

2022-2023 Annual Report





2022-2023 PSSP Annual Report

The Public Service Superannuation Plan (PSSP or Plan) Annual Report details the financial health of the Plan and provides a comprehensive review of its investment performance in 2022-2023.

at a glance as at March 31, 2023

FUNDED RATIO

The Plan was 102.9 per cent funded. The funded ratio increased by 4.6 per cent from 98.3 per cent as at March 31, 2022.

102.9%

FINANCIAL POSITION

\$7.513 b

Assets available for benefits

\$7.299 b

Liabilities

\$0.214 b

Funding surplus

Assets available for benefits were \$7.513 billion. This is an increase of \$57 million from \$7.456 billion as at March 31, 2022.

INVESTMENT RETURN

3.45% The Plan

2.99% Benchmark 5.85% Discount Rate

The Plan's return on investment for fiscal 2022-2023 was 3.45 per cent, net of investment fees (3.60 per cent, gross of investment fees). The Fund outperformed the policy benchmark of 2.99 per cent and was below the actuarial assumed rate of return, or discount rate, of 5.85 per cent.

2022-2023 PSSP Annual Report

as at December 31, 2022

at a glance



42,468

Plan Membership

Total members increased by 1,210

19,886

active members increased by 360

increased by 469

deferred members** increased by 381

- * includes survivors (which encompasses surviving spouses/ex-spouses, children, and dependants)
- ** Deferred members are Plan members who have terminated employment, but have not yet retired or removed their funds from the Plan.

Active member

47.2

average age median age

Retiree

average age median age

Retirees 100 years of age or older

33 centenarians (includes survivors)

Pensionable earnings (active members)

\$72,734 average

\$66,854 median

Lifetime pension (retirees)*

\$22,425

\$18,665

average

*This does not include any supplementary pension amount. Plan members may also receive income from the Canada Pension Plan, the Old Age Security program, and/or the Guaranteed Income Supplement.

Membership Growth

In 2022-2023, Public Service Superannuation Plan Trustee Inc. (PSSPTI) continued to focus on its membership growth initiative. The goal of this initiative is to expand the Plan's membership and improve its aging demographic profile over time.

Since the initiative commenced in 2015, the PSSP membership has grown by 3,590 members and \$480 million in assets have been added to the Plan. The guiding principles for membership growth are that it must enhance the long-term sustainability of the Plan and be cost neutral to existing members.

(since 2015)



new members

new employers

million in assets

The Plan has 1.03 active members for every 1 retiree. A higher ratio of active members to retirees is a good indicator of a healthier pension plan.

as at March 31, 2023

Contributions Received

Plan member and employer contributions* received by the Plan totalled:

\$250 million

*includes all matched and unmatched current and past service contributions

Benefits Paid

Benefits* paid to retirees and survivors totalled:

\$436 million

*includes refunds

Projected Retirements

There were approximately 3,542 Plan members eligible to retire from the PSSP with an unreduced pension as at December 31, 2022. The chart below shows the number of Plan members over the next several years who will be able to retire with an unreduced pension*.

December 31, 2023

4,518

Members

December 31, 2025

6,133

Members

December 31, 2027

7,631

Members

*These figures are cumulative.

Annual Pension in Pay

Number of recipients per pension \$ amount

	<\$15K	\$15-\$30K	\$30-\$45K	\$45-\$60K	\$60K+
Retired Members <65	658	1,096	1,175	605	271
Retired Members >65	5,108	4,345	1,682	582	341
Survivors	2,374	823	156	44	8

- 1. The "annual pension in pay" is the amount paid from the PSSP only.
- 2. The figures provided are estimates, based on currently available data.
- 3. Determination of a pension is formulaic, based on each member's unique combination of years of pensionable service and highest average salary.

For more information on the pension formula, please visit our website at www.nspssp.ca/members/your-working-years/pension-benefit

The Public Service Superannuation Plan is one of the largest public sector pension plans in Atlantic Canada. The Plan is a registered defined benefit pension plan, with a prescribed funding policy, that offers a lifetime pension benefit when you retire. Your pension benefit is funded by contributions made by you and your employer, as well as by investment income generated by the Plan's investment assets. This Annual Report details the Plan's investment performance and financial health as at March 31, 2023.

Report to members

- **05** Message from the Chair
- **07** Public Service Superannuation Plan Trustee Inc.
- **09** Plan Governance
- 10 Nova Scotia Pension Services Corporation
- **11** Financial Position

Investment Management - Discussion & Analysis

- **13** Overview
- **14** Asset Mix
- 15 2022-2023 Investment Performance
- **17** 2022-2023 Economic Review
- **20** Sustainable investing
- **21** Our focus in 2022-2023
- **22** Looking ahead to 2023-2024
- **23** Audited Financial Statements
- **65** Glossary

We welcome your comments and feedback to help us better understand what information about your pension you would like to receive.

Please email your comments to: PSSPTI@nspension.ca. For individual pension questions, please refer to our contact information on page 66.



Message from the Trustee Chair

On behalf of the Public Service Superannuation Plan Trustee Inc. (PSSPTI), I am pleased to present the annual report of the Public Service Superannuation Plan (PSSP or Plan) for the fiscal year ended March 31, 2023. It is my privilege to reflect on the progress and achievements we have made over the past year in safeguarding and growing the Plan's assets.

In 2022-2023, economic challenges continued for global investors. These challenges were driven by geopolitical conflicts, supply chain disruptions, high levels of inflation, and increasing interest rates. Moreover, the first quarter of 2023 saw the beginnings of a potential banking crisis, creating a sharp decline in global markets and triggering fears about the health of the global financial system.

Despite these challenges, the Plan continued to demonstrate resilience and achieved a commendable financial performance in 2022-2023. Our robust investment strategies, guided by a long-term view, prudent risk management, and diversification, enabled us to navigate the landscape of 2022-2023's market volatility.

Plan Performance

The PSSP delivered modestly positive results in 2022-2023, achieving a return of 3.45 per cent net of investment management fees (3.60 per cent gross of investment management fees) which generated \$260 million in total investment income. The Plan outperformed the policy benchmark of 2.99 per cent and was below the actuarial assumed rate of return, or discount rate, of 5.85 per cent. However, with the steep rise in interest rates over the period, the actuarial discount rate for the Plan increased by 0.60 per cent over the last year, resulting in significant reduction in the Plan's liabilities.

For the fiscal year ended March 31, 2023, on a going-concern basis the Plan was 102.9 per cent funded, an increase of 4.6 per cent from the previous March 31st. The Plan had a surplus of \$214 million at March 31st, being the difference between the net assets available for payment of benefits of \$7.513 billion and the actuarially calculated liabilities of \$7.299 billion.

The 2022 PSSP Review

In 2022-2023, the PSSPTI Board conducted its comprehensive review of the Plan. This review is mandated by the *Public Service Superannuation Act (PSSA)* to be completed every 5 years. The *PSSA* requires the review to be conducted by an independent reviewer with experience in Canadian public pension plan structure and administration. The purpose of the review is to identify meaningful changes that will improve the long-term financial sustainability of the Plan and increase the retirement security of its members.

The Independent Reviewer concluded in its 2022 PSSP Review Report that the PSSP is well-governed but, as with most public sector pension plans in Canada, is "facing demographic challenges and economic uncertainty".

PSSPTI received the 2022 PSSP Review Report in February 2022 and over the following year gave substantial consideration and spent significant time and effort on analysis relating to the 31 recommendations set out therein.

PSSPTI ultimately determined to proceed with several of the Report's recommendations, resulting in some Plan amendments for active members. These amendments aim to modernize the PSSP and align it with many Canadian pension plans.

PSSPTI would like to thank those Plan members and stakeholders who made submissions to the Independent Reviewer and to all who supported the successful review process.

Membership Growth

During the fiscal year we continued our focus on membership growth. Our goal with this initiative is to expand the Plan's membership base and improve its aging demographic profile. Since the initiative commenced in 2015, we have grown the PSSP membership by 3,590 members and \$480 million in assets have been added to the Plan. Our guiding principle for membership growth is that it must enhance the long-term sustainability of the Plan and be cost neutral to existing members.

Acknowledgements

Fiscal 2022-2023 was my first year as Chair of the PSSPTI Board, stepping into the role following Ron Smith's many years of outstanding leadership. The Board is deeply grateful to Ron for guiding PSSPTI through its first nine years of existence. It was a busy and rewarding period, and Ron's steady hand and collaborative spirit helped build a solid foundation that will serve us well as we tackle future challenges.

The year was also a significant one overall for the PSSPTI Board. The tenures of many of our long-standing directors came to an end on March 31, 2023, including those of Nancy MacLellan, Keiren Tompkins, Cynthia Yazbek, Mike MacIsaac, Paula Boyd, and Chris Daly. Most of these individuals served on the Board since its inception in 2013 and before that on the transitional board that preceded the formal creation of PSSPTI. I want to acknowledge and thank them for their contributions, dedication, and hard work on behalf of Plan members over the years.

I also wish to welcome the Board's new directors, Hugh Gillis, Jennifer Glennie, Lilani Kumaranayake, Nancy Rondeaux, Ryan Brothers, and Steve Joy. We look forward to working with you and continuing our commitment to the Plan's long-term financial sustainability.

Finally on behalf of the PSSPTI Board, I would like to recognize the talented, dedicated, and supportive staff of Nova Scotia Pension Services Corporation and their commitment to providing excellent and high-quality service to our Plan members.

