Nova Scotia Public Service
Long Term Disability Plan Trust Fund

ANNUAL REPORT 2022

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Nova Scotia Public Service
Long Term Disability Plan Trust Fund

CHAIR & CEO MESSAGE

CHRIS DALY
Chair

ANNA MACISAAC
CEO

I would like to start by introducing Chris Daly our newly appointed Board Chair. Chris has held senior leader roles with the Province of Nova Scotia and now with Nova Scotia Community College, Chris has also been a trustee of the Nova Scotia Public Service Superannuation Plan. Chris brings to the Board table experience in leadership, public sector benefits, strategic planning, and board governance. I'd also like to thank our committee Chairs, Corinne Carey, and Robert Bourgeois for assisting with Board Chair duties while the position was vacant.

On behalf of the Board, we are pleased to present the 2022 Annual Report. The report highlights the Plan's funding position based on the actuarial valuation completed as of December 31, 2022, a review of our claims' activity and a summary of our investments. We encourage you to visit our website or contact the LTD Plan office if you would like additional information.

Every other year an actuarial valuation addresses the Plan's funding position. The results of the scheduled valuation as of December 31, 2022, confirm the Plan continues to be in a strong financial position ending the year with a surplus funding margin of $36.7 million and a funded ratio of 132.1%. The actuarial valuation results were not unexpected and are on track with the Trust's Funding Policy and goal of attaining and maintaining a 125% funded ratio.

As documented in the 2020 and 2021 Annual Report, claim costs continue to surpass premium revenues, which have not changed since a 38% reduction in 2013 and a prior 25% reduction in 2009. With the funded ratio now close to the target of 125%, the currently discounted premium rate will need to be reviewed and premium adjustments will likely be necessary to ensure the stability of the 125% target ratio going forward.

CHAIR & CEO MESSAGE

We continue to see an increase in claims in pay, and an increase in the submission of mental health claims. The last few years have been unprecedented, though COVID no longer requires an emergency -type response, in its wake we have seen added challenges in accessing timely medical care and a positive growing focus on work life balance. We continue to work closely with Manulife, our Claims Administrator, and our participating employers, to address the evolving challenges of the work environment while providing LTD benefits and return to work support for our Plan members.

It was not a great year for investments. Beutel Goodman manages two portfolios on behalf of the Trust Fund, a Liability Hedging portfolio, holding most of the Trust's funds and primarily invested in fixed income assets, and intended to provide security to the Plan's liabilities and a Balanced Fund Portfolio, a mixture of equites, bonds, and cash assets, intended to provide a conservative growth vehicle for a smaller portion of the Trust Fund's assets. For the 12-month period ending December 31, 2022, the Liability Hedging Portfolio recorded a negative return and underperformed its benchmark on a net of fee basis. The Balanced Portfolio for the same time period time, also recorded a negative return but outperformed its blended benchmark on a net of fee basis.

In closing we would like to acknowledge and thank the work and commitment of our 10 trustees. We are confident that working closely with our Plan Sponsors, our participating employers and Claims Administrator that we will meet the challenges of 2023 and the agenda we have defined.

As last year, we are pleased to present the photography of trustee Darren McPhee.

Respectfully,

Chris Daly, Chair
Anna MacIsaac, CEO

BOARD OF TRUSTEES

“Our shared mission is to administer the Nova Scotia Public Service Long Term Disability Plan Trust Fund to ensure sustainable and affordable funding for negotiated long-term disability benefits and return to work support.”

The legal basis for the Trust Fund is an agreement and Declaration of Trust between the Province of Nova Scotia and the Nova Scotia Government and General Employees Union (NSGEU). The agreement established in 1985 provides for the appointment of 11 trustees.

Five trustees are appointed by the NSGEU, one of whom is designated by the Canadian Union of Public Employees (CUPE). Five trustees are appointed by the Province through the Lieutenant Governor in Council, one of whom is designated by the Nova Scotia Health Authority. The Plan Sponsors jointly appoint an independent Chair.

