

2021-2022 pssp annual report



• as at March 31, 2022

Funded Ratio



The Public Service Superannuation Plan (PSSP or Plan) was 98.3 per cent funded. The funded ratio increased by 0.7 per cent from 97.6 per cent as at March 31, 2021.

Financial Position

Surplus (Deficit)

\$7.456 b Assets available for benefits

\$7.588 b



Assets available for benefits were \$7.456 billion. This is an increase of \$216 million from \$7.240 billion as at March 31, 2021.

Investment Return

5.56% The Plan

4.31% Benchmark



The Plan's return on investment for fiscal 2021-2022 was 5.56 per cent, net of investment fees (5.71 per cent, gross of investment fees). The Fund outperformed the policy benchmark of 4.31 per cent on a net basis, and outperformed the actuarial assumed rate of return, or discount rate, of 5.25 per cent.

Plan Membership

at a glance as at December 31, 2021

41,258

Total members increased by 1,394 **↑** **19,526** active members increased by 426 ↑ 18,799 retirees* increased by 646 **↑**

2,933 deferred members** increased by 322 1

* includes survivors 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

47.4 48.4 average age median age

Retiree

71.1 average age

70.1 median age

Retirees over 100

32 centenarians (includes survivors)

Pensionable earnings (active members)

\$70,656 average **\$64,380** median

Lifetime pension (retirees)*

\$22,44

average

median

*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 2021-2022, 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.



The Plan has **1.04** active members for every 1 retiree. A higher ratio of active members to retirees is a good indicator of a healthier pension plan.



Contributions Received

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

\$238 million

*includes all matched and unmatched current and past service contributions

Benefits Paid

Benefits* Paid to retirees and survivors totalled:

\$432 million

*includes refunds

Projected Retirements

There were approximately 3,759 Plan members eligible to retire from the PSSP with an unreduced pension as at December 31, 2021. 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, 2022	December 31, 2024	December 31, 2026
4,501	6,129	7,534
Members	Members	Members

*These figures are cumulative.

Annual Pension in Pay Number of recipients per pension \$ amount

	Hamber of recipiente per penelon y amount						
	<\$15K	\$15- \$30K	\$30- \$45K	\$45- \$60K	\$60K+		
Retired Members <65	653	1,151	1,245	593	262		
Retired Members >65	4,964	4,142	1,578	549	304		
Survivors	2,344	809	152	46	7		

- 1. The "annual pension in pay" is the amount paid from the PSSP only. Plan members may also receive income from the Canada Pension Plan, the Old Age Security program, and/or the Guaranteed Income Supplement.
- 2. The category "survivors" includes surviving spouses/ex-spouses, children, and dependants.
- 3. The figures provided are estimates, based on currently available data.
- 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, 2022.

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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 Ronald Smith, FCPA, FCA, ICD.D

On behalf of the Board of Public Service Superannuation Plan Trustee Inc. (PSSPTI), I am pleased to present the annual report of the Public Service Superannuation Plan (Plan or PSSP) for the fiscal year ended March 31, 2022. This report provides you with details on the financial health of the Plan and a comprehensive review of its investment activities.

As the world moves past the COVID-19 pandemic, new economic and geopolitical disruptions have emerged – supply chain challenges, war in Europe, inflation. The PSSPTI Board assures you that it is doing all it can to keep the Plan on a steady course in these ongoing turbulent times. The Plan is a defined benefit pension plan and is designed for sustainability and long-term performance. PSSPTI follows robust investment strategies and invests for the long term. It maintains a large and very diverse portfolio that is built to weather tough times effectively.

Plan Performance

The PSSP delivered positive results in 2021-2022, achieving a return of 5.56 per cent, net of investment management fees (5.71 per cent, gross of investment management fees) which generated \$413 million in total investment income. The Plan outperformed the policy benchmark of 4.31 per cent on a net basis, and outperformed the actuarial assumed rate of return, or discount rate, of 5.25 per cent. The significant downturn of markets in the first quarter of 2022 unfortunately eroded much of the gains achieved by the PSSP in the prior 3 quarters.

For the fiscal year ended March 31, 2022, the Plan was 98.3 per cent funded, an increase of 0.7 per cent from the previous year. The Plan's deficit was \$0.132 billion at March 31st, being the difference between the net assets available for payment of benefits of \$7.456 billion and the actuarially calculated liabilities of \$7.588 billion.

Asset Liability Study

The asset liability study undertaken by the PSSPTI Board in 2020 generated a new policy asset mix. Implementation is ongoing, with completion targeted for early 2024. In the 2021-2022 fiscal year substantial progress was made, including building out some existing mandates and conducting searches for new external managers. Significant time is needed to invest in real assets and private equity, so the expansion of these asset classes will continue for some time.

Membership Growth

During the fiscal year the PSSPTI Board continued its focus on membership growth. Our goal with this initiative is to expand the Plan's membership base and improve its aging demographic profile over time. 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. New employers joining in fiscal 2021-2022 included the Municipality of Colchester and the Town of Stewiacke. 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.

The 2022 PSSP Review

In 2021-2022, the PSSPTI Board commenced a comprehensive review of the PSSP. This review is mandated by the *Public Service Superannuation Act* (*PSSA*) and is to be done 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.

PSSPTI would like to thank those who took part in the PSSP Review process by providing their input to the Board. The Board received the report from the independent reviewer and is currently reviewing its recommendations. We anticipate releasing the report once our assessment is completed and we have formulated a plan to properly address the recommendations.

Acknowledgements

2021-2022 marks my last year serving as PSSPTI Board Chair after my 9-year tenure. It has been a privilege serving our Plan members and stakeholders for the past decade. I have been consistently impressed by the expertise and diligence of my fellow Board members as they have worked for the retirement security of our current and future Plan members.

I have every confidence in the new Chair, Leo McKenna, as the PSSPTI Board continues its efforts to strengthen the long-term financial sustainability of the PSSP.

On behalf of the PSSPTI Board, I would also like to recognize the talented, dedicated, and supportive staff of Nova Scotia Pension Services Corporation and their commitment to providing consistently excellent service to our Plan members.

