissory note of \$110 million and contributions of

\$110 million, partially offset by decreases for benefits paid of \$294 million, investment-related expenses of \$10 million, management fees from the Teachers' Pension Plan Corporation for the administration of the Plan of \$5 million and non-refundable HST of \$2 million.

Further detail on the investment income and returns are discussed in the Investment Section.

### Accrued benefit obligation

(As at December 31)	2017
(millions of dollars)	
<hr/>	
Accrued benefit obligation, beginning of year	\$ 5,117
Interest on accrued benefits	301
Benefits accrued	87
Benefits paid	(294)
Experience gains	(96)
Changes in actuarial assumptions	(12)
<hr/>	
Decrease in accrued benefit obligation	(14)
<hr/>	
Accrued benefit obligation, end of year	\$ 5,103
<hr/>	

Accrued benefit obligation decreased by \$14 million during the year to \$5,103 million. The decrease was a result of benefits paid during the year of \$294 million, experience gains of \$96 million and changes in actuarial assumptions of \$12 million, partially offset by interest on accrued benefits of \$301 million and benefits accrued of \$87 million. The changes in actuarial assumptions in 2017 are in respect of adjustments applied to mortality rates.

## Management's Responsibility for Financial Reporting

The financial statements of the Teachers' Pension Plan have been prepared by management, which is responsible for the integrity and fairness of the data presented therein. The accounting policies followed in the preparation of these financial statements conform to Canadian Accounting Standards for Pension Plans. Where appropriate, the financial statements include amounts based on management's best estimates and judgments.

In support of its responsibilities, management maintains systems of internal control and supporting procedures to provide reasonable assurance that transactions are authorized, assets are safeguarded, and proper records are maintained. These controls include quality standards in hiring and training, a code of conduct, the establishment of an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines through the organization.

Ultimate responsibility for the financial statements rests with the Teachers' Pension Plan Corporation Board of Directors. The Board of Directors ensures that management fulfills its responsibilities for financial reporting and internal control principally through the Audit and Finance Committee (the "Committee") consisting of four Board members. In carrying out its duties and responsibilities, the Committee meets with management and the external auditors to review the scope and timing of the audit, to review their findings and to satisfy itself that their responsibilities have been properly discharged. The Committee reviews the annual financial statements and the external auditors' report and recommends them to the Board of Directors for approval.

The Plan's actuary, Eckler Ltd., completed an actuarial assessment of the going-concern accrued benefit obligation of the Plan as of December 31, 2017, for inclusion in the Plan's financial statements. The results of the actuaries' assessment are set out in the Actuarial Opinion. This assessment was performed in accordance with accepted actuarial practice. The actuarial assumptions used in these financial statements reflect management's best estimate of future economic events.

The Plan's external auditors, KPMG LLP, conducted an independent examination of the financial statements in accordance with Canadian generally accepted auditing standards and performed such tests and other procedures as they considered necessary to express an opinion. The external auditors have access to the Committee to discuss their audit and related findings as to the fairness of the Plan's financial reporting and any internal control recommendations observed during the audit.

Signed: March 21, 2018

  
Paula McDonald  
Chief Executive Officer

  
Levi May  
Chief Financial Officer

## Actuarial Opinion

Eckler Ltd. (Eckler) was retained by the Board of the Newfoundland and Labrador Teachers' Pension Plan Corporation (the TPPC), Administrator and Trustee of the Newfoundland and Labrador Teachers' Pension Plan to perform an actuarial valuation of the Plan as at August 31, 2017. The results of this valuation were extrapolated to estimate the accrued benefit obligation as at December 31, 2017. The purpose of the extrapolation was to determine the pension obligation and benefit accrual of the Plan for inclusion in the Plan's financial statements in accordance with Section 4600 of Part IV of the Chartered Professional Accountants of Canada (CPA Canada) Handbook.

As this extrapolation was undertaken for purposes of the Plan's financial statements as at December 31, 2017 under the CPA Handbook Section 4600, it may not be appropriate for other purposes and should not be relied upon or used for any other purpose. Specifically, the objective of this extrapolation was different than the triennial valuations required for funding purposes, as per the terms of the Plan's Joint Sponsorship Agreement.

The valuation of the Plan's actuarial liabilities was based on:

- membership data provided by the TPPC as at August 31, 2017;
- methods prescribed by Section 4600 of the CPA Canada Handbook for pension plan financial statements; and
- assumptions regarding future investment returns, inflation, salary growth and demographic experience, with a margin for conservatism where appropriate.

We have reviewed the data used for the valuation and have performed tests of reasonableness and consistency, and it is our opinion that the membership data on which the valuation is based are sufficient and reliable for the purpose of the valuation. Additionally, it is our opinion that the assumptions are appropriate for the purpose of the valuation and the methods employed in the valuation are appropriate for the purpose of the valuation.

Notwithstanding the foregoing opinion, emerging experience differing from the assumptions will result in gains or losses which will be revealed in future valuations.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada.



Jill Wagman  
Fellow, Canadian Institute of Actuaries



Jennifer Urquhart  
Fellow, Canadian Institute of Actuaries

March 21, 2018

Audited Financial Statements

# **TEACHERS' PENSION PLAN**

For the year ended December 31, 2017



KPMG LLP  
Toronto Dominion Place  
140 Water St, Suite 1001  
St. John's NL A1C 6H6

Telephone (709) 733-5000  
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## INDEPENDENT AUDITORS' REPORT

To the Board of Trustees of Teachers' Pension Plan

We have audited the accompanying financial statements of Teachers' Pension Plan, which comprise the statement of financial position as at December 31, 2017 and the statement of changes in net assets available for benefits and changes in accrued benefit obligation for the year then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

### *Board of Trustee'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 the Board of Trustees 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 Teachers' Pension Plan as at December 31, 2017 and its changes in net assets available for benefits and changes in pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

### *Comparative Information*

The financial statements of Teachers' Pension Plan as at and for the period ended December 31, 2016 are unaudited. Accordingly, we do not express an opinion on them.