 Leo D. McKenna, FCPA PSSPTI, Board Chair

Public Service Superannuation Plan Trustee Inc.

PSSPTI is comprised of an independent Chair and 12 directors, who represent the NSGEU, NSGREA, CUPE Local 1867, non-union employees, the Nova Scotia Government, and other employers.

PSSPTI directors are senior representatives from each stakeholder group. They have extensive experience in a wide range of disciplines required to oversee the PSSP.

PSSPTI held 6 board meetings in 2022-2023. Directors also attended committee meetings and various educational training sessions throughout the year.

Director remuneration is payable only to an individual who, while serving on the PSSPTI Board or a committee, is not otherwise employed and paid in a full-time capacity by a third-party employer. In fiscal 2022-2023, PSSPTI directors received remuneration in aggregate of \$77,000, which includes the Chair's remuneration fixed at \$26,000 per annum.

PSSPTI oversees all aspects of the Plan through the four following committees:



Audit, Actuarial, and Risk (AAR)

Oversees the Plan's auditors and actuaries. Conducts a detailed review of the audited financial statements and actuarial valuation reports. Reviews quarterly compliance reports.



Governance, Communications, and Member Services (GCMS)

Supports PSSPTI in fulfilling its obligations to ensure good governance through policy development and best practices. Ensures appropriate governance principles, structures and procedures are in place, as well as communications industry standards are met.



Investment (Invest.)

Monitors investment performance. Reviews and approves all investment management policies.



Plan Rules (PR)

Supports PSSPTI in identifying, proposing, and finalizing amendments to the plan text.

continues on next page...

Public Service Superannuation Plan Trustee Inc. Board of Directors

Leo McKenna, FCPA, FCA **PSSPTI Chair**The Chair is an Ex-Officio

member on all committees.

Meeting Attendance: 6 of 6

Appointed: 2013





Nancy MacLellan
Deputy Minister
Department of Advanced Education
PSSPTI Vice-Chair
Committee: AAR
Non-Bargaining Employees Rep.
Meeting Attendance: 5 of 6
Appointed: 2013

Bernie Conrad Retiree Committee: Invest. NSGREA Representative Meeting Attendance: 6 of 6 Appointed: 2019





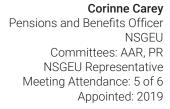
Geoff Gatien
Associate Deputy Minister
and Controller, Department of
Finance and Treasury Board
PSSPTI Vice-Chair
Committee: AAR (Chair)
Employer Representative
Meeting Attendance: 6 of 6
Appointed: 2017

Cynthia Yazbek
Executive Director
Department of Labour, Skills and
Immigration
Committees: PR (Chair),
GCMS
Employer Representative
Meeting Attendance: 6 of 6
Appointed: 2013





Keiren Tompkins Retiree Committees: GCMS (Chair), PR NSGEU Representative Meeting Attendance: 6 of 6 Appointed: 2013







Mike MacIsaac Retiree Committee: GCMS CUPE Local 1867 Representative (NS Highway Workers) Meeting Attendance: 5 of 6 Appointed: 2013







Claire Norman
Benefits Manager
Public Service Commission
Committees: PR, GCMS
Employer Representative
Meeting Attendance: 6 of 6
Appointed: 2021

Bruce Thomson Retiree Committee: Invest. NSGEU Representative Meeting Attendance: 6 of 6 Appointed: 2020





Chris Daly
Director of Policy, Planning and
Research College Services - NSCC
Committee: Invest. (Chair)
Employer Representative
Meeting Attendance: 5 of 6
Appointed: 2013

Paula Boyd
Chief Pension Officer
HRM Pension Plan
Committees: PR, AAR
Employer Representative
Meeting Attendance: 4 of 4

(resigned from the Board in Feb. 2023) Appointed: 2017



For more information on PSSPTI, please visit our website at:

www.nspssp.ca/about/

Plan Governance



The Public Service Superannuation Plan is comprised of the *Public Service Superannuation Act* (*Act*) and the plan text made pursuant to the *Act*. The *Act* and the plan text are available on our website at:

www.nspssp.ca/publicservice/about





- is the Trustee of the PSSP and the Public Service Superannuation Fund
- has the fiduciary responsibility for the PSSP, manages its investment assets, and is responsible for the Plan's overall operations and investment decisions
- sets policy framework and strategic direction for the investment assets
- was established on April 1, 2013

See pages 7 - 8 for more information on the PSSPTI Board.



Nova Scotia Pension Services Board of Directors

- oversees the operation of Nova Scotia Pension Services Corporation, the administrator of the PSSP
- sets strategic direction, approves operational budget, and makes key decisions
- is comprised of joint representation from PSSPTI and Teachers' Pension Plan Trustee Inc. (TPPTI)
- is an 8-person board, with alternating co-chairs, comprised of 4 representatives from PSSPTI and 4 representatives from TPPTI

To learn more visit: www.novascotiapension.ca/about/board



Nova Scotia Pension Services Corporation (NS Pension)



- under the direction of PSSPTI, manages day-to-day operation of Plan investments and pension administration
- provides Plan member, retiree, and employer services

See page 10 for more information.

Nova Scotia Pension Services Corporation

Member Services

Nova Scotia Pension Services Corporation's (NS Pension) member and employer services teams are responsible for providing pension services to all Plan members (employees and retirees, and their eligible beneficiaries). When an employee retires, NS Pension's service teams manage pension payments and provide assistance throughout the retirement process. They also assist employees with support in making informed retirement decisions.

2022-2023 Service Results

92%

of calls were answered in less than 20 seconds





20,289

The number of plan member calls that were received.

pre-retirement seminars were held across the province





78 Reciprocal Transfers In

61 Reciprocal Transfers Out

My Retirement Plan (MRP) website usage https://nspensions.hroffice.com



17,893
The number of times the Pension Projection tool was used



9,355
The number of times the Annual Statement tool was used



5,499
The number of times the Pension Profile tool was used

The MRP website is a secure website that provides active members with access to personalized pension information. Active members can view their annual Member Statement, use the Pension Projection Tool, and access other retirement planning information. Once an active member retires, they will no longer have access to the MRP website. Retirees can contact us by phone or email for information relating to their pension.



Visit us online:

www.novascotiapension.ca www.nspssp.ca

Follow us on Social Media:



@yourNSPSSP



www.facebook.com/yourNSPSSP

Financial Position

As at March 31, 2023, the Plan had assets of \$7.513 billion and liabilities of \$7.299 billion equaling a surplus of \$214 million. The funded ratio increased to 102.9 per cent from 98.3 per cent the previous year.

The funded ratio is equal to the Plan's assets divided by the Plan's liabilities, expressed as a percentage. A funded ratio of 100 per cent or more means that the Plan is fully funded (i.e. there are sufficient assets to cover liabilities, based on current market values and actuarial assumptions).

More details about the assumptions that were used, and their impact on the valuation of Plan liabilities, may be found in the Actuarial Valuation Report (December 31, 2022) which is available on our website at:

www.nspssp.ca/investments/plan-performance

Plan Valuation highlights:

While the Actuarial Valuation Report is completed each year as at December 31, the Plan's fiscal year-end is March 31.

- The actuarial assumptions used in the December 31, 2022 valuation and extrapolation as at March 31, 2023 did not change from the previous year, except for the discount rate at 5.85 per cent.
- Plan liabilities were valued at December 31, 2022 and measured against the assets at that date, resulting in a funded ratio of 101.0 per cent.
- Plan liabilities were extrapolated to March 31, 2023 and measured against the assets at that date, resulting in a funded ratio of 102.9 per cent.

You can learn more about the financial position of the Plan by referring to the audited financial statements for the year ended March 31, 2023 located on page 23 of this Annual Report or on our website: www.nspssp.ca

A look back...



Investment Management Discussion and Analysis

This section includes information on the Public Service Superannuation Fund and the factors that influenced its 2022-2023 investment performance.





Overview

The Goal

The primary goal of the Public Service Superannuation Fund (Fund) is to invest pension assets in a manner that maximizes investment returns, within an acceptable level of risk, which enables the Fund to meet the long-term funding requirements of the Plan.

The SIP&G

The investment of pension assets is guided by the Fund's Statement of Investment Policies & Goals (SIP&G) as written by PSSPTI. The SIP&G sets out the parameters within which investments may be made. These parameters include permissible investments and the policy asset mix of the four main asset classes: equities, fixed income, real assets, and absolute return strategies.

The Investment Beliefs, also found within the SIP&G, state the general principles upon which investments are made.