BOARD OF TRUSTEES

ANITA NICKERSON
Director Compensation, Benefits and Policy and Western Zone People Services
Appointed by Province of Nova Scotia- NSHA
Appointed March, 2019
Strategic Initiatives & Governance Committee

CATHY RANKIN
Director, Benefits- Public Service Commission
Appointed by Province of Nova Scotia
Appointed January, 2006
Strategic Initiatives & Governance Committee

CORINNE CAREY
Pension and Benefits Officer
Appointed by NSGEU
Appointed June, 2013
Strategic Initiatives & Governance Committee- Chair

DARREN MCPHEE
Social Worker/ Care Coordinator
Appointed by NSGEU
Appointed January, 2007
Audit & Investment Committee

BOARD OF TRUSTEES

JIM GOSSE
Servicing Coordinator
Appointed by NSGEU
Appointed July, 2017
Strategic Initiatives & Governance Committee

NICOLE MCKIM
Director of Negotiations & Servicing
Appointed by NSGEU
Appointed January, 2020
Strategic Initiatives & Governance Committee

ROBERT BOURGEOIS
Executive Director, Government Accounting
Appointed by Province of Nova Scotia
Appointed April, 2017
Audit & Investment Committee- Chair

SARAH BRADFIELD
Executive Director, Public Service Commission
Appointed by Province of Nova Scotia
Appointed November, 2018
Strategic Initiatives & Governance Committee

SHANNON YORK
Manager of Derivatives and Quantitative Evaluation
Appointed by Province of Nova Scotia
Appointed February, 2016
Audit & Investment Committee

STEVE JOY
Mechanic II (Auto Body Repair)
Appointed by NSGEU- CUPE
Appointed January, 2019
Audit & Investment Committee

PARTICIPATING EMPLOYERS

Province of Nova Scotia
Nova Scotia Community College
Nova Scotia Health Authority
Art Gallery of Nova Scotia
Atlantic Provinces Special Education Authority (APSEA)
Build Nova Scotia
Events East Group
Invest Nova Scotia
IWK Health Centre
Nova Scotia Government and General Employees Union (NSGEU)
Nova Scotia Legal Aid Commission
Nova Scotia Pension Services Corporation
Nova Scotia Public Service Long Term Disability Plan Trust Fund
Nova Scotia Utility and Review Board
Property Valuation Services Corporation
Université Sainte-Anne

We recognize employees are our employers most important resource. Together we provide the security and peace of mind of LTD coverage.

As of the end of 2022, the LTD Plan insured 16 employers and approximately 14,200 Plan members.

We encourage our participating employers and their employees to visit our website and contact our Navigator if they have any questions pertaining to the LTD Plan.

FUNDING POSITION

The actuarial valuation report, in its entirety, is available on the NSPS-LTD Plan website.

Every second year an actuarial valuation is performed. The most recent actuarial valuation was completed as of December 31, 2022, by HUB International, the firm appointed by the Board of Trustees to provide the Plan's actuarial services.

The purpose of the actuarial valuation is to:

- Determine the funded status of the Plan's claims and administrative expenses as of December 31, 2022, on a going-concern basis.
- Report the cause(s) of change from the previous valuation.
- Estimate the cost of new claims going forward.
- Calculate inputs required to assess the Plan's contribution rates in accordance with the Plan's Funding Policy.

The following table shows the funding position of the Plan for the last five years. In the years between full actuarial valuations (2019 and 2021) the accrued liability for benefits is based on an extrapolation of the results from the previous full actuarial valuation.

YEAR END ($ millions)	**2018**	**2019***	**2020**	**2021***	**2022**
Net assets available for benefits	157.1	166.3	174.3	171.3	$151.1
Benefit liabilities	95.2	102.8	116.2	119.2	$114.4
Funding Margin	62.0	63.5	58.1	52.1	$36.7
FUNDED RATIO	**165%**	**162%**	**150%**	**144%**	**132.1%**

*Based on extrapolated liability results
Source: HUB

FUNDING POSITION

The market value of the assets in the Plan as of December 31, 2022, was $151.1 million.

The benefit liabilities for the Plan are estimated to be $114.4 million. The benefit liabilities include both active in-force claims as of the valuation date and a reserve for claims incurred before the valuation date but not yet reported. It also includes a liability for claims related administrative expenses of 8.0% of total future benefit payments. The cost of any future ad hoc indexing is not reflected in the calculation of the actuarial liabilities.

The Plan continues to have a strong funding position. Since the last full actuarial valuation in December 2020 the Plan's funding margin has been reduced by $21.4 million, from $58.1 million to the current $36.7 million, and the funded ratio reduced by 17.1% to the current 132.1%. This change was expected.