- Ronald Smith PSSPTI Board Chair

Board of Directors (As at March 31, 2022) 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 8 board meetings in 2021-2022. 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 2021-2022, PSSPTI directors received remuneration in aggregate of \$88,806, which includes the Chair's remuneration fixed at \$26,000 per annum.

Ronald Smith FCPA, FCA, ICD.D PSSPTI Chair The Chair is an Ex-Officio member on all committees. Meeting Attendance: 6 of 8 Appointed: 2013

Nancy MacLellan Deputy Minister Department of Advanced Education **PSSPTI Vice-Chair** Committee: Governance Non-Bargaining Employees Representative Meeting Attendance: 8 of 8 Appointed: 2013

Bernie Conrad Retiree Committee: Investment NSGREA Representative Meeting Attendance: 7 of 8 Appointed: 2019

Cynthia Yazbek

Executive Director Department of Labour, Skills and Immigration Committees: • Plan Rules, Chair Governance Employer Representative Meeting Attendance: 8 of 8 Appointed: 2013











Leo McKenna, FCPA, FCA Retiree Committee: Investment Employer Representative Meeting Attendance: 8 of 8 Appointed: 2013 * incoming PSSPTI Board Chair

Geoff Gatien Associate Deputy Minister and Controller. Department of Finance and Treasury Board PSSPTI Vice-Chair Committee: Audit, Actuarial, and Risk, Chair Employer Representative Meeting Attendance: 7 of 8 Appointed: 2017

Keiren Tompkins Retiree Committees: • Governance, Chair • Plan Rules **NSGEU** Representative

Meeting Attendance: 8 of 8 Appointed: 2013

Mike MacIsaac Retiree Committee: Audit, Actuarial, and Risk CUPE Local 1867 Representative (NS Highway Workers) Meeting Attendance: 8 of 8 Appointed: 2013

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Public Service Superannuation Plan Trustee Inc. continued...

Corinne Carey

Pensions and Benefits Officer NSGEU Committees: • Audit, Actuarial, and Risk • Plan Rules NSGEU Representative Meeting Attendance: 7 of 8 Appointed: 2019

Claire Norman

Benefits Manager Public Service Commission Committee: Plan Rules Employer Representative Meeting Attendance: 8 of 8 Appointed: 2021

Bruce Thomson Retiree Committee: Investment NSGEU Representative Meeting Attendance: 8 of 8 Appointed: 2020







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

www.nspssp.ca/about/

Paula Boyd

Chief Pension Officer HRM Pension Plan Committees: • Plan Rules

 Audit, Actuarial, and Risk Employer Representative Meeting Attendance: 7 of 8 Appointed: 2017

Chris Daly

Director of Policy, Planning and Research College Services - NSCC Committee: Investment, Chair Employer Representative Meeting Attendance: 7 of 8 Appointed: 2013

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



Audit, Actuarial, and Risk

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

Ensures PSSPTI's duties and responsibilities are clear and sets the goals for the administrator of the Plan.

Investment

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



Plan Rules

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

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



Public Service Superannuation Plan Trustee Inc. (PSSPTI)

- 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 **Dension** 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, our service teams manage pension payments and provide assistance throughout the retirement process. We also assist employees with support in making informed retirement decisions.

2021-2022 Service Results



87% of calls were answered in less than 20 seconds



20,883 The number of plan member calls that were received.



19 We held 19 pre-retirement seminars across the province 888

56 Reciprocal Transfers In

7 Reciprocal Transfers Out

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



19,985

The number of times the Pension Projection tool was used



10,689 The number of times the Annual Statement tool was used



4,020 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.

We have a new logo:



We have a new address:

Purdy's Wharf, Tower 2, Suite 700, 1969 Upper Water St., Halifax, NS B3J 3R7 Our mailing address remains: PO Box 371, Halifax NS B3J 2P8

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, 2022, the Plan had assets of \$7.456 billion and liabilities of \$7.588 billion equaling an unfunded liability of \$132 million. The funded ratio increased to 98.3 per cent from 97.6 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, 2021) 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, 2021 valuation and extrapolation as at March 31, 2022 did not change from the previous year, including the discount rate at 5.25 per cent.
- Plan liabilities were valued at December 31, 2021 and measured against the assets at that date, resulting in a funded ratio of 101.9 per cent.
- Plan liabilities were extrapolated to March 31, 2022 and measured against the assets at that date, resulting in a funded ratio of 98.3 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, 2022 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 2021-2022 investment performance.

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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

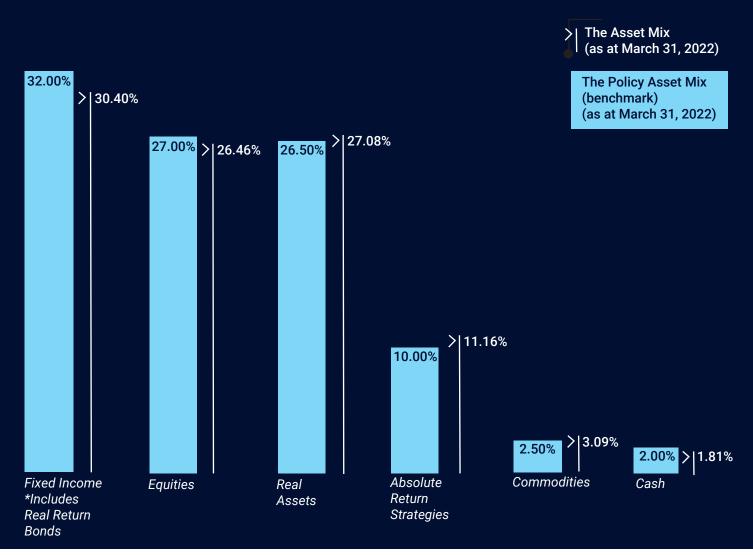
The investment of pension assets is guided by the Fund's Statement of Investment Policies & Goals (SIP&G) as written by PSSPTI. The SIP&G sets out the parameters within which investments may be made. These parameters include permissible investments and the policy asset mix of the four main asset classes: 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, positioning of the Fund's asset classes was maintained relatively close to benchmark as the portfolio began the transition to a new target asset mix, following the 2020 asset liability study. The main driver of asset returns in 2021-2022 centered around the economic recovery from the COVID-19 pandemic shutdowns, the impact of the war in Ukraine, as well as anticipated interest rate increases by central banks in response to accelerating inflation. This generally led to strong gains for the portfolio during 2021 as the COVID-19 vaccine roll-out enabled a strong economic recovery, while interest rates remained constrained. However, as market sentiment shifted to inflationary concerns, potential central bank rate hikes, as well as geopolitical uncertainty due to Russia's invasion of Ukraine, market volatility increased and the portfolio gave up some of those gains in early 2022.