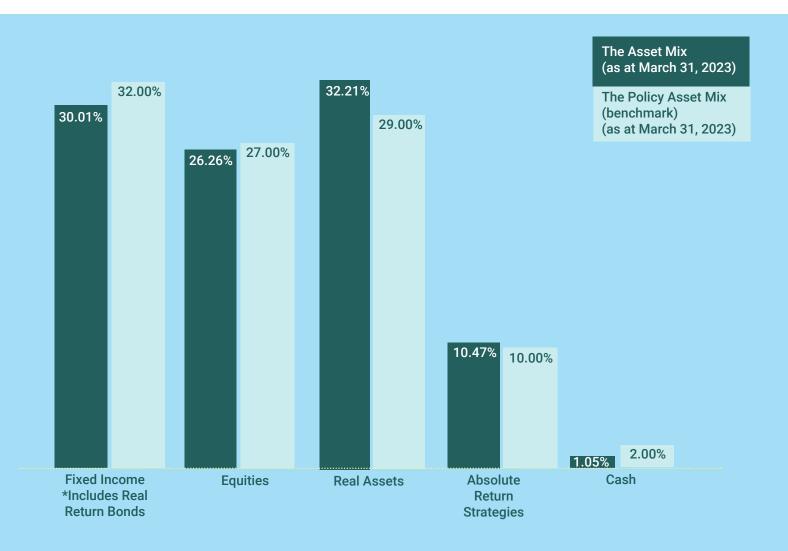
The SIP&G is available on our website at: www.nspssp.ca/investments/investment-policies





Asset Mix

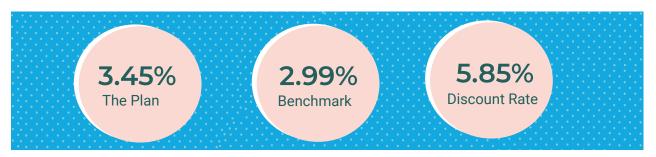
Over the year, apart from private equity, the portfolio completed the transition to a new target asset mix following the 2020 asset liability study. Due to the significant declines of equity and fixed income markets during 2022, the asset mix deviated slightly from benchmark targets during the year. The real assets portfolio ended the fiscal year slightly higher than target, offset by lower positioning in the equity and fixed income portfolios. Given the volatility experienced in many markets during 2022, the benefits of a diversified overall asset mix were apparent.





2022-2023 Investment Performance

In 2022-2023, the Fund achieved a one-year return of 3.45 per cent net of investment management fees (3.60 per cent, gross of investment management fees). The Fund outperformed the policy benchmark of 2.99 per cent and was below the actuarial assumed rate of return of 5.85 per cent.



Slowing economic growth, rising interest rates to combat extreme inflationary pressures not experienced since the 1980s, and the Russian invasion of Ukraine pressured equity and fixed income markets around the globe. Equity markets rallied in the latter part of the year as lower inflation points combined with a banking crisis and prompted optimism that central banks would consider adjusting their hawkish monetary policy.

The US equity market, as measured by the S&P 500 Index, declined 7.73 per cent during the year. Persistently high inflation, coupled with the aggressive measures taken by the Fed to control inflation, stoked fears that the US would enter a recession. Growth stocks faced the sharpest declines, as the rising cost of capital heavily penalized companies with low profitability and higher leverage. Energy was the leading sector in the index due to the spike in oil prices after Russia launched its invasion of Ukraine in February 2022. Despite issues in the US banking sector, equities rallied at the beginning of 2023 on expectations that central banks would pause future increasing interest rates.

Canadian equities, as measured by the S&P TSX Composite index, declined 5.17 per cent. Canadian equities performed relatively well versus other developed markets thanks to the larger exposure to the energy sector and minimal exposure to information technology. This dynamic was reversed in the first quarter of 2023 as energy declined on global growth concerns and tech advanced.

International equities, as measured by the MSCI EAFE index, gained 3.84 per cent. European equities had a turbulent year as record high inflation, rising interest rates, and Russia's invasion of Ukraine combined to pressure European economies. Despite this, European equities rallied in the first quarter of 2023 on expectations that the central bank may not need to raise rates as much as previously expected. The gains were somewhat tempered by concerns about the health of the European banking system. In Japan, equities declined as the economy struggled with high inflation, a possible recession, and a weakening currency. This led to the Bank of Japan intervening in the foreign exchange market in September for the first time in 20 years in an effort to stop the yen's decline against the US Dollar.



2022-2023 Investment Performance continued...

Emerging market equities, as measured by the MSCI EM index, declined 6.65 per cent. Emerging market equities faced significant challenges during the year as China's economy slowed and the aggressive rate hikes from the US central bank added strength to the US dollar. China's zero-Covid policy led to shutdowns in key manufacturing and technology hubs which took a toll on economic growth and investor sentiment. Countries that are heavily reliant on commodity exports did benefit from the increase in energy and other commodity prices. China relaxed the zero-Covid policy later in the year which resulted in a rally to bring its market off extreme lows.

US fixed income, as measured by the Bloomberg US Credit index, declined 5.31 per cent and Canadian fixed income, as measured by the FTSE Canada Universe Bond Index, declined 1.79 per cent. Central banks aggressively raised interest rates during the year to combat the highest inflation increases in decades causing bond prices to fall. Credit spreads widened during the "risk off" sentiment which existed during much of 2022. Bond markets rallied to start 2023 as central banks, while still raising rates, adjusted the language and tone of their monetary policy statements leading the market to anticipate rate cuts by the end of 2023.

Canadian real estate, as measured by the MSCI Pooled Fund Index, posted a total return of 2.2 per cent. The rapid rise in interest rates increased the cost of debt financing available to real estate markets and inflation caused operating costs to rise. These factors decreased net operating income and contributed to rising cap rates which affect valuations negatively.

For the Fund, active performance was negative. The Fund's overall performance, on a net basis, trailed the benchmark by 13 basis points. For much of the year, active performance was positive and added value during the market downturn, however it lagged during the significant market rebound at the end of the year, pushing the overall active performance slightly negative for the year. Positive value-add can be attributed to the Canadian equity, private equity, infrastructure, and fixed income portfolios. Meanwhile, US mid-cap equity managers and the real estate portfolio were the largest detractors to excess return during the year.

Fund Investment Returns as at March 31, 2023									
				Annualized					
		1 year	3 year	5 year	7 year	¦ 10 year			
	Fund	3.45%	8.12%	5.81%	6.44% 6.61%				
	Benchmark	2.99%	6.97%	5.25%	5.92%	6.09%			
Fund returns are reported net of investment management fees.									



2022-2023 Economic Review

Global growth was 3.4 per cent in 2022¹. A number of central banks fought against soaring inflation, the Russian invasion of Ukraine, and the resurgence of Covid-19 in China, all weighed on global growth during the year. Despite the headwinds to growth, real GDP was resilient in several economies. This strength came from stronger than expected private consumption and investment amid robust labour markets and greater than expected fiscal support. Supply chain issues eased in 2022 and the declining cost of transportation reduced pressures on input prices, allowing for a rebound in previously constrained sectors such as motor vehicles. However, this strength in economic growth moderated somewhat in the fourth quarter of 2022 as activity indicators such as consumer sentiment and purchasing manager surveys pointed to slower growth. Slowing growth to fight inflation is part of the mandate of the central banks so while growth is welcome, weak growth plus high inflation makes for a difficult macro environment.

Canada's economy grew 3.4 per cent in 2022². Positive resource and energy sector activity helped offset slower growth in services during the year, however industry data suggests that overall activity is slowing after the earlier post-pandemic rebound. Business sentiment declined during the middle of the year as sales slowed and price pressures continued to impact consumers. The Canadian labour market continued to be surprisingly robust with 409 thousand jobs added during 2022 but showed some signs of slowing relative to population growth in the latter part of the year.

The Canadian housing market started to weaken as higher borrowing costs weighed on sales, putting pressure on high price levels. Inflation in Canada reached record levels during the year but found some relief from lower energy prices towards the end of the year. Food and services inflation remain high, although business inflation expectations eased slightly in the latter half of the year.

¹ World Economic Outlook, A Rocky Recovery, April 2023

² World Economic Outlook, A Rocky Recovery, April 2023



2022-2023 Economic Review continued...

In the United States, the economy grew by 2.1 per cent in 2022³, however showed signs of slowing at year end. Personal consumption expenditures continued to increase, but at a slower pace, and investment in housing slowed as costs of borrowing increased. The labour market remains strong, and unemployment has returned to pre-Covid lows. However, there are indications that labour demand growth is moderating, although some sectors continued to experience labour shortages. Nominal wages continued to rise, contributing to ongoing inflationary pressures. While goods price inflation remains high, services inflation also gradually increased. The direct economic impact from Russia's invasion of Ukraine has been more limited to the US than in many other countries as the US is a net exporter of energy and other commodities that have experienced trade disruptions due to the war. US exports of natural gas and wheat have increased in response to shortages on global markets. Despite increased exports globally, domestic food and gasoline prices remain elevated compared with the prepandemic period.

Economies in the Euro area grew by 3.5 per cent in 2022⁴. European economic growth in 2022 was much more resilient than expected in the face of the war in Ukraine. This resilience is visible in consumption and investment data and aided by significant fiscal support by many European governments to households and firms hit by the energy crisis. Natural gas prices actually declined during the year due to higher than expected non-Russian pipeline and liquefied natural gas flows, compression of demand for gas, and a warmer-than-usual winter. However, activity indicators toward the end of the year suggest that the manufacturing and services sectors are contracting and consumer confidence and business sentiment have worsened. With inflation at 10 per cent or above in several Euro area countries and the United Kingdom, household budgets remain stretched. The accelerated pace of rate increases by the Bank of England and the European Central Bank is tightening financial conditions and cooling demand in the housing and other sectors.

³ World Economic Outlook, A Rocky Recovery, April 2023

World Economic Outlook, A Rocky Recovery, April 2023



2022-2023 Economic Review continued...

Japanese economic growth was 1.1 per cent in 2022⁵. Japan suffered a Covid-19 resurgence starting in late June 2022 and recorded the highest number of infections and deaths since the beginning of the pandemic. However, the government did not implement confinement measures which limited the impact on economic activity. Energy and food prices remain the biggest driver of headline consumer price inflation, which reached 3 per cent in August and September. However, cost increases have been only partly passed through into prices, and government measures, such as price caps on oil, have helped keep inflation relatively muted. The labour market has been tightening, but wage growth remains sluggish and domestic demand is recovering slowly. Supply chain disruptions arising from Russia's war in Ukraine and China's zero-Covid policy held back production, investment and exports. Widening interest rate differentials compared to other advanced economies have led the yen to depreciate to decade lows, adding upward pressures on the prices of imported energy, food and raw materials.