Chartered Professional Accountants

St. John's, Canada  
March 21, 2018

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# Teachers' Pension Plan

## Statement of Financial Position

As at December 31

(in thousands of dollars)

	2017	2016
<b>Assets</b>		
Cash	\$ 21,393	\$ 82,506
Accrued investment income	47,841	46,836
Contributions receivable:		
Employee	2,078	1,037
Employer	2,129	1,053
Receivable from pending trades	5,832	-
Harmonized Sales Tax and other receivables	1,027	709
Investments (note 4)	3,398,149	3,060,908
Promissory note receivable (note 14)	1,813,482	1,838,448
<b>Total assets</b>	<b>\$ 5,291,931</b>	<b>\$ 5,031,497</b>
<b>Liabilities</b>		
Accounts payable and accrued liabilities	\$ 4,329	\$ 2,416
Payable for pending trades	4,803	-
Payable to Teachers' Pension Plan Corporation	1,676	372
Payable to Newfoundland and Labrador Pooled Pension Fund	-	256
Termination benefits payable	-	2,808
<b>Total liabilities</b>	<b>\$ 10,808</b>	<b>\$ 5,852</b>
<b>Net assets available for benefits</b>	<b>\$ 5,281,123</b>	<b>\$ 5,025,645</b>
Accrued benefit obligation (note 9)	5,102,741	5,116,380
<b>Surplus (Deficit)</b>	<b>\$ 178,382</b>	<b>\$ (90,735)</b>

See accompanying notes to financial statements.

On behalf of the Board

 Chair

 Director

## Teachers' Pension Plan

Statement of Changes in Net Assets Available for Benefits

For the year ended December 31, 2017

With comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

	2017	2016
<b>Increase in net assets</b>		
Investment income (note 5)	\$ 345,793	\$ 62,675
Interest earned on promissory note (note 14)	109,806	36,870
	455,599	99,545
Contributions (note 11)	110,411	36,358
<b>Total increase in net assets</b>	<b>566,010</b>	<b>135,903</b>
<b>Decrease in net assets</b>		
Benefits paid (note 12)	(294,048)	(98,053)
Investment related expenses (note 8)	(9,573)	(3,549)
Management fees (note 14)	(5,044)	(490)
Non-refundable Harmonized Sales Tax	(1,867)	-
<b>Total decrease in net assets</b>	<b>(310,532)</b>	<b>(102,092)</b>
<b>Increase in net assets available for benefits</b>	<b>255,478</b>	<b>33,811</b>
Net assets available for benefits, beginning of period	5,025,645	4,991,834
<b>Net assets available for benefits, end of period</b>	<b>\$ 5,281,123</b>	<b>\$ 5,025,645</b>

See accompanying notes to financial statements

## Teachers' Pension Plan

Statement of Changes in Accrued Benefit Obligation

For the year ended December 31, 2017

With comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

	2017	2016
<b>Actuarial present value of accrued benefit obligation, beginning of period</b>	<b>\$ 5,116,380</b>	<b>\$ 5,147,215</b>
<b>Increase in accrued benefit obligation</b>		
Interest on accrued benefits	300,680	102,246
Benefits accrued	86,780	28,288
	387,460	130,534
<b>Decrease in accrued benefit obligation</b>		
Benefits paid	(294,070)	(98,076)
Experience gains	(95,466)	-
Changes in actuarial assumptions	(11,563)	(63,293)
	(401,099)	(161,369)
<b>Net decrease in accrued benefit obligation</b>	<b>(13,639)</b>	<b>(30,835)</b>
<b>Actuarial present value of accrued benefit obligation, end of period (note 9)</b>	<b>\$ 5,102,741</b>	<b>\$ 5,116,380</b>

See accompanying notes to financial statements

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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The Teachers' Pension Plan (the "Plan" or "TPP") was continued on May 31, 1991, with an effective date retroactive to January 1, 1991, by the Teachers' Pensions Act (the "Act"). The Teachers' Pension Plan Fund (the "Fund") was created under the authority of the Act. The assets of the Plan were separated, at carrying value, from the Newfoundland and Labrador Pooled Pension Fund (the "NLPPF") on September 1, 2016, as provided by Section 5.1 of the Pensions Funding Act. Section 9 of the Pensions Funding Act, which references a deficiency guarantee of pension plans, does not apply to the Plan.

The Act provides for two Plan components; a Registered Plan (registration number 0375709), which provides registered pension benefits allowable under the Income Tax Act (Canada), and a Supplementary Plan, which provides benefits in excess of the Income Tax Act (Canada) maximum benefit limits. The Teachers' Pension Plan Corporation (the "Corporation") has been established as the Trustee of the Registered Plan, to manage the investments of and administer the Registered Plan. A Service Level Agreement was signed, and subsequently extended, between the Corporation and the Province of Newfoundland and Labrador (the "Province") to allow the Province to continue to assist with the administration of the Plan for an interim period up to September 30, 2018 unless terminated by the Corporation.

### 1. Description of the Plan

#### a) General

The Plan is a contributory defined benefit pension plan covering teachers as defined under the Act ("teachers" or "employees").

These financial statements include only amounts that pertain to the Registered Plan. Amounts that pertain to the Supplementary Plan are included within the accounts of the Consolidated Revenue Fund of the Province.

The Plan is not subject to income tax, but is subject to indirect taxes including the Harmonized Sales Tax.

#### b) Funding policy

The employer funding requirement is to match the employee contributions for current service. Matching of contributions may also occur for other types of past service, which may be purchased under contract.

#### c) Employee contributions

Employee contributions are equal to 11.35% of salary, up to the maximum allowed under the *Income Tax Act* (Canada). Amounts in excess of the maximum allowed are paid to the Supplementary Plan.

#### d) Accrued service pensions

A service pension is available from the Plan based on  $1/45^{\text{th}}$  of the member's best five years average salary times years of pensionable service prior to January 1, 1991, plus 2% of the member's best five years average salary times years of pensionable service after January 1, 1991. When a member who retired after August 31, 1998 reaches age 65, this pension is reduced by 0.6% of the member's best five years average salary up to average Year's Maximum Pensionable Earnings ("YMPE") times years of pensionable service after April 1, 1967.