The main factors contributing to the change in the funded ratio are:

Change in discount rate to 4.25% from 2.50%:
increase of $12.1 million.
Change in termination assumption to reflect recent actuarial tables and Plan experience:
increase of $12.1 million.
Decrease in expense assumption to reflect the growth of claim payments relative to expenses under the Plan:
increase of $2.1 million.
Investment returns in 2021 and 2022 lower than expected:
decrease of $18.6 million.
Increase in claims experience greater than expected:
decrease of $18.6 million.
Source: HUB

It is important to note that the cost of new claims exceeding the premiums and EI rebates collected was expected, as there is a temporary discount in Plan premiums meant to amortize the existing funding margin in accordance with the Funding Policy.

FUNDING POSITION

The Board of Trustees have adopted a Funding Policy to guide how the Plan responds to variations in its funded position. The objective of the policy is to maintain a funded position that provides for the security of benefits promised to claimants while maintaining stable and affordable premium rates. The target funded ratio under the policy is 125%.

A 125% funded ratio implies target assets of $143 million. When compared to the Plan's current net assets of $151 million this suggests an excess funding margin of $8.1 million, a $21.4 million decrease since the last actuarial valuation of Dec 2020.

The Funding Policy provides guidance on actions (premium adjustments and/or benefit changes, including benefit indexing) to consider when the Plan's funded ratio is outside of its target range. In general, when the Plan is outside of its target funding range, the policy aims to return the Plan to its target level within a ten-year period. The specific adjustments to consider and the level of Board discretion are outlined in the policy and vary based on the degree of variance from the Plan's target funded ratio.

Current discounted premium levels and projected EI rebates submitted to the Plan are expected to continue to be below the best-estimate range for the cost of new disability claims including associated administrative expenses. Given the Plan's past significant funding margin, this has not been a cause for immediate concern.

The Plan remains financially sound and well able to meet the commitments made to existing disability claimants. However as noted in past Annual Reports, the discount in current premiums in place since 2013 will now need to be reviewed as the Plan's funded ratio is very close to its target of 125%.

The Board will continue to monitor and respond to emerging Plan risks. The Plan has adopted a biennial schedule for valuations; accordingly, the next formal actuarial valuation is scheduled for December 31, 2024.

CLAIMS

The Board has hired Manulife Financial to administer the LTD Plan on its behalf. As Plan administrator, Manulife provides claims management services as dictated by the LTD Plan under the supervision of the LTD Plan office.

2022 CLAIMS HIGHLIGHTS

- Manulife received 238 claims in 2022 compared to 240 in 2021.
- Mental illness continues to be the leading cause of disability making up 40% of claims paid.
- Overall durations from benefit start date to closure (excluding permanent claims*) was 15.3 months, slightly higher than the previous year.
- Return to work closures were the number one reason for claim resolution.
- Average return to work durations have remained consistent with claimants returning to work after 11.3 months on claim.
- LTD benefit payments were $22,816,000, an increase of 8% from 2021.

*Permanent claims- A return to work is highly unlikely

Quarterly, Manulife's performance is measured against mutually agreed upon standards. The results are reflective of:

Initial claim decisions made within 10 business days

98% met

Information reviewed within 10 business days

97% met

Privacy compliance met

97% met

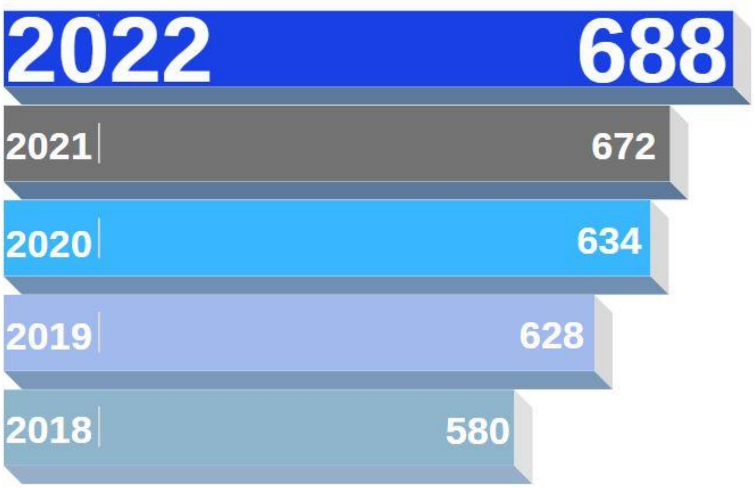
Case management practices followed

99% met

Source: Manulife

CLAIMS

CLAIMS IN PAY AS OF DECEMBER 31, 2022



% CHANGE

2%

6%

1%

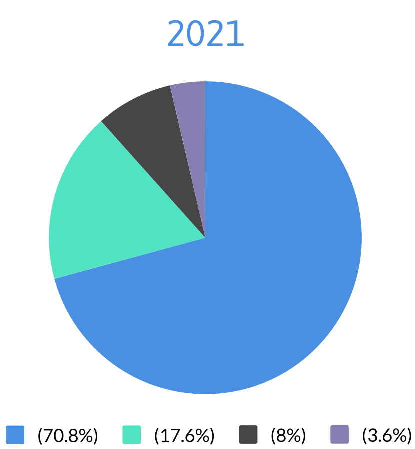
8%

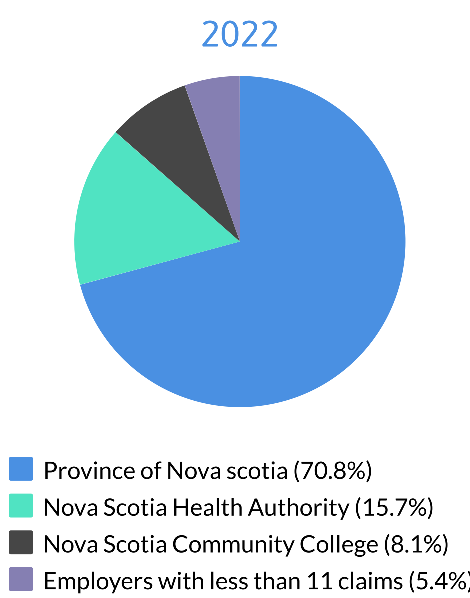
Source: Manulife

Though there was an increase in claims in pay, the increase was not as significant as that seen in 2021.

CLAIMS DISTRIBUTION BY EMPLOYER AS OF DECEMBER 31, 2022

It is not surprising that the Province, as our largest participating employer, has the highest percentage of LTD claims. Of note, claims distribution has not changed significantly over the years.



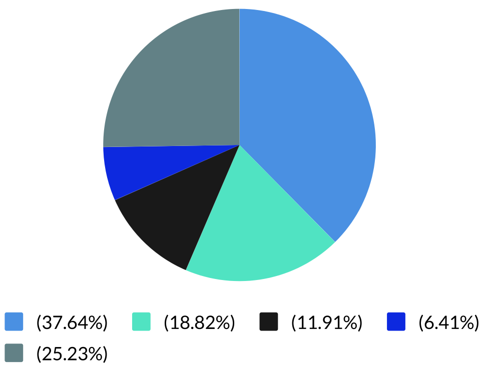


Source: Manulife

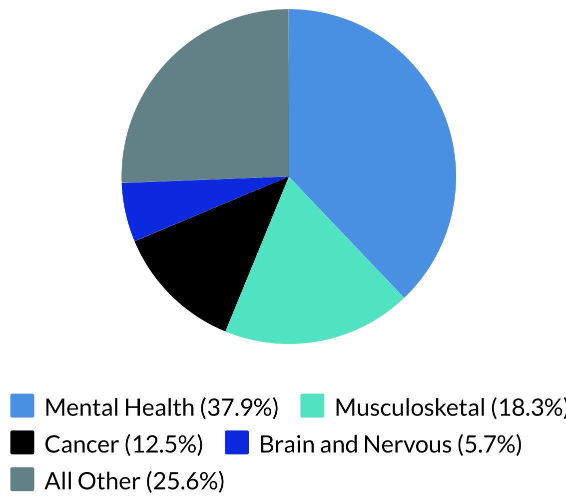
CLAIMS

LTD DIAGNOSES FOR CLAIMS APPROVED (REGARDLESS OF YEAR SUBMITTED)

2021



2022



Source: Manulife

ACTIVE CLAIMS BY STATUS AS OF DECEMBER 31, 2022

STATUS	2020	2021	2022
Intervention	263	279	**273**
Rehab	47	32	**47**
Permanent	324	361	**368**
TOTAL	634	672	**688**

Source: Manulife

Intervention- Medical management is ongoing and final prognosis is unknown. The Case Manager is actively monitoring status to determine when it will be medically safe to move forward with return to work planning.