2021-2022 Public Service Superannuation Plan Annual Report

2021-2022 Investment Performance

In fiscal 2021-2022, the Fund achieved a one-year return of 5.56 per cent, net of investment management fees (5.71 per cent, gross of investment management fees). The Fund outperformed the policy benchmark of 4.31 per cent on a net basis and also outperformed the actuarial assumed rate of return of 5.25 per cent.

Investment Retu	ırn	
5.56%	4.31%	5.25%
The Plan	Benchmark	Discount Rate

The US equity market, as measured by the S&P 500 Index, returned 15.65 per cent during the fiscal year. US equities surged to new record highs as the COVID-19 vaccine roll-out helped businesses and the economy in general rebound from lockdowns initiated in 2020. Strong corporate earnings and accommodative fiscal and monetary policies supported markets with relatively low volatility for much of 2021. In the first quarter of 2022 U.S equities declined amid the war in Ukraine and mounting inflation. Major stock indexes posted their worst quarterly returns in two years. Growth stocks had the steepest pullback with central banks raising rates, including companies within the information technology, consumer discretionary and communication services sectors.

Canadian equities, as measured by the S&P TSX Composite index, gained 20.19 per cent. The S&P/TSX was one of the better-performing markets in 2021-2022, with seven of the 11 sectors contributing. Energy and materials were particularly strong as commodities trended higher as the war in Ukraine put pressure on supply.

International equities, as measured by the MSCI EAFE index, returned 6.21 per cent. European stocks rallied as widespread vaccine roll-outs and massive government stimulus measures helped lift the eurozone economy out of a pandemic-induced downturn. The invasion of Ukraine, and sharply higher inflation, derailed Europe's recovery efforts and equities tumbled in late fiscal 2021-2022. Japanese equities lagged other developed markets, weighed down by supply chain disruptions and the lingering economic impact of COVID-19.

2021-2022 Investment Performance continued...

Emerging Market equities, as measured by the MSCI EM index, returned -9.86 per cent. Emerging market stocks posted their weakest return since 2018. The war in Ukraine further exacerbated the impacts of a slowing global economy and rapidly rising inflation. China's economic slowdown, increased government intervention in the private sector, and continued COVID lockdowns have put significant pressure on China's economy and equity markets. Some commodity producing countries were spared from the worst of the declines in the first quarter of 2022 as prices for oil and industrial metals soared on worries about global supplies.

US fixed income, as measured by the Bloomberg US Credit index, returned -4.16 per cent and Canadian fixed income, as measured by the FTSE Canada Universe Bond Index, returned -4.52 per cent. Bonds came under intense pressure as central banks around the world sought to tame high inflation by raising interest rates. Despite the Ukraine conflict, the U.S. Federal Reserve, the Bank of England, and the Bank of Canada all hiked rates during the first quarter of 2022 while European Central Bank officials indicated they would do the same later in the year.

Real assets markets, which includes commercial real estate, infrastructure, and agriculture/ timber investments, continued a trend of increasing values after a brief pause in market activity in 2020. Investor demand was a key driver in these markets resulting in lower yields. As an example of investor demand, Canadian commercial real transactions achieved an all-time high in 2021 of \$59.1¹ billion. Infrastructure investors continued to favour renewable energy investments as well as data infrastructure such as fiber optic networks and data centres. Sector allocations bifurcated the real estate market as performance for industrial properties was very strong while office and retail investments lagged. An underweight to Canadian government fixed income was also a contributor to active return, however, this was somewhat offset by some cash drag. Emerging market equities and US equities added value, while international and Canadian equities detracted.

For the Fund, active performance was positive. The Fund's overall performance, on a net basis, led the benchmark by 1.25 per cent. Private equity and real estate were significant contributors to the Funds' active return.

Fund Investment Returns as at March 31, 2022										
				Annualized						
		1 year	3 year	5 year	7 year	10 year				
	Fund	5.56%	6.84%	6.24%	5.59%	7.27%				
	Benchmark	4.31%	5.98%	5.79%	5.32%	6.64%				
Fund returns are reported net of investment management fees.										

¹ CBRE 4Q 2021 Market Report

Fiscal Year 2021-2022 Economic Review

The Global economy grew 6.1 per cent in 2021². Supply disruptions hindered global manufacturing, especially in Europe and the United States, for much of the year. A resurgence in COVID cases also held back a broader recovery. In China, disruptions from COVID outbreaks, interruptions to industrial production from power outages, declining real estate investment, and a faster-than-expected withdrawal of public investment all contributed to a second-half slowdown. There were signs of a global turnaround later in 2021, with international trade picking up and upside surprises for services activity and industrial production data. Economic progress and optimism were halted when Russia launched its invasion of the Ukraine on February 24th.

Inflation continued to rise throughout 2021, driven by several factors including rising oil and food prices, and ongoing supply chain disruptions. Inflation surged to decade highs in the first quarter of 2022. With increasing inflation pressure, global central banks began tightening monetary policy and reducing their asset purchase programs. Global growth is expected to slow significantly, largely as a consequence of the war. A severe double-digit drop in GDP is expected in Ukraine due to fighting. A deep contraction is also projected for Russia due to sanctions and European countries' decisions to scale back energy imports. The economic costs of war are expected to spread through commodity markets, trade, and financial markets.

Canada's economy grew 4.6 per cent in 2021³. This is lower than the 6.3 per cent expected by the IMF in the July 2021 report as supply-chain disruptions have slowed Canada's economic recovery. Household consumption data revealed the significant disruptions to the manufacture and supply of durable goods, including motor vehicles. Housing market activity slowed, tempering growth in domestic expenditure. Residential construction remains at elevated levels but has declined from its peak in April 2021. With these drags on growth, industry data suggest the recovery resumed in the third quarter, but at a modest pace. With the fourth COVID wave receding, the Canadian economy surpassed pre-pandemic levels by end of 2021. Significant inflationary pressure in the economy led the Bank of Canada to end its asset purchase program in December and hike rates to 1.0 per cent as of April 2022.