As part of pension reform, in respect of service accrued after August 31, 2015, the calculation is based on the best eight years' salary. For service accrued before September 1, 2015, the calculation will be based on the greater of the average best five years' salary to August 31, 2015 or the average best eight years of salary.

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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

#### e) Disability pensions

A disability pension equal to the accrued service pension is available on permanent incapacity at any age with a minimum of five years pensionable service.

#### f) Survivor pensions

A survivor pension of 60% of the member's accrued service pension is paid to the surviving principal beneficiary (and on the surviving principal beneficiary's death, to dependent children) following the death of a pensioner, a deferred pensioner or a teacher with at least five years pensionable service.

#### g) Pre-retirement death benefits

Where a teacher or deferred pensioner with at least five years pensionable service dies before receiving a pension and a survivor benefit is payable, the surviving principal beneficiary may elect to receive either the survivor benefit, or the greater of the commuted value of the survivor benefit and the commuted value of the teacher's or deferred pensioner's pension entitlement.

Where a teacher or deferred pensioner with at least five years pensionable service dies before receiving a pension and there is no surviving principal beneficiary, the commuted value of the teacher's or deferred pensioner's pension entitlement is paid to the teacher's or deferred pensioner's estate.

Where a teacher with less than five years pensionable service dies, the contributions made by the teacher, with interest, shall be paid to the teacher's personal representative.

#### h) Termination benefits

On termination of employment, a teacher may elect to receive a refund of the teacher's own contributions with interest or, if the teacher has at least five years pensionable service, may elect to receive a deferred pension, commuted value or a combination of commuted value and refund of the teacher's own contributions with interest based on certain service requirements. A teacher who terminates after August 31, 2016 with less than 24.5 years of service and who chooses to take a deferred pension will have to wait until age 62 to access that pension.

#### i) Indexing

Effective September 1, 2002 and each September 1 thereafter the amount of a pension or survivor benefit paid to an individual who has reached the age of 65 will be adjusted by 60% of the Consumer Price Index for Canada for the previous calendar year as published by Statistics Canada, to a maximum of 1.2% of the annual pension or survivor benefit. This provision only applies to a pension or survivor benefit where the teacher to whom that pension or benefit relates retires after August 31, 1998. For individuals who retire after August 31, 2015, the indexing adjustment is only applicable for the years and months of service credited before August 31, 2015.

### 2. Basis of Preparation

#### a) Basis of presentation

The financial statements are prepared in Canadian dollars, which is the Plan's functional currency, in accordance with Canadian accounting standards for pension plans in Part IV of the Chartered Professional Accountants (CPA) Canada Handbook (Section 4600). Section 4600 provides specific accounting guidance on investments and pension obligations.

In selecting or changing accounting policies that do not relate to its investment portfolio or pension obligations, Canadian accounting standards for pension plans require the Plan to comply on a consistent basis with either International Financial Reporting Standards ("IFRS") in Part I of the CPA Canada Handbook, or Accounting Standards for Private Enterprises ("ASPE") in Part II of the Handbook. The Plan has chosen to comply on a consistent basis with IFRS. To the extent that IFRS in Part I is inconsistent with Section 4600, Section 4600 takes precedence.

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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### 2. Basis of Preparation (continued)

#### a) Basis of Presentation (continued)

Consistent with Section 4600, investment assets and liabilities 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.

#### b) Use of estimates and judgments

The preparation of the financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the year. Significant items subject to such estimates and assumptions include the valuation and classification of investments, as well as assumptions used in the calculation of pension obligations. Actual results could differ from these estimates and the impact of any such differences will be recorded in future periods.

### 3. Significant Accounting Policies

#### a) Financial assets and financial 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. Upon initial recognition, attributable transaction costs are recognized in the statements of changes in net assets available for benefits as incurred.

Subsequently, the Plan measures all of its investments at fair value through the statement of changes in net assets available for benefits.

All other non-derivative financial assets including contributions and accounts receivable are measured at amortized cost.

The Plan de-recognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Plan neither transfers nor retains substantially all the risks and rewards of ownership and does not retain control of the financial asset.

On de-recognition of a financial asset, the difference between the carrying amount of the asset and consideration received is recognized in the statement of changes in net assets available for benefits as a net realized gain on sale of investments.

##### 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.

The Plan de-recognizes a financial liability when its contractual obligations are discharged, cancelled or expired.

The Plan considers all liabilities, except for derivative contracts payable, to be non-derivative financial liabilities.

##### 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.

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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### 3. Significant Accounting Policies (continued)

#### a) Financial assets and financial liabilities (continued)

Financial assets and liabilities are offset and the net amount presented in the statement of net assets available for benefits 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.

#### b) Fair value measurement

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.

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; and discounted cash flow analysis.

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.

Fair values of investments are determined as follows:

Short-term notes, treasury bills 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.

Bonds and debentures are valued at the closing mid-price at the valuation date.

Publicly traded equities are valued at year-end quoted closing prices where available. Where quoted prices are not available on the valuation date, estimated fair values are calculated using the last trade date.

The Plan's investments in real estate are through its jointly-owned subsidiary, Newvest Realty Corporation ("Newvest"). All real properties have been subject to valuations by qualified independent property appraisers using market-based assumptions in accordance with recognized valuation techniques. The valuation techniques used include the direct capitalized net operation income method and the discounted cash flow method unless the property was acquired in the year and only then would the cost be applied as the fair value. Recent real estate transactions with similar characteristics and location to the assets are also considered. The direct capitalization income method applies a capitalization rate of property's stabilized net operating income which incorporates allowances for vacancy, management fees and structural reserves for capital expenditures for the property.

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.

Investments in derivative financial instruments, including futures, forwards and option contracts, are valued at year-end quoted market prices where available. Where quoted prices are not available, values are determined using pricing models, which take into account current market and contractual prices of the underlying instruments, as well as time value and yield curve or volatility factors underlying the positions. Unrealized gains and losses on derivative financial instruments, net of premiums paid or received on options contracts, are included in derivative contracts investments.