Emerging market economic growth for 2022 was 4.0 per cent⁶. Economic activity in the emerging markets largest economy, China, slowed amid multiple large Covid-19 outbreaks in Beijing and other densely populated cities. Renewed lockdowns accompanied the outbreaks until the relaxation of Covid-19 restrictions in November and December, which paved the way for a full reopening. Real estate investment continued to contract, and developer restructuring is proceeding slowly, amid the lingering property market crisis. Consumer and business sentiment remained subdued well into 2022. China's slowdown helped reduce global trade growth and international commodity prices as the year progressed.

⁵ World Economic Outlook, A Rocky Recovery, April 2023

⁶ World Economic Outlook, A Rocky Recovery, April 2023



Sustainable Investing

Sustainable investing and climate risk continues to be a focus for PSSPTI. Sustainable investing is an investment approach that, in addition to achieving targeted investment returns, considers long-term investing and environmental, social and corporate governance factors. A Sustainable Investment Policy was first approved in 2015 and since then an annual Sustainable Investment Report has become a reoccurring item on the PSSPTI Board's agenda.

A sustainability report is also posted on the PSSP website to provide members with more information on ongoing sustainable investment activities. Work continues on how to improve the resiliency of investment portfolios such as real estate to protect assets that could be negatively impacted by climate change. The infrastructure portfolio is investing in renewable energy sources to continue to meet global growth and demand, and the agriculture and timber portfolio has a lens on the shifting landscape of supply and demand of natural resources.

PSSPTI continues to engage with its investment managers, like-minded partners and broader industry groups to progress their sustainable investment programs. PSSPTI welcomes the emergence of Canadian pension plan and global association groups taking a leading approach to sustainable investing. PSSPTI will look to further integrate these industry best practices in the years to come.





Our focus during 2022-2023

The implementation of the new PSSPTI approved policy asset mix, a result of the 2020 asset liability study, continued during the first half of 2022. The pace of the increase to real assets (real estate, infrastructure, and timber/agriculture), and corresponding decreases in government bond and equity assets, was accelerated by the turmoil in many financial markets. Also, a new global equity external manager search was completed and mandate funded. The net result was that, excluding a small additional increase to private equity, PSSPTI was able to fully implement the new asset mix by mid-2022, much earlier than previously planned.

Given the elevated market volatility during much of 2022, the relative weights of various asset classes drifted higher or lower to a greater extent than normal. Other than the implementation of the new policy asset mix, PSSPTI was also focused on maintaining ample liquidity during the year. Re-balancing within, and between, liquid asset classes (equities and fixed income) and illiquid asset classes was of paramount importance for the pension fund community during the year.

21



Looking Ahead to 2023-2024

With heightened market volatility expected to continue well into 2023, PSSPTI expects the portfolio to experience periods of variation against benchmark targets that will need to be monitored and managed. Central banks remain focused on fighting inflation while global economies and markets continue to absorb the effect of the significant 2022 interest rate increases. China's reopening, the ongoing Russia/Ukraine conflict, energy concerns in Europe, pressure on banks, labour market shortages and slowing growth all provide opposing forces that will add to continued market volatility and put pressure on pension plans to maintain focus on long-term goals while maintaining ample liquidity.

The past year was challenging for pension plans across the globe from an absolute investment return perspective and 2023 has started off with continued heightened volatility. Fixed income yields, however, are arriving at levels not seen in decades, presenting an opportunity for pension plans to once again add diversification with yield from the bond markets. Furthermore, as markets transition away from an era of low interest rates to being more rational and fundamentally based, the benefits of broadly diversified portfolios as well as active portfolio management should become apparent.

With the asset mix transition essentially complete, PSSPTI will focus on portfolio optimization at an asset class level and look for opportunities to take advantage of potential market dislocations, while carefully monitoring private market weights and liquidity. New strategies are being developed for asset classes, considering the current environment, to enhance portfolio return at the total plan level, while risk management tools will continue to be enhanced. PSSPTI will continue to manage the plan investments with a long-term focus despite heightened short term volatility.

You can view the PSSP's Quarterly Investment Reports online at:

www.nspssp.ca/quarterly-investment-reports

The PSSP's Quarterly Investment Reports are posted online shortly after each quarter end and include detailed information such as the Fund's investment returns and asset mix.



Financial Statements of Public Service Superannuation Plan Year ended March 31, 2023



KPMG LLP Purdy's Wharf Tower One 1959 Upper Water Street, Suite 1000 Halifax NS B3J 3N2 Canada Tel 902-492-6000 Fax 902-429-1307

INDEPENDENT AUDITOR'S REPORT

To the Public Service Superannuation Plan Trustee Inc.

Opinion

We have audited the financial statements of Public Service Superannuation Plan (the "Entity"), which comprise:

- the statement of financial position as at March 31, 2023;
- the statement of changes in net assets available for benefits for the year then ended;
- the statement of changes in pension obligation for the year then ended;
- the statement of changes in surplus (deficit) for the year then ended;
- and notes to the financial statements, including a summary of significant accounting policies.

(Hereinafter referred to as the "financial statements").

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Entity as at March 31, 2023, and its changes in net assets available for benefits and its changes in pension obligation for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for Opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the "Auditor's Responsibilities for the Audit of the Financial Statements" section of our auditor's report.

We are independent of the Entity in accordance with the ethical requirements that are relevant to our audit of the financial statements in Canada and we have fulfilled our other ethical responsibilities in accordance with these requirements.

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

KPMG LLP, an Ontario limited liability partnership and member firm of the KPMG global organization of independent member firms affiliated with KPMG International Limited, a private English company limited by guarantee. KPMG Canada provides services to KPMG LLP.



Page 2

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

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

In preparing the financial statements, management is responsible for assessing the Entity's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Entity or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Entity's financial reporting process.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists.

Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

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

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.
 - The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit
 procedures that are appropriate in the circumstances, but not for the purpose of
 expressing an opinion on the effectiveness of the Entity's internal control.



Page 3

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Entity's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Entity to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Chartered Professional Accountants

Halifax, Canada June 22, 2023

KPMG LLP

Financial Statements of

Public Service Superannuation Plan

Year ended March 31, 2023

Contents

Financial Statements

Statement of Financial Position	28
Statement of Changes in Net Assets Available for Benefits	29
Statement of Changes in Pension Obligation and Changes in Surplus (Deficit)	30
Notes to Financial Statements	31

Statement of Financial Position

March 31, 2023, with comparative information for 2022	2023	2022
(in thousands of dollars)		
Net assets available for benefits		
Assets		
Cash	\$ 283,990	\$ 198,503
Contributions receivable:		
Employers'	7,165	6,769
Employees'	6,896	6,573
Accounts receivable	2,306	2,631
Receivable from pending trades	6,729	20,867
Accrued investment income	17,191	16,777
Investments (note 5)	7,298,608	7,330,305
Total assets	7,622,885	7,582,425
Liabilities		
Due to administrator (note 14)	1,165	1,370
Accounts payable and accrued liabilities	4,302	4,952
Payable for pending trades	83,072	110,936
Investment-related liabilities (note 5)	21,350	9,185
Total liabilities	109,889	126,443
Net assets available for benefits	\$ 7,512,996	\$ 7,455,982
Accrued pension obligation and surplus (deficit)		
Accrued pension obligation (note 9)	\$ 7,299,181	\$ 7,588,411
Surplus (deficit):		
Funding surplus (deficit) (note 9)	213,815	(132,429)
	213,815	(132,429)
Commitments (note 10)		
Accrued pension obligation and surplus (deficit)	\$ 7,512,996	\$ 7,455,982

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

On behalf of the board:

Geoff Gatien, Vice-Chair, Public Service Superannuation Plan Trustee Inc.

Cornne Carey, Vice-Chair, Public Service Superannuation Plan Trustee Inc.



Statement of Changes in Net Assets Available for Benefits

March 31, 2023, with comparative information for 2022	2023	2022
(in thousands of dollars)		
Increase in assets		
Contributions (note 4)	\$ 250,190	\$ 238,110
Transfers from other pension plans:		
Individuals	9,106	6,591
Universities, municipalities & other (note 8)	-	15,387
Pension plan transfer-related income (note 8)	129	20
Investment income (note 5)	187,625	192,975
Change in market value of investments (note 5)	72,806	220,486
Total increase in assets	519,856	673,569
Decrease in assets		
Benefits paid (note 11)	436,446	431,644
Transfers to other pension plans	5,960	5,384
Administrative expenses (note 12)	20,436	20,737
Total decrease in assets	462,842	457,765
Increase in net assets available for benefits	57,014	215,804
Net assets available for benefits, beginning of year	7,455,982	7,240,178
Net assets available for benefits, end of year	\$ 7,512,996	\$ 7,455,982

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



Statement of Changes in Pension Obligation

Year ended March 31, 2023, with comparative information for 2022	2023	2022
(in thousands of dollars)		
Accrued pension obligation, beginning of year	\$ 7,588,411	\$ 7,414,946
Increase in accrued pension benefits		
Interest on accrued pension obligation	398,392	389,285
Benefits accrued	207,283	200,474
Benefit improvements	28,066	-
Transfers from other pension plans	9,106	21,978
Purchases of service	3,441	3,369
Net experience losses (note 9)	27,986	-
	674,274	615,106
Decrease in accrued pension benefits		
Benefits paid	436,446	431,644
Transfers to other pension plans	5,960	5,384
Changes in actuarial assumptions (note 9)	521,098	-
Net experience gains (note 9)	-	4,613
	963,504	441,641
Net (decrease) increase in accrued pension benefits	(289,230)	173,465
Accrued pension obligation, end of year	\$ 7,299,181	\$ 7,588,411

Statement of Changes in Surplus (Deficit)

Year ended March 31, 2023, with comparative information for 2022		2023	2022
(in thousands of dollars)			
(Deficit), beginning of year	\$	(132,429)	\$ (174,693)
Increase in net assets available for benefits		57,014	215,804
Decrease in purchases of service via instalments (note 7)		-	(75)
Net decrease (increase) in accrued pension obligation		289,230	(173,465)
Surplus (deficit), end of year	\$	213,815	\$ (132,429)

See accompanying notes to financial statements.