² International Monetary Fund; World Economic Outlook 2022 Apr; War Sets Back The Global Recovery; Table 1.1

³ International Monetary Fund; World Economic Outlook 2022 Apr; War Sets Back The Global Recovery; Table 1.1

Fiscal Year 2021-2022 Economic Review continued...

In the United States, the economy expanded by 5.7 per cent in 2021⁴.

The recovery from the pandemic began to lose steam as the year progressed. As of the July IMF report, US growth for 2021 was estimated at 7.0 percent. The pace of economic growth in the first half of the year was supported by a temporary burst of economic activity as vaccination rates increased, lockdown measures eased, and many businesses hard-hit by the pandemic, such as hospitality and leisure, finally saw a material rebound in demand. Economic growth began to slow in the second half of the year as businesses struggled to keep up with the surges in demand due to global supply chain disruptions and tight labour market conditions. With inflation hitting multi-decade highs, the Federal Reserve has hiked rates twice in early 2022 and laid out the plan to trim asset purchases at a quicker than expected pace.

Growth in the Euro area increased by 5.3 per cent in 2021⁵. After a remarkable rebound in the second and third quarters of 2021, growth in the Euro area slowed in the fourth quarter. A sharp resurgence of COVID infections, a persistent drag on production from supply bottlenecks in economies heavily exposed to global supply chains, and sharply higher energy prices were some of the factors in the slowdown. Despite these headwinds, the estimate for growth in the Euro area was revised up from the July estimate of 4.6 per cent.⁶ The war in Ukraine has significantly impacted the Euro area, especially with the rising cost of commodities. Rising energy and food costs, coupled with on-going supply chain disruptions, has led to lower output and decades-high inflation. This has led many of the region's central banks to withdraw monetary policy accommodations more rapidly than expected despite the significant impacts caused by the ongoing conflict in Ukraine.

The Japanese economy grew by 1.6 per cent in 2021⁷. Activity remained subdued through 2021 but picked up toward the end of the year as high vaccination rates allowed for the relaxation of pandemic-control measures. Supply-chain disruptions, especially amongst major trading partners including China, weighed on production and trade and pushed up producer prices. Cost pressures have not been passed on to consumers with negative implications for business profitability, which remains especially weak. Inflation has remained subdued in Japan and below the 2 per cent inflation target but upward price pressures increased at the end of the year. Monetary policy has remained accommodative with longer-term interest rates around zero. The Bank of Japan has also supported lending to businesses affected by the coronavirus by extending the duration of this support by six months until the end of March 2022.

⁷ International Monetary Fund; World Economic Outlook 2022 Apr; War Sets Back The Global Recovery; Table 1.1

⁴ International Monetary Fund; World Economic Outlook 2022 Apr; War Sets Back The Global Recovery; Table 1.1.

⁵ International Monetary Fund; World Economic Outlook 2022 Apr; War Sets Back The Global Recovery; Table 1.1

⁶ International Monetary Fund; World Economic Outlook 2021 Jul; Fault Lines Widen in the Global Recovery; Table 1.

Fiscal Year 2021-2022 Economic Review continued...

Emerging market economic growth was 6.8 per cent in 2021⁸. The war in Ukraine will amplify economic forces already shaping the global recovery from the pandemic. The war has further increased commodity prices and intensified supply disruptions, adding to inflation. Growth in China has decelerated more markedly than previously envisioned. Recurring mobility restrictions related to the pandemic and regulatory curbs on the property and financial sectors have restrained consumer spending and residential investment. In contrast, and despite supply disruptions and electricity shortages, manufacturing activity has been generally solid and export growth has accelerated. Macroeconomic policy action has helped prevent a sharper economic slowdown and mitigated financial stress. The People's Bank of China has provided short-term liquidity injections and cut reserve requirements, and the government accelerated infrastructure investment and increased efforts to support homeowners and creditworthy developers. Industrial production decelerated and new export orders remain subdued, reflecting a moderation in external demand and lingering supply bottlenecks that have been made worse by the conflict in Ukraine.

⁸ International Monetary Fund; World Economic Outlook 2022 Apr; War Sets Back The Global Recovery; Table 1.1

2021-2022 Investment Accomplishments

An asset liability study is undertaken by PSSPTI at least every five years, the last one being in 2020. The purpose of the study is to review the investment risks to which the Fund is exposed and to identify potential changes to the policy asset mix. Working with an external consultant, an adjusted long-term asset mix was approved by PSSPTI.

With the completion of the recent asset liability study and the approval of the new policy asset mix, PSSPTI focused on establishing and then initiating an implementation plan during fiscal 2021-2022. Several asset classes were impacted; allocation to government bonds and developed market equities declined, and commodities were eliminated outright, while real assets (real estate, infrastructure, and timber/ agriculture) and private equity portfolios were increased. Furthermore, several changes were planned within the equity and fixed income asset classes helping optimize overall exposures.

While the overall implementation plan may take until early 2024 to complete, substantial progress was made during the year including building out changes to existing mandates and working though new external investment manager searches. Due to the substantial lead time necessary for investment into real assets and private equity, growth in these asset classes will continue for some time.



* This table differs slightly from the table on page 14 in that it reflects full implementation of the new target mix.

2021-2022 Investment Accomplishments continued...

A sustainability report was released this year to provide members with information on PSSPTI's ongoing sustainable investment activities. Amongst other items, the report advised members that the resiliency assessments for the real estate portfolios were completed and have identified physical risks from extreme weather conditions that are now formally considered in property acquisitions and annual repair and maintenance budgets.

PSSPTI reports on sustainable activities undertaken over the past year. This includes engaging with the Fund's external service providers to ensure that, at hire and throughout the relationship, Environmental, Social & Governance (ESG) factors are properly considered. PSSPTI is a member of various organizations with mandates focused on advancing ESG themes industry-wide, such as Climate Action 100+, PIAC, RealPAC and Ceres.