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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### 3. Significant Accounting Policies (continued)

#### b) Fair value measurement (continued)

The Plan holds certain private investments, such as non-traded pooled or closed funds, limited partnership interests, private placement bonds or equity investments, through the wholly-owned TPP Neptune Corporation. Private investment fund valuations are initially provided by the external fund managers, usually on a three month lagging basis. Such valuations are then adjusted to reflect cash contributions and cash distributions between the valuation date and the reporting date.

#### c) Receivable/payable for pending trades

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

#### d) Investment income

Investment income is recorded on an accrual basis and includes interest income, dividends and other income as well as gains and losses that have been realized on the sale of investments and unrealized current period change in market value of investments.

Dividend income is recognized as of the date of record.

The net realized gain on sale of investments is the difference between proceeds received and the average cost of investments sold.

#### e) 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 the market value of the investment.

#### f) Contributions

Contributions from employers and members due to the Plan at the reporting date are recorded on an accrual basis. Service purchases that include, but are not limited to leaves of absence, periods of reduced accrual and transfer from other pension plans are recorded and service is credited when the signed contract to purchase is received.

#### g) Benefits

Benefit payments to retired members are recorded as they are due and paid, twice monthly. Commuted value payments, contribution refunds and transfers to other pension plans are recorded when paid. Accrued benefits for members are recorded as part of the accrued pension obligation.

#### h) Administration expenses

Administration expenses are incurred for direct pension administration and external investment management and are recorded on an accrual basis. Direct pension administration expenses represent costs to provide direct services to plan members and employers that are incurred by the Corporation and charged to the Plan as a management fee. External investment management expenses represent payments to the investment managers. Under the Service Level Agreement between the Corporation and the Government of Newfoundland and Labrador the Province continues to assist with administration of the Plan for an interim period. Certain salaries, overhead and administrative expenses of the Department of Finance, Pensions Division are charged to the Plan on a cost recovery basis.

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

### 3. Significant Accounting Policies (continued)

i) Cash

Cash includes balances with banks and investment managers.

j) Future changes in accounting policies

The relevant new guidance issued by the International Accounting Standards Board not yet adopted by the Plan includes IFRS 9, Financial Instruments. The new standard will replace IAS 39, Financial Instruments: Recognition and Measurement and includes guidance on recognition and derecognition of financial assets and financial liabilities, impairment and hedge accounting. The new standard comes into effect January 1, 2018, with early adoption permitted.

Management does not expect any significant impact on either the Plan's financial position or its investment income when adopting the new standard.

### 4. Investments

a) Investment portfolio:

The fair value of investments relative to the cost is summarized in the following table:

	2017			2016		
	Fair Value	%	Cost	Fair Value	%	Cost
Money market	\$ 89,193	2.6	\$ 89,193	\$ 39,120	1.3	\$ 39,120
Equities						
Canadian equity	722,931	21.3	655,815	780,305	25.5	747,580
Global equity	1,258,242	37.0	1,093,008	1,334,469	43.6	1,292,061
Private equity	25,221	0.8	22,857	8,917	0.3	8,917
Real assets						
Real estate	121,546	3.6	111,958	114,676	3.7	112,776
Infrastructure	43,785	1.3	44,867	30,834	1.0	30,680
Infrastructure - pooled fund	201,660	5.9	204,220	178,735	5.8	187,107
Fixed income						
Canadian bonds	711,026	20.9	730,751	578,413	18.9	600,697
Mortgages	196,473	5.8	195,779	-	-	-
Private debt	28,072	0.8	27,934	-	-	-
Derivatives	-	-	-	(4,561)	(0.1)	-
	<b>\$ 3,398,149</b>	<b>100</b>	<b>\$ 3,176,382</b>	<b>\$ 3,060,908</b>	<b>100</b>	<b>\$ 3,018,938</b>

b) Fair value measurement

Financial instruments are classified according to the following fair value hierarchy that reflects the significance of inputs used in determining the fair values:

Level 1 - unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2 - inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly or indirectly.

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

#### 4. Investments (continued)

##### b) Fair value measurement (continued)

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

Investments based on the valuation level within the fair value hierarchy are as follows:

	<b>2017</b>			
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Money market	\$ -	\$ 89,193	\$ -	\$ 89,193
Equities				
Canadian equity	710,091	12,840	-	722,931
Global equity	1,256,398	-	1,844	1,258,242
Private equity	-	-	25,221	25,221
Real assets				
Real estate	-	-	121,546	121,546
Infrastructure	-	-	43,785	43,785
Infrastructure - pooled fund	-	201,660	-	201,660
Fixed income				
Canadian bonds	-	711,026	-	711,026
Mortgages	-	-	196,473	196,473
Private debt	-	-	28,072	28,072
Derivatives	-	-	-	-
<b>Total</b>	<b>\$ 1,966,489</b>	<b>\$ 1,014,719</b>	<b>\$ 416,941</b>	<b>\$ 3,398,149</b>
				<b>2016</b>
	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Total</b>
Money market	\$ -	\$ 39,120	\$ -	\$ 39,120
Equities				
Canadian equity	768,717	11,588	-	780,305
Global equity	1,332,709	-	1,760	1,334,469
Private equity	-	-	8,917	8,917
Real assets				
Real estate	-	-	114,676	114,676
Infrastructure	-	-	30,834	30,834
Infrastructure - pooled fund	-	178,735	-	178,735
Fixed income				
Canadian bonds	-	578,413	-	578,413
Mortgages	-	-	-	-
Private debt	-	-	-	-
Derivatives	-	(4,561)	-	(4,561)
<b>Total</b>	<b>\$ 2,101,426</b>	<b>\$ 803,295</b>	<b>\$ 156,187</b>	<b>\$ 3,060,908</b>

There have been no transfers between levels in any of the periods presented.