Rehab- The focus is on addressing physical and/or cognitive barriers that are impacting ability to return to work.

ACTIVITY IN PERIOD

ACTIVITY	2020	2021	2022
Approved *	172	201	**183**
Declined	49	64	**66**
Resolved	169	169	**169**
Resolved RTW	87	82	**73**

*Approvals are based on claims approval in the reporting period, regardless of when received.

Source: Manulife

CLAIMS

CLAIM RESOLUTIONS

YEAR	2020	2021	2022
Return to Work	87	82	73
Medical Evidence	10	8	8
Change of Definition *	9	8	15
Max Period or Age	36	38	46
Retirement	6	10	5
Deceased	13	18	17
Other	8	5	5
TOTAL RESOLUTIONS	169	169	169

Source: Manulife

*Change of Definition- disabled from own occupation; however not any occupation.

Though return to works were down in 2022, it remains the number one reason for claim resolution. With Manulife and employer input, we will continue to identify potential return to work opportunities.

The increase in LTD claims, driven to a large extent by the increase in mental illness claims, is concerning. There are likely many contributing factors. The goal will be to recognize where we may be able to have a positive impact.

INVESTMENT MANAGER PORTFOLIO SUMMARY

Investment Manager Beutel Goodman & Company Ltd. is the sub-advisor for the Trust Fund's Liability Hedging Portfolio and Balanced Portfolio.

Beutel Goodman considers environmental, social and governance (ESG) factors in its investment process. They are committed to active ownership through engagement, proxy voting and collaboration as part of managing investment risk, while seeking to enhance the long-term financial performance of investments for clients.

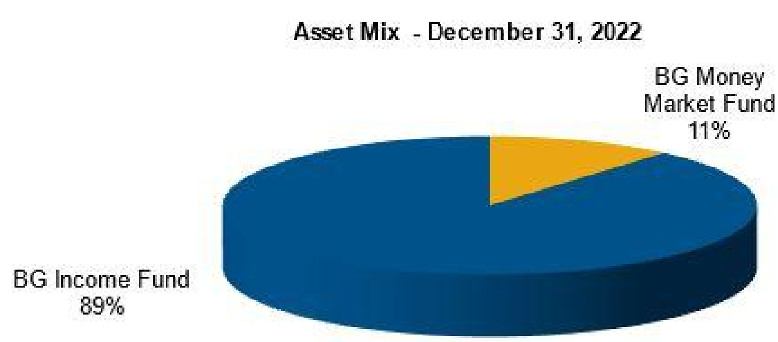
Liability Hedging Portfolio

Over the 12-month period ended December 31, 2022, the Liability Hedging Portfolio recorded a negative return and underperformed its benchmark on a net of fee basis.

	YTD	3 YR	5 YR	SI *
Total Portfolio Net of Fees	-10.51%	-1.39%	0.65%	1.58%
Benchmark	-10.39%	-1.87%	0.38%	1.60%
Under/ Outperformed	Underperformed	Outperformed	Outperformed	Underperformed

*SI- Since Inception
Source: Beutel Goodman

Total Portfolio $106,645,819



Source: Beutel Goodman

INVESTMENT MANAGER PORTFOLIO SUMMARY

Inflation was the dominant theme of 2022 as global central banks began aggressively tightening monetary policy, to try and bring down prices. Bond markets suffered one of their worst starts to a year in decades as supply-chain issues and strong consumer demand drove inflation in the U.S. and Canada to 40-year highs.

Central banks worldwide have largely been moving in concert on rate hikes. In December, the U.S. Federal Reserve, the Bank of Canada, the Bank of England, and the European Central Bank each hiked rates by 50 basis points concluding a hawkish year for monetary policy.