You can view the Report on our website at: *www.nspssp.ca/investments/investment-policies*



Looking Ahead to 2022-2023

While the implementation plan to transition to the new policy asset mix continues, some asset classes, like real assets and private equity, need significant lead time and will continue to be a focus in the years ahead. Once commitments reach their intended allocation size the asset classes will settle into a regular steady state of monitoring with commitments used to rebalance incoming cash flows.

The process of implementing asset mix changes also provides opportunities to optimize the Fund. PSSPTI will continue to review existing investment strategies and investment manager mandates to enhance returns on a risk-adjusted basis, while also reviewing the liquidity of the Fund to identify strategies to ensure that greater allocations to illiquid assets do not impair the Fund's overall liquidity profile.

The financial markets have started the year with heightened volatility amid governments raising rates, high inflation, geopolitical instability, continued COVID supply chain disruptions and food and energy price shocks. While this leads to volatility and uncertainty in investment markets, the resiliency of the diversified portfolio with exposure to asset classes that provide inflation protection and protection against volatility will be key to minimizing downside losses. In the meantime, growth drivers in the portfolio will aid in market participation to the upside. PSSPTI will continue to implement changes to the asset mix to ensure the portfolio remains robust and well diversified, relatively liquid and able to maintain a long-term focus on appreciation.

Further work will be done on ESG within the portfolio and broader general industry. This includes measurement of risks and opportunities, participation in external working groups to follow industry trends, and examining how the overall portfolio is allocated across different ESG category exposures. This is an ever-evolving field and the Trustee continues to ensure we understand our positions in the Fund.

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, 2022



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INDEPENDENT AUDITORS' 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, 2022;
- 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 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, 2022, 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 *"Auditors' Responsibilities for the Audit of the Financial Statements"* section of our auditors' 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.

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.

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.



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.

Auditors' 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 auditors' 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.
- 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 auditors' 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 auditors' 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.



Page 3

• 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.

KPMG LLP

Chartered Professional Accountants Halifax, Canada June 23, 2022

Financial Statements of Public Service Superannuation Plan Year ended March 31, 2022

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Statement of Financial Position

March 31, 2022, with comparative information for 2021	2022	2021
(in thousands of dollars)		
Net assets available for benefits		
Assets		
Cash	\$ 198,503	\$ 176,654
Contributions receivable:		
Employers'	6,769	6,056
Employees'	6,573	5,971
Accounts receivable	2,631	3,485
Receivable from pending trades	20,867	11,299
Accrued investment income	16,777	18,379
Investments (note 5)	7,330,305	7,055,589
Total assets	7,582,425	7,277,433
Liabilities		
Due to administrator (note 14)	1,370	2,714
Accounts payable and accrued liabilities	4,952	4,547
Payable for pending trades	110,936	20,465
Investment-related liabilities (note 5)	9,185	9,529
Total liabilities	126,443	37,255
Net assets available for benefits	\$ 7,455,982	\$ 7,240,178
Purchases of service via instalments (note 7)	-	75
Fair value of net assets available for benefits	\$ 7,455,982	\$ 7,240,253
Accrued pension obligation and deficit		
Accrued pension obligation (note 9)	\$ 7,588,411	\$ 7,414,946
Deficit:		
Funding deficit (note 9)	(132,429)	(174,693)
	(132,429)	(174,693)
Commitments (note 10)		
Accrued pension obligation and deficit	\$ 7,455,982	\$ 7,240,253

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

On behalf of the board:

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

Approved by Nancy MacLellan, Vice-Chair, Public Service Superannuation Plan Trustee Inc.

Financial Statements



Statement of Changes in Net Assets Available for Benefits

Year ended March 31, 2022, with comparative information for 2021	2022	2021
(in thousands of dollars)		
Increase in assets		
Contributions (note 4)	\$ 238,110	\$ 236,420
Transfers from other pension plans:		
Universities, municipalities & other (note 8)	15,387	26,917
Individuals	6,591	2,659
Interest on pension plan transfer deficits (note 8)	20	84
Investment income (note 5)	192,975	226,697
Change in market value of investments (note 5)	220,486	783,582
Total increase in assets	673,569	1,276,359
Decrease in assets		
Benefits paid (note 11)	431,644	414,249
Transfers to other pension plans	5,384	4,576
Administrative expenses (note 12)	20,737	20,411
Total decrease in assets	457,765	439,236
Increase in net assets available for benefits	215,804	837,123
Net assets available for benefits, beginning of year	7,240,178	6,403,055
Net assets available for benefits, end of year	\$ 7,455,982	\$ 7,240,178

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

Statement of Changes in Pension Obligation

Year ended March 31, 2022, with comparative information for 2021		2022		2021
(in thousands of dollars)				
Accrued pension obligation, beginning of year	\$	7,414,946	\$	7,007,434
Increase in accrued pension benefits				
Interest on accrued pension obligation		389,285		385,409
Benefits accrued		200,474		187,815
Purchases of service		3,369		3,230
Transfers from other pension plans		21,978		29,576
Changes in actuarial assumptions (note 9)		-		214,482
Net experience losses (note 9)		-		5,825
		615,106		826,337
Decrease in accrued pension benefits				
Benefits paid		431,644		414,249
Transfers to other pension plans		5,384		4,576
Net experience gains (note 9)		4,613		-
		441,641		418,825
Net increase in accrued pension benefits		173,465		407,512
Accrued pension obligation, end of year	\$	7,588,411	\$	7,414,946

Statement of Changes in Deficit

Year ended March 31, 2022, with comparative information for 2021		2022	2021
(in thousands of dollars)			
Deficit, beginning of year	\$	(174,693)	\$ (604,220)
Increase in net assets available for benefits		215,804	837,123
Decrease in purchases of service via instalments		(75)	(84)
Net increase in accrued pension obligation		(173,465)	(407,512)
Deficit, end of year	\$	(132,429)	\$ (174,693)

See accompanying notes to financial statements.

Notes to Financial Statements

Year ended March 31, 2022 (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*.

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) below or 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) below or 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 23, 2022.

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 equity investments and the determination of the accrued pension obligation.