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

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(in thousands of dollars)

#### 4. Investments (continued)

##### b) Fair value measurement (continued)

The following table reconciles the Plan's Level 3 fair value measurements from period to period:

Fair value, August 31, 2016	\$	122,896
Acquisitions		34,253
Settlements		(1,110)
Change in unrealized gain		148
Fair value, December 31, 2016	\$	156,187
<hr/>		
Fair value, December 31, 2016	\$	156,187
Acquisitions		262,212
Settlements		(11,199)
Change in unrealized gain		9,741
Fair value, December 31, 2017	\$	416,941

Level 3 financial instruments are valued using various methods. Real estate subsidiaries are valued using the overall capitalization method and the valuations are significantly affected by non-observable inputs, the most significant of which is the capitalization rate. At December 31, 2017, an increase or decrease of 25 basis points in the capitalization rate used by the independent property appraisers would have decreased or increased the valuation of the Plan's investments in the amounts of \$7.5 million and \$8.3 million, respectively.

The Plan's private equity, infrastructure, private debt and mortgage investments are structured as indirect investments in private funds; these funds are valued using various methods including the discount rate method. Based on the structure of these investments, the Plan's ability to access information on underlying individual fund investments is limited. Accordingly, the fair value of these investments is based on the net asset value provided by the fund's general partner or investment manager, and therefore, in the absence of specific information to support deviating from this value, no other reasonably possible alternative assumptions could be applied.

##### c) 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 uses such contracts to enhance investment returns and for managing exposure to foreign currency volatility.

Notional amounts of derivative contracts are the contract amounts used to calculate the cash flow to be exchanged. They represent the contractual amounts to which a rate or price is applied for computing the cash to be paid or received. Notional amounts are the basis on which the returns from and fair value of the contracts are determined. They are not recorded as financial assets or liabilities on the annual statement of financial position and change in net assets available for benefits. They are a common measure of volume of outstanding transactions but do not represent credit or market risk exposure. The aggregate notional amounts and fair value of derivative contracts can fluctuate significantly.

Derivative contracts transacted on either regulated exchange market or in the over the counter market directly between two counterparts include the following:

##### (i) Futures

Futures are transacted in standard amounts on regulated exchanges and are subject to daily cash management.

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

#### 4. Investments (continued)

##### c) Derivatives (continued)

##### (ii) Currency forwards

Currency forward 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 Plans' derivatives and their related assets and liabilities:

	Notional amount	Fair value asset	Fair value liability	Fair value net
December 31, 2017				
Currency forwards	\$ 22,775	\$ (377)	\$ (92)	\$ (285)
December 31, 2016				
Currency forwards	\$ 162,773	\$ 26	\$ (556)	\$ 582

##### d) Securities lending

The Plan participates in a securities lending program whereby it lends securities in order to enhance portfolio returns. The securities lending program requires collateral in cash, high-quality debt instruments or securities. Collateral transactions are conducted under terms that are usual and customary in standard securities lending programs. In the absence of an event of default, the same securities or equivalent securities must be returned to the counterparty at the end of the contract.

The fair values of the allocated securities and collateral associated with the securities lending program as at period end are as follows:

	2017	2016
Securities lent	\$ 637,869	\$ 715,891
Securities contractually receivable	\$ 671,954	\$ 756,339

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

#### 5. Investment Income

a) Investment income is as follows:

	2017	2016
Dividend income	\$ 55,983	\$ 13,338
Interest income	25,625	3,849
Real estate income	3,498	3,055
Securities lending income	1,727	523
Commission recapture and other income	472	3
Dividend, interest and other investment income	87,305	20,768
Gain (loss) on sale of investments	85,519	(6,539)
Current period increase in market value of investments	172,969	48,446
Investment income	\$ 345,793	\$ 62,675

b) Investment income (loss) by asset mix, is as follows:

	Investment income	Gain (loss) on sale of investments	Current period change in market value of investments	2017
Money market	\$ 3,358	\$ -	\$ -	\$ 3,358
Equities				
Canadian equity	18,151	1,446	34,332	53,929
Global equity	20,755	112,639	116,347	249,741
Private equity	-	-	2,364	2,364
Real assets				
Real estate	796	(1,466)	7,688	7,018
Infrastructure	-	(8)	(1,237)	(1,245)
Infrastructure - pooled fund	17,113	-	5,812	22,925
Fixed income				-
Canadian bonds	24,982	(11,071)	2,558	16,469
Mortgages	-	-	693	693
Private debt	83	153	137	373
Derivatives	-	(16,174)	4,275	(11,899)
Securities lending	1,727	-	-	1,727
Other	340	-	-	340
	\$ 87,305	\$ 85,519	\$ 172,969	\$ 345,793

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

#### 5. Investment Income (continued)

##### b) Investment income (loss) by asset mix (continued)

	Investment income	Gain (loss) on sale of investments	Current period change in market value of investments	2016
Money market	\$ 745	\$ 48	\$ -	\$ 793
Equities				
Canadian equity	834	(1,114)	33,014	32,734
Global equity	12,504	(8,284)	35,662	39,882
Private equity	-	-	154	154
Real assets				
Real estate	3,055	-	1,900	4,955
Infrastructure	-	-	-	-
Infrastructure - pooled fund	-	-	-	-
Fixed income				
Canadian bonds	3,630	2,811	(22,284)	(15,843)
Mortgages	-	-	-	-
Private debt	-	-	-	-
	\$ 20,768	\$ (6,539)	\$ 48,446	\$ 62,675

#### 6. 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. The use of financial instruments exposes the Plan to credit and liquidity risks, interest rate volatility, and market risks including foreign exchange and market price fluctuations and volatility. The Plan has policies and operating procedures that establish an asset mix among equity, fixed income, real estate and private equity investment, require diversification of investments within categories, and set limits on the size of exposure to individual investment and counterparties. Trustee oversight, procedures and compliance functions are incorporated into Plan processes to achieve consistent controls and mitigate operational risk.

##### a) 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.

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

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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

##### a) Interest rate risk (continued)

The term to maturity classifications of interest bearing investments, based upon the contractual maturity of these securities, are as follows:

	2017	2016
	(%)	(%)
Within 1 year	2.6	6.3
Short (1-5 years)	53.3	31.0
Medium (5-10 years)	19.9	30.4
Long (10+ years)	24.2	32.3
Total	100.0	100.0

Assuming a parallel change in the long and short-term yields, a 1% increase or decrease in interest rates would have the effect of decreasing or increasing, respectively, the fair value of the Plan's fixed income investments by approximately \$52.1 million or 7.33% (2016 - \$45.3 million or 7.80%).