Key Drivers of Performance for the Liability Hedging Portfolio:

- Duration exposure was positive as the portfolio was generally short duration in a rising bond yield environment in the first three quarters of the year. A tactical long position during the fourth quarter benefited from yields falling in the middle of the quarter.
- Curve positioning was positive as the portfolio was short the two-year area of the curve as the front end of the curve sold off.
- Corporate security selection was a detractor. Within corporate security selection, Financials securities were the main source of weakness.

Portfolio Activity

The portfolio management team at Beutel employs macroeconomic analysis, rigorous bottom-up credit research and proprietary risk-management tools to search for opportunities where the market has mispriced risk and reward. As a by-product of the team's investment process, market performance and general management activity, the following changes occurred in the portfolio during the reporting period:

- Weighting in federal government bonds increased while the portfolio's weighting in provincial and municipal bonds decreased.
- Weighting in investment grade corporate bonds decreased.
- The portfolio's level of cash and cash equivalents increased.

INVESTMENT MANAGER PORTFOLIO SUMMARY

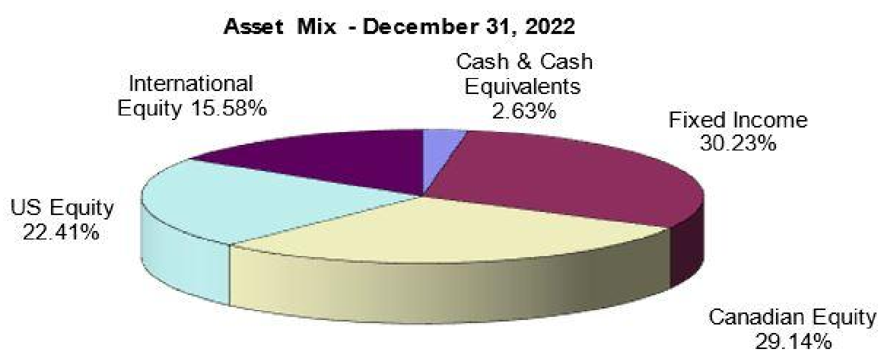
Balanced Fund Portfolio

Over the 12-month period ended December 31, 2022, the Balanced Portfolio recorded a negative return but outperformed its blended benchmark on a net of fee basis.

	YTD	3 YR	5 YR	SI
Total Portfolio Net of Fees	-4.35%	4.34%	4.68%	7.00%
Benchmark	-8.68%	3.09%	4.21%	5.91%
Under/ Outperformed	Outperformed	Outperformed	Outperformed	Outperformed

*SI- Since Inception
Source: Beutel Goodman

Total Portfolio $42,307,540



Source: Beutel Goodman

The year 2022 was marked by extreme volatility, with far-reaching events on both the geopolitical and economic fronts unfolding simultaneously. Supply-chain issues attributable to the war in Ukraine and COVID-19 lockdowns in China coincided with strong consumer demand to help drive inflation to 40-year highs. This prompted central banks around the world to aggressively hike interest rates.

INVESTMENT MANAGER PORTFOLIO SUMMARY

The rate hikes set off a wave of indiscriminate selling in markets, particularly during the third quarter. Equities then rallied during October and November as inflation started to show signs of easing. This rally came to an abrupt halt in December, however, with investors seeming to discount, as the prospect of a recession in 2023, became the consensus view among many economists.

The Portfolio is divided into three portions: Canadian equities, U.S. equities and international equities. The Canadian equity and U.S. equity components outperformed their respective benchmarks while the international equity component underperformed its benchmark. The fixed income portion of the Fund also underperformed its benchmark.

From an asset allocation perspective, relative outperformance was driven primarily by stock selection in U.S. equity and Canadian equity. Stock selection and an overweight in international equity detracted from relative performance. The selection effect in fixed income was also a detractor of relative performance. Offsetting this was the underweight allocation to fixed income.

Market Risk 2023

Given the various macro headwinds, many economists are predicting an economic contraction in the first half of 2023, which could spur central banks to cut rates later in the year. There is currently considerable uncertainty regarding the impact of this tightening cycle on the economy. As such, it is likely that the volatility that characterized equity and fixed income markets in 2022 could continue into 2023. This disruption will likely present both risks and opportunities for investors.

LET'S GET IN TOUCH

You can reach us at (902)461-0421 or toll-free at 1(877)461-0421
or
www.nsps-ltd.com

Thank you

LTD Nova Scotia Public Service Long Term Disability Plan Trust Fund