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



Significant accounting policies

a. Investment transactions, income recognition and transaction costs

i. 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 equity, 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

	2022	2021
(in thousands of dollars)		
Employer		
Matched current service	\$ 117,159	\$ 115,651
Matched past service	361	292
	117,520	115,943
Employee		
Matched current service	117,160	115,716
Unmatched past service	2,646	3,955
Matched past service	361	292
Unmatched current service	423	514
	120,590	120,477
	\$ 238,110	\$ 236,420



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:

		2022		2021
(in thousands of dollars)		%		%
Investments				
Fixed income				
Money market	\$ 118,331	1.6	\$ 286,943	4.1
Canadian bonds & debentures	527,186	7.2	626,707	8.9
Non-Canadian bonds & debentures	1,182,418	16.2	1,239,575	17.6
Canadian real return bonds	361,106	4.9	257,208	3.6
Equities				
Canadian	333,665	4.6	370,026	5.2
US	567,558	7.7	650,608	9.2
Global	733,840	10.0	865,010	12.3
Private	296,047	4.0	211,833	3.0
Commodities	230,452	3.1	186,683	2.6
Real assets				
Real estate	1,070,918	14.7	882,547	12.5
Infrastructure	808,878	11.0	673,877	9.6
Agriculture & timber	75,209	1.0	31,925	0.5
Absolute return strategies				
Hedge funds	830,663	11.4	696,763	9.9
Investment-related receivables				
Agreements to resell securities	104,795	1.4	-	-
Promissory notes	34,611	0.5	21,190	0.3
Derivative-related, net	 54,628	0.7	54,694	0.7
	\$ 7,330,305	100.0	\$ 7,055,589	100.0
Investment-related liabilities				
Agreements to repurchase securities	\$ -	-	\$ (3,503)	36.8
Derivative-related, net	(9,185)	100.0	(6,026)	63.2
	\$ (9,185)	100.0	\$ (9,529)	100.0
Net investments	\$ 7,321,120		\$ 7,046,060	

2022							
(in thousands of dollars)		Cha	nges in marke	et va	lue of investme	nts a	nd derivatives
	 vestment ncome		Realized	I	Jnrealized		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

2021

(in thousands of dollars) Changes in market value of investments and derivatives Investment Realized Unrealized income Total Fixed income \$ 33,883 \$ (95,352) \$ 63,651 \$ (61, 469)Equities 465,292 541,972 35,216 76,680 Commodities 33,422 33,422 Real assets 126.148 33.229 (72, 394)(39, 165)40,505 Absolute return strategies 37,274 3,231 _ Derivatives (406) 32,005 236,312 268.317 Other 2,088 \$ 226,697 \$ 213,071 \$ 570,511 \$ 783,582

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:

2022

2022											
(in thousands of dollars)			Fair value								
	N	otional value		Assets		Liabilities		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			

2021

(in thousands of dollars)			Fair value								
	No	tional value		Assets	L	iabilities		Net			
Derivatives											
Futures	\$	18,042	\$	\$1,210	\$	(1,233)	\$	(23)			
Options		-		-		-		-			
Credit default swaps		4,768		286		(49)		237			
Interest rate swaps		80,800		1,374		(548)		826			
Total return swaps		137,260		-		(2,322)		(2,322)			
Currency forwards		2,891,247		50,113		(21)		50,092			
	\$	3,132,117	\$	52,983	\$	(4,173)	\$	48,810			
Cash collateral		-		1,711		(1,853)		(142)			
Notional and fair value	\$	3,132,117	\$	54,694	\$	(6,026)	\$	48,668			

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

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		-		120	40	160
Interest rate swaps		-		(521)	-	(521)
Total return swaps		(3)		(4,253)	-	(4,256)
Currency forwards		49,562		-	-	49,562
	\$	48,527	\$	(4,654)	\$ 40	\$ 43,913
Cash collateral, net						1,530
Fair value, net	\$	48,527	\$	(4,654)	\$ 40	\$ 45,443

2021						
(in thousands of dollars)	Under 1 year			1 to 5 years	Over 5 years	Total
Derivatives, net						
Futures	\$	(23)	\$	-	\$ -	\$ (23)
Options		-		-	-	-
Credit default swaps		-		136	101	237
Interest rate swaps		-		(282)	1,108	826
Total return swaps		(2,322)		-	-	(2,322)
Currency forwards		50,092		-	-	50,092
	\$	47,747	\$	(146)	\$ 1,209	\$ 48,810
Cash collateral, net						(142)
Fair value, net	\$	47,747	\$	(146)	\$ 1,209	\$ 48,668

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 equity, real estate, infrastructure, and agriculture & timber investments valued based on financial statements and or investor statements. Promissory notes are valued at cost.

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								
Agreements to repurchase securities	\$	-	\$	-	\$	-	\$	-
Derivative-related, net		(3,080)		(6,105)		-		(9,185)
	\$	(3,080)	\$	(6,105)	\$	-	\$	(9,185)
 Net investments	\$	1,124,902	\$	4,031,675	\$	2,164,543	\$	7,321,120
	Ψ	1,12-7,302	Ψ	4,001,070	Ψ	2,10-1,0-10	Ψ	7,521,120

2021								
(in thousands of dollars)		Level 1		Level 2		Level 3		Total
Investments								
Fixed income								
Money market	\$	27,565	\$	259,378	\$	-	\$	286,943
Canadian bonds & debentures		180,420		446,287		-		626,707
Non-Canadian bonds & debentures		57,341		1,182,234		-		1,239,575
Canadian real return bonds		-		187,326		69,882		257,208
Equities								
Canadian		297,870		72,156		-		370,026
US		195,315		455,293		-		650,608
Global		560,267		304,743		-		865,010
Private		-		-		211,833		211,833
Commodities		-		186,683		-		186,683
Real assets								
Real estate		-		167,550		714,997		882,547
Infrastructure		-		-		673,877		673,877
Agriculture & timber		-		-		31,925		31,925
Absolute return strategies								
Hedge funds		-		696,763		-		696,763
Investment-related receivables								
Agreements to resell securities		-		-		-		-
Promissory notes		-		-		21,190		21,190
Derivative-related, net		2,921		51,773		-		54,694
	\$	1,321,699	\$	4,010,186	\$	1,723,704	\$	7,055,589
Investment-related liabilities								
Agreements to repurchase securities	\$	-	\$	(3,503)	\$	-	\$	(3,503)
Derivative-related, net		(3,086)		(2,940)		-		(6,026)
	\$	(3,086)	\$	(6,443)	\$	-	\$	(9,529)
Net investments	\$	1,318,613	\$	4,003,743	\$	1,723,704	\$	7,046,060
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There were no significant transfers between level 1, level 2, and level 3 financial instruments during the years ended March 31, 2022 and 2021.