Notes to Financial Statements

Year ended March 31, 2023 (in thousands of dollars)



Authority and description of Plan

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

General

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

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

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

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

Funding

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

Authority and description of Plan (continued)

Retirement benefits

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

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

Pension benefits are made up of two components:

Lifetime pension:

- 1.3% of the members' highest average salary (best five years) up to the YMPE for each year of pensionable service (maximum 35 years), plus
- 2.0% of the member's highest average salary (best five years) above the YMPE for each year of pensionable service (maximum 35 years)

Pension benefits are integrated with CPP benefits at age 65. To supplement members' income until unreduced CPP benefits are payable from CPP at age 65, a bridge benefit is payable until age 65. Members who receive reduced CPP benefits before age 65 will still receive the bridge benefit until age 65.

Bridge benefit payable until age 65:

• 0.7% of the members' highest average salary (best five years) up to the average YMPE (best five years) for each year of pensionable service

Death benefits

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

Termination benefits

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

Refunds

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

Indexing

Subject to the conditions specified in the Act, pensions in pay are indexed at a rate of 0.0% from January 1, 2021, through to December 31, 2025.



Basis of Preparation

a. Basis of presentation

These financial statements are prepared in Canadian dollars, which is the Plan's functional currency in accordance with the accounting standards for pension plans in Part IV of the Chartered Professional Accountants ("CPA") Canada Handbook ("Section 4600 – Pension Plans"). Section 4600 – Pension Plans provides specific accounting guidance on investments and pension obligations. For accounting policies that do not relate to either investments or pension obligations, the Plan must consistently comply with either International Financial Reporting Standards ("IFRS") in Part I or Accounting Standards for Private Enterprises in Part II of the CPA Canada Handbook. The Plan has elected to comply on a consistent basis with IFRS in Part I of the CPA Canada Handbook. To the extent that IFRS in Part I is inconsistent with Section 4600, Section 4600 takes precedence.

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

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

These financial statements were authorized for issue by the Board of Trustees of the Public Service Superannuation Plan Trustee Inc. on June 22, 2023.

b. Basis of measurement

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

c. Use of estimates and judgments

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

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



Significant accounting policies

a. Investment transactions, income recognition and transaction costs

. Investment transactions:

Investment transactions are accounted for on a trade date basis.

ii. Income recognition:

Investment income is recorded on an accrual basis and includes interest, dividends, and distributions. Change in market value of investments includes gains and losses that have been realized on disposal of investments and the unrealized appreciation and depreciation in the fair value of investments.

iii. Transaction costs:

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

b. Foreign currency translation

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

Foreign currency differences arising on re-translation are recognized in the statement of changes in net assets available for benefits as a change in market value of investments.

c. Financial assets and liabilities

i. Non-derivative financial assets:

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

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

ii. Non-derivative financial liabilities:

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

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

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

Significant accounting policies (continued)

iii. Derivative financial instruments:

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

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

d. Fair value measurement

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

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

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

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

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

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

Significant accounting policies (continued)

Fair values of investments are determined as follows:

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

Significant accounting policies (continued)

e. Non-investment assets and liabilities

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

f. Receivable/payable 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.

g. Accrued pension obligation

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

h. Contributions

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

i. Benefits

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

j. Administrative expenses

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

k. Actuarial value of net assets and actuarial adjustment

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

Significant accounting policies (continued)

I. Income taxes

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

m. Future changes to accounting policies

No relevant new guidance has been issued by the International Accounting Standards Board.



Contributions

	2023	2022
(in thousands of dollars)		
Employer		
Matched current service	\$ 122,952	\$ 117,159
Matched past service	210	361
	123,162	117,520
Employee		
Matched current service	123,140	117,160
Unmatched past service	3,021	2,646
Unmatched current service	657	423
Matched past service	210	361
	127,028	120,590
	\$ 250,190	\$ 238,110



Investments and investment-related liabilities

a. The fair value of the Plan's investments and investment-related liabilities along with the related income as at March 31 are summarized in the following tables:

		2023		2022
(in thousands of dollars)		%		%
Investments				
Fixed income				
Money market	\$ 69,238	0.9	\$ 118,331	1.6
Canadian bonds & debentures	369,912	5.1	527,186	7.2
Non-Canadian bonds & debentures	1,325,296	18.2	1,182,418	16.2
Canadian real return bonds	339,565	4.7	361,106	4.9
Equities				
Canadian	463,531	6.4	333,665	4.6
US	438,223	6.0	567,558	7.7
Global	571,016	7.8	733,840	10.0
Private	403,273	5.5	296,047	4.0
Commodities	-	-	230,452	3.1
Real assets				
Real estate	1,208,762	16.4	1,070,918	14.7
Infrastructure	1,023,540	14.0	808,878	11.0
Agriculture & timber	158,154	2.2	75,209	1.0
Absolute return strategies				
Hedge funds	785,576	10.8	830,663	11.4
Investment-related receivables				
Agreements to resell securities	96,223	1.3	104,795	1.4
Promissory notes	35,021	0.5	34,611	0.5
Derivative-related, net	11,278	0.2	54,628	0.7
	\$ 7,298,608	100.0	\$ 7,330,305	100.0
Investment-related liabilities				
Derivative-related, net	(21,350)	100.0	(9,185)	100.0
	\$ (21,350)	100.0	\$ (9,185)	100.0
Net investments	\$ 7,277,258		\$ 7,321,120	

2023								
(in thousands of dollars)			Cha	nges in market	value	e of investment	s and	d derivatives
	Investment income			Realized	U	nrealized		Total
Fixed income	\$	90,428	\$	(40,455)	\$	(12,498)	\$	(52,953)
Equities		33,481		91,366		(33,298)		58,068
Commodities		-		50,086		(45,078)		5,008
Real assets		57,201		35,432		161,885		197,317
Absolute return strategies		-		49,637		31,116		80,753
Derivatives		5,292		(159,679)		(55,708)		(215,387)
Other		1,223		-		-		-
	\$	187,625	\$	26,387	\$	46,419	\$	72,806

2022							
(in thousands of dollars)		Cha	nges in market	valu	e of investment	s an	d derivatives
	 estment ncome		Realized	L	Inrealized		Total
Fixed income	\$ 69,357	\$	(9,907)	\$	(148,548)	\$	(158,455)
Equities	35,056		233,162		(135,035)		98,127
Commodities	-		4,695		83,442		88,137
Real assets	89,493		62,821		56,545		119,366
Absolute return strategies	-		12,565		7,268		19,833
Derivatives	(1,428)		56,697		(3,225)		53,472
Other	497		1		5		6
	\$ 192,975	\$	360,034	\$	(139,548)	\$	220,486

b. Derivatives

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

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

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

Futures

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

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

Credit default swaps

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

Interest rate swaps

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

Total return swaps

Total return swaps are contractual agreements under which the total return receiver assumes market and credit risk on a bond or loan, where the total return payer forfeits risk associated with market performance but takes on the credit exposure that the total return receiver may be subject to. The total return receiver receives income and capital gains generated by an underlying loan or bond. In return, the total return receiver must pay a set rate and any capital losses generated by the underlying loan or bond over the life of the swap.