##### b) 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. All changes in market conditions will directly result in an increase or decrease in net assets available for benefits. 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. If equity market indices (S&P/TSX and MSCI ACWI and their sectors) declined by 10%, and all other variables are held constant, the potential loss to the Plan would be approximately \$200.6 million or 5.90% (2016 - \$232.9 million or 7.61%).

##### c) Credit risk

Credit risk is the risk that the issuer of a debt security or counterparty to a contract is unable to fulfill its financial obligation and causes the other party to incur a loss.

##### Fixed Income portfolio

Credit risk in the fixed income portfolio is monitored by evaluating the Plan's exposure by sector (government versus corporate) and by credit quality.

The Plan is exposed to credit risk from the following interest earning investments, classified by sector as at period end:

	2017	2016
	(%)	(%)
Federal government	20.1	17.9
Provincial governments	17.9	32.5
Municipal governments	0.9	1.1
Corporate	58.6	44.9
Other	2.5	3.6
Total	100.0	100.0

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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

##### c) Credit risk (continued)

The Plan's risk by credit rating as at period end is as follows:

	2017	2016
	(%)	(%)
AAA to A-	72.1	75.6
BBB to BBB-	19.1	15.7
BB+ and below	0.1	0.6
Not rated	8.7	8.1
Total	100.0	100.0

##### Real estate

Real estate investment managers manage risk through monthly monitoring of tenant performance and arrears. Tenant exposure is managed by limiting concentration to a specific economic sector and geographic area. Transactions that involve assuming a new tenant exposure are vetted through an appropriate due diligence and approval process.

##### Securities lending

The Plan lends securities for a fee to approved borrowers. High quality collateral is provided by borrowers to alleviate the credit risk. Regular reporting of the securities lending program ensure that its various components are continuously being monitored.

##### d) Foreign currency risk

Foreign currency exposure arises through holdings of securities and units in pooled funds in non-Canadian assets. Fluctuations in the relative value of the Canadian dollar against these foreign currencies can result in a positive or a negative effect on the fair value of the investments. The Plan's exposure to foreign currencies provides diversification benefits that should be assessed by asset class. Foreign currency positions arising from investments in real estate or infrastructure are generally hedged, while investments in global public and private equity generally are not hedged. In addition, the investment managers of the Plan are given flexibility through their mandate to periodically hedge currency for opportunistic or defensive purposes.

The Plan's unhedged currency exposure from net investment assets as at period end is summarized in the following table:

	2017	2016
	(%)	(%)
Canadian Dollar	62.1	61.2
US Dollar	24.3	23.9
Euro	4.1	3.8
British Pound	2.1	3.0
Other Asia / Pacific currencies	2.4	3.0
Other European currencies	2.3	2.5
Japanese Yen	1.7	1.6
Other currencies	1.0	1.0
Total	100.0	100.0

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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### 6. Investment Risk Management (continued)

#### d) Foreign currency risk (continued)

A 10% increase in the value of the Canadian dollar in relation to all other foreign currencies, with all other variables held constant, would result in an unrealized investment loss of \$126.7 million, or 3.79% (2016 - \$121.4 million or 3.88%).

#### e) Liquidity risk

Liquidity risk corresponds to the Plan's ability to meet its financial obligations as they come due with sufficient and readily available cash resources. 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. In general, the Plan's investments in cash and cash equivalents, debt and public equities are expected to be highly liquid and are invested in securities that are actively traded. Investments in private equity and real estate are considered highly illiquid due to their private nature and longer term to maturity.

### 7. Capital Management

The capital of the Plan is defined as the net assets available for benefits. The Plan was established as a vehicle to invest employee and employer pension plan contributions in the capital markets with a long-term goal to achieve investment returns. The main objective of the Plan is to secure promised pension obligations as they come due, and the secondary objective is to minimize long-term contributions and manage the variability of contributions.

The Plan is jointly sponsored by the Government of Newfoundland and Labrador and the Newfoundland and Labrador Teachers' Association. The Investment Committee appointed by the Board of Directors of the Corporation, the Trustee of the Plan, has been tasked with the responsibility of oversight of all investment activities of the Plan.

#### a) Portfolio management

The Plan utilizes external investment management firms to invest the assets of the Plan. Each investment manager is selected through a disciplined process to ensure a good fit with the investment structure and objectives of the Plan.

CIBC Mellon Global Securities Services provides all custodial and administrative services for the Plan, and effective July 1, 2017 Eckler Ltd. began providing investment counselling services to the Plan.

#### b) Asset mix policy

In 2017, the Corporation focused on the implementation of the interim asset mix that the Corporation's Board of Directors approved in late 2016. During 2017, the Corporation's Board of Directors completed an updated asset/liability study (the "Study") and as a result of the Study, a new asset mix was approved by the Board of Directors in November 2017. Factors considered in determining the asset mix included the Plan's going concern funded ratio, member demographics, existing and future pension obligations, actuarial assumptions and liquidity requirements. The following summarizes the interim asset mix policy that was in place for the majority of 2017, and the new asset mix policy approved in November 2017:

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

#### 7. Capital Management (continued)

##### b) Asset mix policy (continued)

	Interim asset mix (%)	New asset mix (%)
Equities		
Canadian	18.0	17.5
Global	34.0	17.5
Emerging market	-	10.0
Private equity	5.0	5.0
Real assets		
Real estate	5.0	7.5
Infrastructure	5.0	7.5
Fixed income		
Canadian bonds	20.0	-
Universe bonds	-	12.5
Corporate bonds	-	7.5
Mortgages	8.0	7.5
Private debt	5.0	7.5

#### 8. Investment Related Expenses

Investment related expenses consist of management fees and expenses charged by the external investment management firms, the custodian and the investment consultant and are as follows:

	2017	2016
Investment management fees	\$ 8,760	\$ 2,685
Custodian fees	675	181
Investment consulting fees	82	67
Miscellaneous foreign fees	56	616
Total	\$ 9,573	\$ 3,549

#### 9. Accrued Benefit 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 December 31, 2017 for all active and inactive members including pensioners and survivors. In accordance with Section 4600, the obligation is measured using the projected unit credit method, prorated on service. This method calculates the actuarial value of the benefits accrued up to the financial reporting date, after the projected benefits have been attributed equally to each year of a member's service.