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

2022

(in thousands of dollars)

	Fixed inco	ne	Equities	Real assets	I	nvestment - related receivables	Total
Balance, beginning of year	\$ 69,8	82	\$ 211,833	\$ 1,420,799	\$	21,190	\$ 1,723,704
Purchases, contributed capital		-	80,360	413,220		13,421	507,001
Sales, capital returned	(17	'9)	(30,122)	(100,911)		-	(131,212)
Realized gains	2	44	24,990	57,025		-	82,259
Unrealized gains (losses)	(3,66	5)	8,986	(22,530)		-	(17,209)
Balance, end of year	\$ 66,2	82	\$ 296,047	\$ 1,767,603	\$	34,611	\$ 2,164,543

2021

(in thousands of dollars)

	Fix	ed income	Equities	Real assets	I	nvestment - related receivables	Total
Balance, beginning of year	\$	68,258	\$ 138,205	\$ 1,470,043	\$	21,190	\$ 1,697,696
Purchases, contributed capital		-	53,037	94,341		-	147,378
Sales, capital returned		(1,020)	-	(101,555)		-	(102,575)
Realized gains		232	-	7,920		-	8,152
Unrealized gains (losses)		2,412	20,591	(49,950)		-	(26,947)
Balance, end of year	\$	69,882	\$ 211,833	\$ 1,420,799	\$	21,190	\$ 1,723,704

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, 2022 and 2021, respectively, was \$65,050 and (\$18,795).

Fair value assumptions and sensitivity

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

Significant unobservable inputs used in measuring fair value:

The table below sets out information about significant unobservable inputs used at March 31, 2022 in measuring financial instruments categorized as level 3 in the fair value hierarchy.

(in thousands of dollars)						
Description	2022	2 Fair value	2021 F	air value	Valuation technique	Unobservable inputs
Unlisted real estate					Income approach technique: overall capitalization rate method and discounted cash flow	Capitalization rates,
subsidiaries	\$	802,325	\$	664,753	method	discount rates
Unlisted funds: private equity, real						
estate, infrastructure,					Net asset value - audited	Information not
agriculture & timber		1,261,325		967,879	financial statements	available
Listed real return bond		66,282		69,882	Vendor supplied price - proprietary price model	Information not available
Unlisted promissory					Issued by subsidiaries;	
notes		34,611		21,190	valued at cost	N/A
	\$	2,164,543	\$	1,723,704		

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.

	2022	2021
(in thousands of dollars)		
Unlisted direct real estate subsidiaries		
Direct capitalization method		
Minimum capitalization rate	3.25%	3.50%
Maximum capitalization rate	6.75%	6.75%
Increase of 25 basis points in capitalization rate	\$ (36,628)	\$ (37,696)
Decrease of 25 basis points in capitalization rate	\$ 41,865	\$ 37,861
Discounted cash flow method		
Minimum discount rate	3.40%	3.50%
Maximum discount rate	8.50%	8.32%
Increase of 25 basis points in discount rate	\$ (25,605)	\$ (17,201)
Decrease of 25 basis points in discount rate	\$ 28,181	\$ 17,315
Note: 1 basis point is equal to 0.01%		

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

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, 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

March 31, 2021			
(in thousands of dollars)			
	Number of investments	Fair value	Cost
Private market investments	18	\$ 2,836,323	\$ 2,053,722
	18	\$ 2,836,323	\$ 2,053,722

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, 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 and 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	

March 31, 2021							
(in thousands of dollars)	l	Under 1 year	1 to 5 years	5 to 10 years	Over 10 years	Total	Average yield (%)(1)
Fixed income							
Money market	\$	285,284	\$ -	\$ -	\$ -	\$ 285,284	-
Bonds and debentures		23,448	476,930	477,002	502,323	1,479,703	3.5
Real return bonds (2)		-	-	 -	69,882	69,882	5.3
	\$	308,732	\$ 476,930	\$ 477,002	\$ 572,205	\$ 1,834,869	3.0
Pooled funds				 		 575,564	
Total fixed income						\$ 2,410,433	

- 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:

	2022	2021
(in thousands of dollars)		
Interest rate sensitive assets	\$ 1,382,968	\$ 1,833,446
Average duration for 1% increase in interest rates	(6.5)	(6.5)
Sensitivity to 1% increase in interest rates	(90,374)	(119,632)
Fair value after 1% increase in rates	\$ 1,292,594	\$ 1,713,814
Average duration for 1% decrease in interest rates	6.5	6.5
Sensitivity to 1% decrease in interest rates	90,374	119,632
Fair value after 1% decrease in rates	\$ 1,473,342	\$ 1,953,078

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:

	2022	2021
(in thousands of dollars)		
Total equity	\$ 1,931,110	\$ 2,097,477
10% increase in market values	193,111	 209,748
Fair value after 10% increase in market values	\$ 2,124,221	\$ 2,307,225
10% decrease in market values	(193,111)	(209,748)
Fair value after 10% decrease in market values	\$ 1,737,999	\$ 1,887,729

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 2022.