Currency forwards

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

The following tables set out the notional values of the Plan's derivatives and their related assets and liabilities as at March 31:

2023						
(in thousands of dollars)				F	air value	
					-	
	No	otional value	Assets	L	iabilities	Net
Derivatives						
Futures	\$	61,966	\$ 2,562	\$	(1,296)	\$ 1,266
Options		-	-		-	-
Credit default swaps		7,500	185		(8)	177
Interest rate swaps		68,600	1,613		(3,038)	(1,425)
Total return swaps		182,706	2,534		(3,302)	(768)
Currency forwards		3,148,530	2		(13,615)	(13,613)
	\$	3,469,302	\$ 6,896	\$	(21,259)	\$ (14,363)
Cash collateral			4,382		(91)	4,291
Notional and fair value	\$	3,469,302	\$ 11,278	\$	(21,350)	\$ (10,072)

2022												
(in thousands of dollars)			Fair value									
	No	otional value		Assets		iabilities		Net				
Derivatives												
Futures	\$	32,870	\$	2,048	\$	(3,020)	\$	(972)				
Options		37,300		-		(60)		(60)				
Credit default swaps		5,000		264		(103)		161				
Interest rate swaps		68,600		1,222		(1,743)		(521)				
Total return swaps		133,888		-		(4,256)		(4,256)				
Currency forwards		2,803,106		49,564		(3)		49,561				
	\$	3,080,764	\$	53,098	\$	(9,185)	\$	43,913				
Cash collateral		-		1,530		-		1,530				
Notional and fair value	\$	3,080,764	\$	54,628	\$	(9,185)	\$	45,443				

The following tables set out the contractual maturities of the Plan's derivatives and their net related assets and liabilities as at March 31:

2023						
(in thousands of dollars)	Under 1 year			1 to 5 years	Over 5 years	Total
Derivatives, net						
Futures	\$	1,266	\$	-	\$ -	\$ 1,266
Options		-		-	-	-
Credit default swaps		1		123	53	177
Interest rate swaps		-		(1,425)	-	(1,425)
Total return swaps		(3,302)		2,534	-	(768)
Currency forwards		(13,613)		-	-	(13,613)
	\$	(15,648)	\$	1,232	\$ 53	\$ (14,363)
Cash collateral, net						4,291
Fair value, net	\$	(15,648)	\$	1,232	\$ 53	\$ (10,072)

2022						
(in thousands of dollars)	Under 1 year			1 to 5 years	Over 5 years	Total
Derivatives, net						
Futures	\$	(972)	\$	-	\$ -	\$ (972)
Options		(60)		-	-	(60)
Credit default swaps		-		121	40	161
Interest rate swaps		-		(521)	-	(521)
Total return swaps		(3)		(4,253)	-	(4,256)
Currency forwards		49,561		-	-	49,561
	\$	48,526	\$	(4,653)	\$ 40	\$ 43,913
Cash collateral, net						1,530
Fair value, net	\$	48,526	\$	(4,653)	\$ 40	\$ 45,443

Cash is deposited or pledged with various financial institutions as collateral if the Plan was to default on payment obligations on its derivative contracts. On the statement of financial position, collateral is represented as part of the net balance of derivative-related receivables and liabilities.



Financial Instruments

a. Fair values

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

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

- Level 1: Fair value is based on inputs that reflect unadjusted quoted prices in active markets for identical assets or liabilities that the Investment Manager has the ability to access at the measurement date. Level 1 primarily includes publicly listed investments.
- Level 2: Fair value is based on valuation methods that make use of inputs other than quoted prices included in Level 1, that are observable for the asset or liability, either directly or indirectly, including inputs in markets that are not considered to be active. Level 2 primarily includes debt securities and derivative contracts not traded on a public exchange and public equities not traded in an active market.
- Level 3: Fair value is based on valuation methods where inputs that are based on non-observable market data have a significant impact on the valuation. Level 3 includes real return bonds, private equities, real estate, infrastructure, and agriculture & timber investments valued based on financial statements and or investor statements. Promissory notes are valued at cost.

2023				
(in thousands of dollars)	Level 1	Level 2	Level 3	Total
Investments				
Fixed income				
Money market	\$ -	\$ 69,238	\$ -	\$ 69,238
Canadian bonds & debentures	81,204	288,708	-	369,912
Non-Canadian bonds & debentures	45,725	1,279,571	-	1,325,296
Canadian real return bonds	-	277,901	61,664	339,565
Equities				
Canadian	144,150	319,381	-	463,531
US	-	438,223	-	438,223
Global	466,666	104,350	-	571,016
Private	-	-	403,273	403,273
Commodities	-	-	-	-
Real assets				
Real estate	-	170,853	1,037,909	1,208,762
Infrastructure	-	-	1,023,540	1,023,540
Agriculture & timber	-	-	158,154	158,154
Absolute return strategies				
Hedge funds	-	785,576	-	785,576
Investment-related receivables				
Agreements to resell securities	-	96,223	-	96,223
Promissory notes	-	-	35,021	35,021
Derivative-related, net	6,944	4,334	-	11,278
	\$ 744,689	\$ 3,834,358	\$ 2,719,561	\$ 7,298,608
Investment-related liabilities				
Derivative-related, net	(1,387)	(19,963)	-	(21,350)
	\$ (1,387)	\$ (19,963)	\$ -	\$ (21,350)
Net investments	\$ 743,302	\$ 3,814,395	\$ 2,719,561	\$ 7,277,258

2022				
(in thousands of dollars)	Level 1	Level 2	Level 3	Total
Investments				
Fixed income				
Money market	\$ -	\$ 118,331	\$ -	\$ 118,331
Canadian bonds & debentures	133,366	393,820	-	527,186
Non-Canadian bonds & debentures	20,036	1,162,382	-	1,182,418
Canadian real return bonds	-	294,824	66,282	361,106
Equities				
Canadian	253,257	80,408	-	333,665
US	198,449	369,109	-	567,558
Global	519,296	214,544	-	733,840
Private	-	-	296,047	296,047
Commodities	-	230,452	-	230,452
Real assets				
Real estate	-	187,402	883,516	1,070,918
Infrastructure	-	-	808,878	808,878
Agriculture & timber	-	-	75,209	75,209
Absolute return strategies				
Hedge funds	-	830,663	-	830,663
Investment-related receivables				
Agreements to resell securities	-	104,795	-	104,795
Promissory notes	-	-	34,611	34,611
Derivative-related, net	3,578	51,050	-	54,628
	\$ 1,127,982	\$ 4,037,780	\$ 2,164,543	\$ 7,330,305
Investment-related liabilities				
Derivative-related, net	 (3,080)	 (6,105)	 	 (9,185)
	\$ (3,080)	\$ (6,105)	\$ -	\$ (9,185)

There were no significant transfers between level 1, level 2, and level 3 financial instruments during the years ended March 31, 2023 and 2022.

The following tables present the changes in the fair value measurement in Level 3 of the fair value hierarchy:

2023

(in thousands of dollars)

				I	nvestment - related	
	Fixed income	Equities	Real assets		receivables	Total
Balance, beginning of year	\$ 66,282	\$ 296,047	\$ 1,767,603	\$	34,611	\$ 2,164,543
Purchases, contributed capital	-	52,281	342,115		6,619	401,015
Sales, capital returned	(1,955)	-	(85,582)		(6,209)	(93,746)
Realized gains	445	10,856	21,051		-	32,352
Unrealized gains (losses)	(3,108)	44,089	174,416		-	215,397
Balance, end of year	\$ 61,664	\$ 403,273	\$ 2,219,603	\$	35,021	\$ 2,719,561

2022

(in thousands of dollars)

	Fix	ed income	Equities	Real assets	I	nvestment - related receivables	Total
Balance, beginning of year	\$	69,882	\$ 211,833	\$ 1,420,799	\$	21,190	\$ 1,723,704
Purchases, contributed capital		-	80,360	413,220		13,421	507,001
Sales, capital returned		(179)	(30,122)	(100,911)		-	(131,212)
Realized gains		244	24,990	57,025		-	82,259
Unrealized gains (losses)		(3,665)	8,986	(22,530)		-	(17,209)
Balance, end of year	\$	66,282	\$ 296,047	\$ 1,767,603	\$	34,611	\$ 2,164,543

The total realized and unrealized gains (losses) included in the change in market value of investments from level 3 financial instruments held as at March 31, 2023 and 2022, respectively, was \$247,749 and \$65,050.

Fair value assumptions and sensitivity

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

Significant unobservable inputs used in measuring fair value:

The table below sets out information about significant unobservable inputs used at March 31, 2023 in measuring financial instruments categorized as level 3 in the fair value hierarchy.

(in thousands of dollars)								
Description	20	2023 Fair value 2		22 Fair value	Valuation technique	Unobservable inputs		
Unlisted real estate subsidiaries Unlisted funds:	\$	904,041	\$	802,325	Income approach technique: overall capitalization rate method and discounted cash flow method	Capitalization rates, discount rates		
private equity, real estate, infrastructure, agriculture & timber		1,718,835		1,261,325	Net asset value - audited financial statements	Information not available		
Listed real return bond		61,664		66,282	Vendor supplied price - proprietary price model	Information not available		
Unlisted promissory					Issued by subsidiaries;			
notes		35,021		34,611	valued at cost	N/A		
	\$	2,719,561	\$	2,164,543				

The following analysis illustrates the sensitivity of the Level 3 valuations to reasonably possible capitalization rate and discount rate assumptions for real estate properties where reasonably possible alternative assumptions would change the fair value significantly.

Valuations determined by the direct capitalization method and discounted cash flow method are most sensitive to changes in the capitalization and discount rates.