The actuarial valuation of the Plan was performed as at August 31, 2017, based on plan membership as at this date, and results were extrapolated to December 31, 2017.

The actuarial assumptions used in determining the value of the accrued benefit obligation of \$5.1027 billion were determined using a methodology that is consistent with the methodology used to determine the assumptions made in the funding valuation, with adjustments where appropriate for future economic and non-economic events.

# Teachers' Pension Plan

## Notes to Financial Statements

For the year ended December 31, 2017

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(in thousands of dollars)

### 9. Accrued Benefit Obligation (continued)

The primary economic assumptions include the discount rate, the salary escalation rate and the inflation rate. The discount rate was developed by calculating the expected average annual gross rate of return for the Plan's assets, net of estimated fees, and adding back any expected value-added return resulting from active management, less a provision for adverse deviation. The salary increase assumptions incorporates the underlying inflation assumption, and includes an additional margin of 0.75% for productivity. The salary increase assumption also includes a service based merit component.

The key assumptions used in the valuation are summarized in the table below:

	2017	2016
Net of expense discount rate	6.00 % per annum	6.00% per annum
Inflation	2.25% per annum	2.25% per annum
Pensioner indexing	1.00% per annum	1.00% per annum
Annual salary increase		
- Service based merit	< 10 years of service: 4.00% per annum 10+ years of service: 0.75% per annum	< 10 years of service: 4.00% per annum 10+ years of service: 0.75% per annum
- Contractual	3.00% per annum	3.00% per annum
Maximum pension and YMPE	2017: \$2,914.44 and \$55,300 2018+: Increase at 3.00% per annum	2015: \$2,818.89 and \$54,900 2016+: Increase at 3.00% per annum
Retirement age	100% at earliest age member is eligible for an unreduced pension	100% at earliest age member is eligible for an unreduced pension
Mortality	CPM 2014 Public Sector Mortality Table projected generationally with CPM Improvement Scale B	CPM 2014 Public Sector Mortality Table projected generationally with CPM Improvement Scale B Size adjustment factors of 1.02 for males and 0.96 for females

### 10. Actuarial Valuations

As per the Plan's Joint Sponsorship Agreement, triennial actuarial valuations are required for plan funding purposes, with off-cycle valuations performed as directed to be used for monitoring the position of the pension plan. The results of these off-cycle valuations do not impact funding requirements of the plan.

An off-cycle valuation for funding purposes was performed as at August 31, 2017 by the consulting firm Eckler Ltd, and used to determine the accrued benefit obligation contained herein. The valuation as at August 31, 2017 was re-run with assumptions adjusted as deemed appropriate and the liabilities were extrapolated to December 31, 2017.

A valuation was also performed as at August 31, 2015 by the actuarial consulting firm of Morneau Shepell. An extrapolation of the pension obligation as at August 2016 and December 2016 was estimated using the results of the 2015 valuation. The next required valuation for funding purposes will be as of August 31, 2018. A review of the appropriateness of the assumptions used for funding purposes will be completed as part of the process for this valuation.

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

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(in thousands of dollars)

#### 11. Contributions

	2017	2016
Employee		
Current service	\$ 52,531	\$ 17,591
Past service	2,231	781
Reciprocal transfers	2,362	282
	57,124	18,654
Employer		
Current service	52,531	17,529
Past service	756	175
	53,287	17,704
Total contributions	\$ 110,411	\$ 36,358

#### 12. Benefits Paid

	2017	2016
Retirement benefit payments	\$ 276,060	\$ 90,976
Disability benefit payments	8,922	3,313
Termination benefit payments (including commuted value payments and contribution refunds)	4,451	2,973
Transfers to other pension funds	3,123	344
Death benefit payments	1,492	447
	\$ 294,048	\$ 98,053

#### 13. 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 value of the Plan's subsidiaries as at December 31, 2017 and 2016:

	Purpose	Ownership	2017	2016
Newvest Realty Corporation	Real estate	37.53%	\$ 121,546	\$ 114,676
TPP Neptune Corporation	Private Equity, Private Infrastructure and Private Debt	100.00%	\$ 94,033	\$ 39,751

Funding is made by capital investment from the Plan via share capital or contributed surplus. TPP Neptune Corporation has commitments that must be funded directly through capital investment by the Plan. These amounts are included in the Plan's commitments (note 15).

## Teachers' Pension Plan

### Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

#### 14. Related Party Transactions

Administration expenses are incurred by the Corporation for direct pension administration and charged to the Plan as a management fee. Expenses for the year ended December 31, 2017 and the four month period ended December 31, 2016 include an allocation of costs of the Department of Finance, Pensions Division under the Service Level Agreement with the Corporation, as well as direct costs incurred by the Corporation. A breakdown of the expenses included in the management fee are as follows:

	2017	2016
Consulting and other professional services	\$ 1,756	\$ 67
Salaries and benefits	1,476	284
Premises and equipment	963	-
Board and committee fees and expenses	271	-
Other expenses	267	80
Insurance	261	37
Rent	50	22
	<b>\$ 5,044</b>	<b>\$ 490</b>

The following related party investments were held by the Plan at period end:

	2017		2016	
	Cost	Market Value	Cost	Market Value
Province of Newfoundland and Labrador Debentures				
Series maturing October 17, 2033	\$ 1,037	\$ 1,023	\$ 1,037	\$ 966
Series maturing October 17, 2046	974	972	974	874
Newfoundland and Labrador Hydro Debentures				
Matured July 14, 2017	-	-	65	63
	<b>\$ 2,011</b>	<b>\$ 1,995</b>	<b>\$ 2,076</b>	<b>\$ 1,903</b>

As part of the pension reform process, the Province issued a promissory note to the Corporation on August 29, 2016, for the benefit of the Plan. The principal sum of \$1.862 billion, valued at September 1, 2015, together with interest at 6% per annum, is payable in annual blended payments of principal and interest of \$135 million on August 31 of each year, with the first payment made on August 31, 2016 and continuing for 29 years. The second payment due on August 31, 2017 has been received. Payments under the promissory note are fixed and will be made regardless of the funded status of the Plan in the future. The promissory note is non-marketable. In addition, the promissory note and the payments due are not assignable or transferrable by the Corporation.