	2022	2021
(in thousands of dollars)		
Fixed income		
Canadian		
Governments	\$ 341,989	\$ 557,616
Corporate	160,552	206,832
Non-Canadian		
Governments	20,036	57,341
Corporate	864,282	1,013,080
	\$ 1,386,859	\$ 1,834,869
Pooled funds	802,182	575,564
Total fixed income	\$ 2,189,041	\$ 2,410,433

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

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:

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

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, 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

March 31, 2021		
(in thousands of dollars)	Unhedged	Hedged
Summary FX exposure		
Canadian dollar	\$ 2,958,442	\$ 5,752,932
United States dollar	3,551,619	1,675,096
Euro	263,913	(193,205)
British pound sterling	142,005	(38,563)
Japanese yen	104,608	51,425
Other	161,152	(15,852)
	\$ 7,181,739	\$ 7,231,833

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:

	2022	2021
(in thousands of dollars)		
Fund assets and liabilities	\$ 7,446,029	\$ 7,231,832
10% increase in Canadian dollar	(194,218)	(134,445)
Fund assets and liabilities after increase	\$ 7,251,811	\$ 7,097,387
10% decrease in Canadian dollar	237,378	164,322
Fund assets and liabilities after decrease	\$ 7,683,407	\$ 7,396,154

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 29.9% (2021 – 39.0%) 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 25.3% (2021 – 24.4%) 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, 2022, the Plan had cash in the amount of \$198,503 (2021 - \$176,654).

vi. COVID-19

On March 11, 2020, the outbreak of the novel strain of coronavirus, specifically identified as "COVID-19", was classified as a global pandemic, which has resulted in governments enacting emergency measures to combat the spread of the virus. These measures, which include the implementation of travel bans, self-imposed quarantine periods and social distancing, have caused material disruption to business globally resulting in an economic slowdown. Global equity and capital markets have also experienced significant volatility and weakness. Governments have reacted with significant monetary and fiscal interventions designed to stabilize economic conditions. The duration and impact of the COVID-19 pandemic is unknown currently, as is the efficacy of the government's interventions. The Plan's administrator has implemented procedures in response to the COVID-19 pandemic, including employee education, monitoring of symptoms, increased sanitation practices, as well as employees working remotely when possible. The duration of the outbreak and economic impacts are uncertain and there may be impacts in the future on the Plan's operations.



Purchases of service via instalments

The purchases of services via instalments of \$nil as at March 31, 2022 (2021 - \$75) represents the present value of outstanding employee and employer contributions that is due as a result of service purchases that are being paid for through payroll deductions. The liabilities associated with this service are already recognized in the accrued pension benefit obligation.



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 deficit to the associated liability is 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, 2021 and issued their report in June 2022. The report indicated that the Plan had a funding excess of \$143,512 (December 31, 2020 – deficit of \$156,497).

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:

	2022	2021
Discount rate	5.25% 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:

	2022	2021
(in thousands of dollars)	Extrapolated	Extrapolated
Actuarial value of net assets	\$ 7,455,982	\$ 7,240,253
Accrued pension obligation	(7,588,411)	(7,414,946)
Funding deficit	\$ (132,429)	\$ (174,693)



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, 2022.

March 31, 2022					
(in thousands of dollars)		Committed	Outstanding		
Canadian dollar					
Infrastructure	CAD	15,000	CAD	75	
	CAD	15,000	CAD	75	
United States dollar					
Infrastructure	USD	708,110	USD	167,865	
Private equity		525,000		315,960	
Real estate		25,000		4,445	
Agriculture & timber		85,000		31,950	
	USD	1,343,110	USD	520,220	
Euro					
Infrastructure	EUR	65,000	EUR	51,917	
Real estate		20,000		829	
	EUR	85,000	EUR	52,746	
British pound sterling					
Infrastructure	GBP	31,700	GBP	936	
	GBP	31,700	GBP	936	



	2022	2021
(in thousands of dollars)		
Benefits paid to retired members	\$ 363,650	\$ 352,225
Benefits paid to surviving members	42,710	41,410
Refunds paid to terminated members	25,284	20,614
	\$ 431,644	\$ 414,249



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.

	202	2 2021
(in thousands of dollars)		
Plan administration		
Office and administration services	\$ 6,580	b \$ 6,123
Actuarial & consulting services	190) 146
Legal services	135	5 114
Audit services	48	3 59
Other professional services	9	1 76
	7,044	1 6,518
Pension plan transfer-related costs		
Professional services	309	9 479
Recovery (note 8)	(309) (479)
Investment expenses		
Investment management services	10,449	9 10,484
Transaction costs	43	5 567
Custody services	483	3 474
Advisory & consulting services	288	3 378
Information services	21	5 216
	11,870	12,119
Bad debt	:	3 13
HST	1,820) 1,761
	\$ 20,73	7 \$ 20,411

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 \$41,247 (2021 - \$42,085) 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:

	2022			2021	
(in thousands of dollars)					
Securities on Ioan	\$	308,706	\$	329,670	
Collateral held	\$	333,458	\$	356,428	



Related party transactions

Investments held by the Plan include debentures of the Province of Nova Scotia. The total fair value of these investments is \$7,168 (0.01% of total investment assets and liabilities) as at March 31, 2022 (2021 - \$12,534 (0.2% 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, 2022 was \$7,033 (2021 - \$6,867). The amount due to the administrator as at March 31, 2022 was \$1,370 (2021 - \$2,714).



Interest in subsidiaries

The Plan's subsidiaries were created for the purposes of providing investment earnings from US equities, private equities, 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:

			2022	2021
(in thousands of dollars)				
Subsidiary	Purpose	Ownership %	 Fair value	Fair value
PSS Investments RE Inc.	Real estate	100	\$ 545,089	\$ 480,516
NT Combined Investments Inc.	US equities	53	369,109	455,293
PSS Investments AI Inc.	Private equities	100	296,047	211,833
PSS Investments II Inc.	Real estate	100	231,561	195,254
PSS Investments CS Inc.	Infrastructure	100	185,307	193,498
PSS Investments BR Inc.	Infrastructure	100	86,839	19,878
PSS Investments AX Inc.	Infrastructure	100	57,610	54,843
PSS Investments ES Inc.	Real estate	100	39,971	39,227
PSS Investments IV Inc.	Infrastructure	100	37,664	60,015
HV Combined Investments Inc.	Hedge funds	63	37,097	41,666
PSS Investments III Inc.	Infrastructure	100	25,783	24,217
PSS Investments MU Inc.	Infrastructure	100	21,178	-
PSS Investments AC Inc.	Infrastructure	100	12,864	12,427
PSS Investments KA Inc.	Infrastructure	100	11,437	7,488
PSS Investments CS II Inc.	Infrastructure	100	11	18
			\$ 1,957,567	\$ 1,796,173

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.



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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.

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