	2023	2022
(in thousands of dollars)		
Unlisted direct real estate subsidiaries		
Direct capitalization method		
Minimum capitalization rate	3.50%	3.25%
Maximum capitalization rate	7.25%	6.75%
Increase of 25 basis points in capitalization rate	\$ (44,976)	\$ (36,628)
Decrease of 25 basis points in capitalization rate	\$ 50,099	\$ 41,865
Discounted cash flow method		
Minimum discount rate	3.40%	3.50%
Maximum discount rate	9.50%	8.50%
Increase of 25 basis points in discount rate	\$ (20,420)	\$ (25,605)
Decrease of 25 basis points in discount rate	\$ 20,754	\$ 28,181

Note: 1 basis point is equal to 0.01%

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

Significant investments

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

March 31, 2023			
(in thousands of dollars)			
	Number of investments	Fair value	Cost
Private market investments	22	\$ 6,827,656	\$ 5,980,754
	22	\$ 6,827,656	\$ 5,980,754

March 31, 2022			
(in thousands of dollars)			
	Number of investments	Fair value	Cost
Private market investments	19	\$ 3,209,162	\$ 2,449,213
	19	\$ 3,209,162	\$ 2,449,213

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

b. Investment risk management

Risk management relates to the understanding and active management of risks associated with all areas of the business and the associated operating environment. Investments are primarily exposed to interest rate volatility, market price fluctuations, credit risk, foreign currency risk and liquidity risk. The Plan has set formal goals, policies, and operating procedures that establish an asset mix among equity, fixed income, real assets, absolute return strategy investments and derivatives that requires diversification of investments within categories and set limits on the size of exposure to individual investments and counterparties. Risk and credit committees have been created to regularly monitor the risks and exposures of the Plan. Trustee oversight, procedures and compliance functions are incorporated into Plan processes to achieve consistent controls and to mitigate operational risk.

i. Interest rate risk

Interest rate risk refers to the fact that the Plan's financial position will change with market interest rate changes, as fixed income securities are sensitive to changes in nominal interest rates. Interest rate risk is inherent in the management of a pension plan due to prolonged timing differences between cash flows related to the Plan's assets and cash flows related to the Plan's liabilities. To properly manage the Plan's interest rate risk, appropriate guidelines on the weighting and duration for the bonds and other fixed income investments are set and monitored.

March 31, 2023							
(in thousands of dollars)	ι	Jnder 1 year	1 to 5 years	5 to 10 years	Over 10 years	Total	Average yield (%)(1)
Fixed income							
Money market	\$	67,528	\$ -	\$ -	\$ -	\$ 67,528	-
Bonds & debentures		43,115	305,374	368,491	323,146	1,040,126	4.2
Real return bonds (2)		-	-	-	61,664	61,664	5.3
	\$	110,643	\$ 305,374	\$ 368,491	\$ 384,810	\$ 1,169,318	4.0
Pooled funds						934,693	
Total fixed income						\$ 2,104,011	

March 31, 2022							
(in thousands of dollars)	ι	Jnder 1 year	1 to 5 years	5 to 10 years	Over 10 years	Total	Average yield (%)(1)
Fixed income							_
Money market	\$	116,505	\$ -	\$ -	\$ -	\$ 116,505	-
Bonds & debentures		18,169	375,614	411,573	398,716	1,204,072	3.6
Real return bonds (2)		-	-	-	66,282	66,282	5.3
	\$	134,674	\$ 375,614	\$ 411,573	\$ 464,998	\$ 1,386,859	3.3
Pooled funds						802,182	
Total fixed income						\$ 2,189,041	

- 1. The average effective yield reflects the estimated annual income of a security as a percentage of its year-end fair value. The total average yield is the weighted average of the average yields shown.
- 2. Real return bond yields are based on real interest rates. The ultimate yield will be impacted by inflation as it occurs.

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

Interest rate sensitivity

The Plan's investments in fixed income and fixed income related derivatives are sensitive to interest rate movements. The following table represents the assets held in the Plan as at March 31, subject to interest rate changes, average duration due to a one percent increase (decrease) in interest rate and the change in fair value of those assets:

	2023	2022
(in thousands of dollars)		
Interest rate sensitive assets	\$ 1,176,162	\$ 1,382,968
Average duration for 1% increase in interest rates	(5.8)	(6.5)
Sensitivity to 1% increase in interest rates	(68,162)	(90,374)
Fair value after 1% increase in rates	\$ 1,108,000	\$ 1,292,594
Average duration for 1% decrease in interest rates	5.8	6.5
Sensitivity to 1% decrease in interest rates	68,162	90,374
Fair value after 1% decrease in rates	\$ 1,244,324	\$ 1,473,342

ii. Market price risk

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

Market sensitivity

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

	2023	2022
(in thousands of dollars)		
Total equity	\$ 1,876,043	\$ 1,931,110
10% increase in market values	187,604	193,111
Fair value after 10% increase in market values	\$ 2,063,647	\$ 2,124,221
10% decrease in market values	(187,604)	(193,111)
Fair value after 10% decrease in market values	\$ 1,688,439	\$ 1,737,999

iii. Credit risk

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

Fixed income

The Plan's Fixed Income Program includes two main sectors: the Government Sector and the Corporate Sector. One benefit to managing these two pieces separately is to provide the opportunity to access physical government bonds when required. When markets are at their utmost distress these may be the only securities available for liquidation. Managing the Corporate Sector and the Government Sector separately allows for the adjustment of credit risk within the Fixed Income Program by changing the allocation between these two sectors - increasing the Government Sector through periods of market duress and increasing the Corporate Sector through periods of stability. This approach also allows the active management of the Corporate Sector and taking active decisions where returns can be maximized. In order to minimize the exposure to credit risk, a comprehensive investment policy has been developed. There were no significant concentrations of credit risk in the portfolio in 2023.

The fair values of the Plan's fixed income investments exposed to credit risk are categorized in the following table as at March 31:

	2023	2022
(in thousands of dollars)		
Fixed income		
Canadian		
Governments	\$ 201,822	\$ 341,989
Corporate	110,224	160,552
Non-Canadian		
Governments	45,725	20,036
Corporate	811,547	864,282
	\$ 1,169,318	\$ 1,386,859
Pooled funds	934,693	802,182
Total fixed income	\$ 2,104,011	\$ 2,189,041

Derivatives

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

- Deals only with highly rated counterparties, with whom International Swap and Derivative Association agreements have been executed, normally major financial institutions with a minimum credit standard of "A" rating, as supported by a recognized credit rating agency; and
- ii. Credit risk represents the maximum amount that would be at risk as at the reporting date if the counterparties failed completely to perform under the contracts, and if the right of offset proved to be non-enforceable. Credit risk exposure on derivative contracts is represented by the receivable replacement cost of contracts with counterparties, less any prepayment collateral or margin received, as at the reporting date.

Securities lending

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

iv. Foreign currency risk

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

The Plan's currency policy allows for the management of risk of investment and non-investment assets and liabilities held in the Fund through hedging strategies that are implemented through the purchase of forward currency contracts. The forward currency contracts offset the Plan's foreign currency exposure, hence reducing the Plan's foreign currency risk.

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

March 31, 2023		
(in thousands of dollars)	Unhedged	Hedged
Summary FX exposure		
Canadian dollar	\$ 2,693,447	\$ 5,730,102
United States dollar	4,152,720	1,863,353
Euro	281,468	(175,532)
British pound sterling	145,190	(7,236)
Japanese yen	94,558	94,558
Other	148,202	(3,274)
	\$ 7,515,585	\$ 7,501,971

March 31, 2022		
(in thousands of dollars)	Unhedged	Hedged
Summary FX exposure		
Canadian dollar	\$ 2,708,122	\$ 5,309,631
United States dollar	4,024,713	2,103,189
Euro	267,877	(104,642)
British pound sterling	145,805	10,941
Japanese yen	96,786	96,622
Other	153,165	30,287
	\$ 7,396,468	\$ 7,446,028

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

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

	2023	2022
(in thousands of dollars)		
Fund assets and liabilities	\$ 7,501,971	\$ 7,446,029
10% increase in Canadian dollar	(161,079)	(194,218)
Fund assets and liabilities after increase	\$ 7,340,892	\$ 7,251,811
10% decrease in Canadian dollar	196,874	237,378
Fund assets and liabilities after decrease	\$ 7,698,845	\$ 7,683,407

v. Liquidity risk

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

Approximately 22.1% (2022 - 29.9%) of the Plan's investments are in liquid securities traded in public markets, consisting of fixed income and equities. Pooled funds consisting of exchange traded equities are approximately 26.2% (2022 - 25.3%) of the Plan's investments and are liquid within 30 days or less. Although market events could lead to some investments becoming illiquid, the diversity of the Plan's portfolio should ensure that liquidity is available for benefit payments. The Plan also maintains cash on hand for liquidity purposes and for payment of Plan liabilities. At March 31, 2023, the Plan had cash in the amount of \$283,990 (2022 - \$198,503).



Purchases of service via instalments

The purchase of service via payroll deduction has been discontinued. The present value of outstanding purchases is \$nil as at March 31, 2023 (2022 - \$nil). The change in present value of outstanding purchases as at March 31, 2023 is \$nil (2022 - decrease \$75) and is shown in the Statement of Changes in Surplus (Deficit). The liabilities associated with these purchases are already recognized in the accrued pension benefit obligation.



Universities, municipalities & other authorities pension plan transfers

On May 4, 2015, the *University Pension Plan Transfer Act* (Bill No. 102) was proclaimed to facilitate the transfer of university pension plans to the Plan and on November 9, 2016, the *Municipalities and Other Authorities Pension Plan Transfer Act* (Bill No. 55) was also proclaimed to facilitate the transfer of pension plans of municipalities and other authorities to the Plan.

Both the *University Pension Plan Transfer Act* and the *Municipalities and Other Authorities Pension Plan Transfer Act* allow the Trustee to enter into an agreement with a university, municipality or other authority to transfer, in whole or in part, assets and liabilities of a designated plan to the Plan and to allow the members, the survivors of the members, the post-transfer employees of the transferring party and the survivors of the post-transfer employees to participate in the Plan.

The Trustee's guiding principle throughout this transfer process is that it must be beneficial to the long-term sustainability of the Plan and cost-neutral to the Plan and Plan members. A transfer to the Plan resulting in a surplus or deficit to the associated liability is paid or recovered with interest owing from the transfer date.