The amount of the promissory note outstanding at December 31, 2017 was \$1.813 billion (December 31, 2016 - \$1.838 billion)

## Teachers' Pension Plan

Notes to Financial Statements

For the year ended December 31, 2017

with comparative information for the four month period ended December 31, 2016

(in thousands of dollars)

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### 14. Related Party Transactions (continued)

Principal repayments of the promissory note by the Province to the Corporation and by the Corporation to the Plan for the next five years are as follows:

2018	\$26,463
2019	\$28,051
2020	\$29,734
2021	\$31,518
2022	\$33,409

On August 31, 2016, the Corporation entered into a Service Level Agreement with the Province for administrative services to be provided on a cost recovery basis during the interim period. The cost of the services for the year ended December 31, 2017 was \$0.88 million (2016 - \$0.42 million).

### 15. Commitments

The Plan has committed to invest in certain private market investments, including private equity, private debt, infrastructure and mortgage. As at December 31, 2017, these commitments totaled \$356.4 million (December 31, 2016 - \$261 million) of which \$267.9 million will be made through TPP Neptune Corporation. The commitments are expected to be funded over the next four years.

### 16. Comparative Information

Certain 2016 comparative information has been reclassified to conform to the financial statement presentation adopted for the current year.

# Glossary of Terms

<b>Accrued Benefit Obligation</b>	An estimate of the current value of the future obligations of the Plan. The Plan's future obligations refer to the pension commitments made to the retirees, current employees and future employees.
<b>Actuarial Rate of Return</b>	The assumed long-term rate of return used by the Plan's external actuaries to determine the value of the Plan's liabilities. Also referred to as the Discount Rate.
<b>Assets</b>	The items owned by the Plan that have a monetary value and are available to pay the Plan's obligations. Examples of the Plan's assets are cash, stocks, bonds, real estate, infrastructure, etc.
<b>Asset Allocation/Mix</b>	The allocation of the Plan's Fund among the different asset classes that the Fund invests in such as cash, stocks, bonds, real estate, infrastructure, etc.
<b>Asset Liability Study</b>	A study that analyzes the future stream of liabilities of the Plan and helps determine an asset mix which will provide the return required to support the liabilities over the long term. The study also examines the amount of risk that the Plan must take to generate the return.
<b>Benchmark</b>	A standard against which the performance of the Plan's return on investment can be measured.
<b>Developed Markets</b>	These countries are the most advanced economically, have highly developed capital markets, high levels of liquidity, meaningful regulatory bodies, large market capitalization and high levels of per capita income, such as the United States, Canada, Japan, Germany, the UK, Australia, etc.
<b>Discount Rate</b>	The rate that reflects what the Plan's assets are expected to earn over the long term.
<b>Emerging Markets</b>	A country's economy that is progressing toward becoming advanced and has some characteristics of a developed market, as shown by some liquidity in local debt and equity markets, and the existence of some form of market exchange and regulatory body but does not meet standards to be a developed market. They do not have the level of market efficiency and strict standards in accounting and securities regulation as more advanced economies. Such markets include Brazil, Chile, China, Colombia, Czech Republic, Egypt, Greece, Hungary, India, Indonesia, Korea, Malaysia, Mexico, Pakistan, Peru, Philippines, Poland, Russia, Qatar, South Africa, Taiwan, Thailand, Turkey and United Arab Emirates.
<b>Equity(ies)</b>	A stock or any other security representing an ownership interest in a company.
<b>Fixed Income</b>	A loan made by an investor to a company or a government. It is commonly referred to as a bond.
<b>Funded Ratio</b>	The Plan's assets divided by the Plan's liabilities and expressed as a percentage. If the percentage is above 100%, the Plan has a surplus which indicates that there are more than enough assets to fund the future estimated liabilities. If the percentage is below 100%, the Plan has a deficit or Unfunded Liability which indicates that the assets are not sufficient to fund the future liabilities.

<b>Gross of Investment Management Fees</b>	Refers to the fact that the investment return has been calculated before any fees or expenses paid to the investment managers.
<b>Net Assets Available for Benefits</b>	Total assets less liabilities of the Plan that are available for the Accrued Benefit Obligation.
<b>Net of Investment Management Fees</b>	Refers to the fact that the investment return includes fees or expenses paid to the investment managers and has been deducted from the investment return calculation.
<b>Overweight/Underweight</b>	Refers to the difference in the actual asset mix at a point in time compared to the Strategic Asset Allocation. Underweight indicates less than the Strategic Asset Allocation, while overweight indicates more than the Strategic Asset Allocation.
<b>Return on Investment</b>	A performance measure, expressed as a percentage, used to determine the return of an investment relative to the investment's cost. It evaluates the efficiency of the Plan's assets.
<b>Strategic Asset Allocation</b>	The Plan's target asset allocation based on the Asset Liability study conducted in 2017.
<b>Unfunded Liability</b>	See Funded Ratio. The unfunded liability is expressed in dollar terms.
<b>Universe Bonds</b>	Represent the broad Canadian fixed income market consisting of marketable issues that are widely covered. The universe is weighted by size to its various components across the federal, provincial and municipal government sectors as well as corporate issues.
<b>Volatility</b>	A measure of the variation in the price of a security or the returns of the Plan. High volatility indicates increased risk.
<b>Yield</b>	The income return on an investment, such as interest, received from holding a particular security. A common term used for the return on bonds.