Accrued pension obligation

a. Actuarial assumptions

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

Actuarial valuations of the Plan are conducted annually and provide an estimate of the accrued pension obligation (Plan liabilities) calculated using various economic and demographic assumptions, based on membership data as at the valuation date. The Plan's consulting actuaries, Mercer, performed a valuation as at December 31, 2022 and issued their report in June 2023. The report indicated that the Plan had a funding excess of \$75,847 (December 31, 2021 – excess of \$143,512).

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

The assumed increases in the real rate of pensionable earnings (i.e. increase in excess of the assumed inflation rate) are dependent on the attained age of the members. These rates are based on recent experience of the Plan and current expectations for future years. Demographic assumptions are used to estimate when future benefits are payable to members and beneficiaries, including assumptions about mortality rates, termination rates, and patterns of early retirement. Each of these assumptions is updated periodically, based on a detailed review of the experience of the Plan and on the expectations for future trends.

Accrued pension obligation (continued)

The major economic and demographic assumptions used in the December 31 valuation were as follows:

	2023	2022
Discount rate	5.85% per annum	5.25% per annum
Inflation	2.00% per annum	2.00% per annum
Salary	2.50% per annum plus merit ranging from 0.00% to 2.50%	2.50% per annum plus merit ranging from 0.00% to 2.50%
Retirement age	10% at age 59; 20% at age 60; 10% at each age 61-64; 50% at each age 65-69; 100% at age 70	10% at age 59; 20% at age 60; 10% at each age 61-64; 50% at each age 65-69; 100% at age 70
	However, 20% each year after EURD, if it is greater	However, 20% each year after EURD, if it is greater
	40% at 35 years of service	40% at 35 years of service
Mortality	120% of CPM 2014 Publ with generational mortality using 100% of CPM-B	120% of CPM 2014 Publ with generational mortality using 100% of CPM-B

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

	2023	2022
(in thousands of dollars)	Extrapolated	Extrapolated
Actuarial value of net assets	\$ 7,512,996	\$ 7,455,982
Accrued pension obligation	(7,299,181)	(7,588,411)
Funding surplus (deficit)	\$ 213,815	\$ (132,429)



Commitments

The Plan has committed capital to investment in real estate and infrastructure over a definitive period of time. The future commitments are generally payable on demand based on the capital needs of the related investment. The table below indicates the capital amount committed and outstanding as at March 31, 2023.

March 31, 2023					
(in thousands of dollars)	Committed		Outstanding		
Canadian dollar					
Private equities	CAD	20,000	CAD	17,800	
Infrastructure		15,000		75	
	CAD	15,000	CAD	75	
United States dollar					
Infrastructure	USD	708,110	USD	86,997	
Private equities		525,000		272,052	
Agriculture & timber		32,500		1,309	
Real estate		25,000		4,403	
	USD	1,290,610	USD	364,761	
Euro					
Infrastructure	EUR	75,000	EUR	38,907	
Real estate		20,000		829	
	EUR	95,000	EUR	39,736	
British pound sterling					
Infrastructure	GBP	15,000	GBP	725	
	GBP	15,000	GBP	725	



Benefits

	2023	2022
(in thousands of dollars)		
Benefits paid to retired members	\$ 377,831	\$ 363,650
Benefits paid to surviving members	40,837	42,710
Refunds paid to terminated members	17,778	25,284
	\$ 436,446	\$ 431,644



Administrative Expenses

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

	2023	2022
(in thousands of dollars)		
Plan administration		
Office and administration services	\$ 7,063	\$ 6,580
Actuarial & consulting services	77	190
Legal services	88	135
Audit services	63	48
Other professional services	79	91
	7,370	7,044
Pension plan transfer-related costs		
Professional services	22	309
Recovery (note 8)	(22)	(309)
	-	-
Investment expenses		
Investment management services	9,664	10,449
Transaction costs	607	435
Custody services	542	483
Advisory & consulting services	313	288
Information services	207	215
	11,333	11,870
Bad debt	10	3
Bud dest	10	3
HST	1,723	1,820
	\$ 20,436	\$ 20,737

Investment management and performance fees included in the unrealized gains/ (losses) on investment vehicles consisting of pooled funds, limited partnerships and holding companies are estimated at \$32,514 (2022 - \$41,247) using financial statements and or investor statements where available, and when not available, estimates based on investment management contracts. These fees are not direct expenses of the Plan and therefore are not included in administrative expenses.



Securities lending

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

The following table represents the estimated fair value of securities that were loaned out and the related collateral as at March 31:

	2023	2022
(in thousands of dollars)		
Securities on loan	\$ 195,183	\$ 308,706
Collateral held	\$ 210,207	\$ 333,458



Related party transactions

Investments held by the Plan include debentures of the Province of Nova Scotia. The total fair value of these investments is \$1,326 (0.02% of total investment assets and liabilities) as at March 31, 2023 (2022 - \$7,168 (0.1% of total investment assets and liabilities)).

The Plan's administrator, Nova Scotia Pension Services Corporation, an entity co-owned by Teachers' Pension Plan Trustee Inc. and Public Service Superannuation Plan Trustee Inc. for the purpose of providing pension plan administration and investment services, charges the Plan, at cost, an amount equal to the expenses incurred in order to service the Plan. The administration expense charged to the Plan before HST for the year ending March 31, 2023, was \$7,326 (2022 - \$7,033). The amount due to the administrator as at March 31, 2023 was \$1,165 (2022 - \$1,370).



Interest in subsidiaries

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

			2023	2022
(in thousands of dollars) Subsidiary Purpose		Ownership %	Fair value	Fair value
PSS Investments RE Inc.	Real estate	100	\$ 604,489	\$ 545,089
PSS Investments AI Inc.	Private equities	100	401,953	296,047
NT Combined Investments Inc.	US equities	52	364,518	369,109
PSS Investments II Inc.	Real estate	100	271,057	231,561
PSS Investments CS Inc.	Infrastructure	100	218,845	185,307
PSS Investments BR Inc.	Infrastructure	100	133,290	86,839
PSS Investments AX Inc.	Infrastructure	100	58,329	57,610
PSS Investments MU Inc.	Infrastructure	100	50,147	21,178
HV Combined Investments Inc.	Hedge funds	63	44,117	37,097
PSS Investments ES Inc.	Real estate	100	36,141	39,971
PSS Investments IV Inc.	Infrastructure	100	35,467	37,664
PSS Investments III Inc.	Infrastructure	100	26,453	25,783
PSS Investments KA Inc.	Infrastructure	100	23,598	11,437
PSS Investments AC Inc.	Infrastructure	100	14,302	12,864
PSS Investments CS II Inc.	Infrastructure	100	2	11
			\$ 2,282,708	\$ 1,957,567

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



Capital management

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

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

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

Glossary

Absolute Return Strategies: An investment strategy which focuses on generating positive returns in rising and falling capital markets.

Actuarial assumed rate of return: The long term rate of return assumed by the Plan's external actuary in determining the value of the Plan's *liabilities*. Also, referred to as the Discount Rate.

Asset(s): Financial and real items owned by the Plan which have a monetary value, including cash, stocks, bonds, real estate, etc.

Asset mix: The allocation of funds to be used for investment purposes between different types of *assets*, including cash, stocks, bonds, real estate, etc.

Benchmark: A standard against which the performance of the Plan's *return on investment* can be measured.

Commodities: A commodity is a basic good used in commerce that is interchangeable with other *commodities* of the same type. *Commodities* are most often used as inputs in the production of other goods or services. The quality of a given commodity may differ slightly, but it is essentially uniform across producers.

Equity(ies): Common or preferred stock representing ownership in a company.

Fixed Income: Assets that generate a predictable stream of interest such as bonds and debentures.

Funded ratio: A ratio of the Plan's *assets* to *liabilities*, expressed as a percentage. A ratio above 100 per cent indicates that the Plan has more *assets* than required to fund its future estimated *liabilities*.

Gross of investment management fees: Refers to the fact that the *return on investment* is reported before the deduction of management fees.

Liabilities: An estimate of the current value of future obligations of the Plan as a result of retirement commitments made to past, current, and future employees.

Net of investment management fees: Refers to the fact that the *return on investment* includes investment management fees.

Real Assets: Physical real estate, infrastructure and commodity *assets* such as apartments, bridges, tolls, gold and farmland that are invested in either directly or through pooled vehicles.

Return on investment(s): A performance measure used to evaluate the efficiency of the Plan's investments, expressed as a percentage gain or loss on the initial investment at the beginning of the period.



NS Pension contact information:

- 1-800-774-5070 (toll free) 902-424-5070
- @ info@nspension.ca
- www.novascotiapension.ca www.nspssp.ca
- Purdy's Wharf, Tower 2, Suite 700, 1969 Upper Water St., Halifax, NS B3J 3R7
- PO Box 371 Halifax NS B3J 2P8
- yourNSPSSP @yourNSPSSP
- www.facebook.com/yourNSPSSP

All information presented in this document is premised on the Plan rules and criteria which currently exist under the Public Service Superannuation Act (the "PSSA") and the plan text made thereunder. This document explains in plain language aspects of the rules and criteria of the Plan. Plan members, beneficiaries, and others who wish to determine their legal rights and obligations under the Plan should refer to the PSSA, the plan text, or other legal documents as appropriate. In the event of a discrepancy between the information provided in this document and the legislation and/or legal documents, the latter takes precedence.

pension