For Information

TTC Pension Fund Society (TTC Pension Plan/TTCPP) Annual Report

Date: June 12, 2023
To: TTC Board

Summary

The attached 2022 TTC Pension Fund Society (TTC Pension Plan/TTCPP) Annual Report is submitted for the information of the TTC Board.

Attachments

Attachment 1 – TTC Pension Plan Report – TTC Pension Fund Society (TTC Pension Plan/TTCPP) Annual Report

TTC Pension Fund Society (TTC Pension Plan/TTCPP) Annual Report

Date: June 12, 2023
From: Chief Executive Officer – TTC Pension Plan

Summary

The attached 2022 TTC Pension Fund Society (TTC Pension Plan/TTCPP) Annual Report is submitted for the information of the TTC Board.

Financial Summary

There are no financial implications resulting from the adoption of this report.

Equity/Accessibility Matters

This report has no accessibility or equity issues.

Decision History

The Annual Report is a comprehensive publication distributed primarily for communication with Plan members and pensioners. Similar to the Annual Reports of other major Ontario pension plans, the attached covers important information, discussion and analysis of TTC Pension Plan's financial position, investments, funded status, and administrative matters.

Issue Background

TTC Pension Plan was established through collective bargaining and incorporated on January 3, 1940 to provide retirement benefits for Toronto's transit employees. TTCPP is administered by a Board, consisting of five directors appointed by the Toronto Transit Commission (TTC) and five directors who are ex-officio members of the Amalgamated Transit Union (ATU) Local 113 executive. The directors are also contributing members of the TTC Pension Plan which promotes a strong alignment of interest with the plan members. The TTCPP Board of Directors review, monitor and make decisions on the administration of the plan benefits and investments within tolerable risk parameters. To fulfill this responsibility, the Board delegates the day-to-day management of operations to pension plan staff and hires professional investment managers, consultants, actuarial and legal counsel to advise them.

Effective January 1, 2011, pursuant to the Memorandum of Agreement between the TTC and the ATU Local 113, the TTC Pension Plan was established as a Jointly Sponsored Pension Plan (JSPP), as defined by the Ontario *Pension Benefits Act*. Other Ontario JSPPs include: Ontario Teachers' Pension Plan (OTPP), Ontario Municipal Employees Retirement System (OMERS), Healthcare of Ontario Pension Plan (HOOPP), Ontario Public Service Employees' Union Pension Plan (OP Trust) and Colleges of Applied Arts and Technology Pension Plan (CAAT).

TTCPP covers substantially all full time employees of the TTC and TTCPP who have completed six months of continuous service. Contributions are made into the Plan by members and matched dollar for dollar by their employer. The contribution rate is 9.25% up to the Yearly Maximum Pensionable Earnings (YMPE) and 10.85% above YMPE. The YMPE for 2022 was $64,900. It is worth noting that the contribution rates have remained at this level since 2011 and is among the lowest of other Ontario JSPPs. The Plan is registered with the Financial Services Regulatory Authority (FSRA) and is subject to regulation under the Ontario *Pension Benefits Act* and the *Income Tax Act* (registration number 0317586).

As at December 31, 2022, TTC Pension Plan had approximately 15,400 active members and 10,300 pensioners and net assets of $7.8 billion. The Plan design supports equal cost and risk sharing between members and employers. Unlike typical final average earnings defined benefit plans, the TTCPP does not provide automatic annual updates to the best four-year base period used in determining pension benefits, and does not guarantee automatic increases to pensions in payment. Instead, benefit changes are approved only when, and to the degree that, they are deemed actuarially affordable.

The annual report includes audited financial statements for the TTCPP, which are marked "draft". These draft financial statements were approved by the TTCPP Audit and Risk Committee on May 25th, 2023 and will be presented to the TTCPP Board for approval on June 8th, 2023. Once the approval is secured by the TTCPP Board, the Audited Financial Statements included in the annual report will have the "draft" watermark removed.

Contact

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Sean.Hewitt@ttc.ca

Signature

Sean Hewitt
TTCPP Chief Executive Officer

Attachments

Attachment 1 – 2022 TTC Pension Plan Annual Report

For the long run

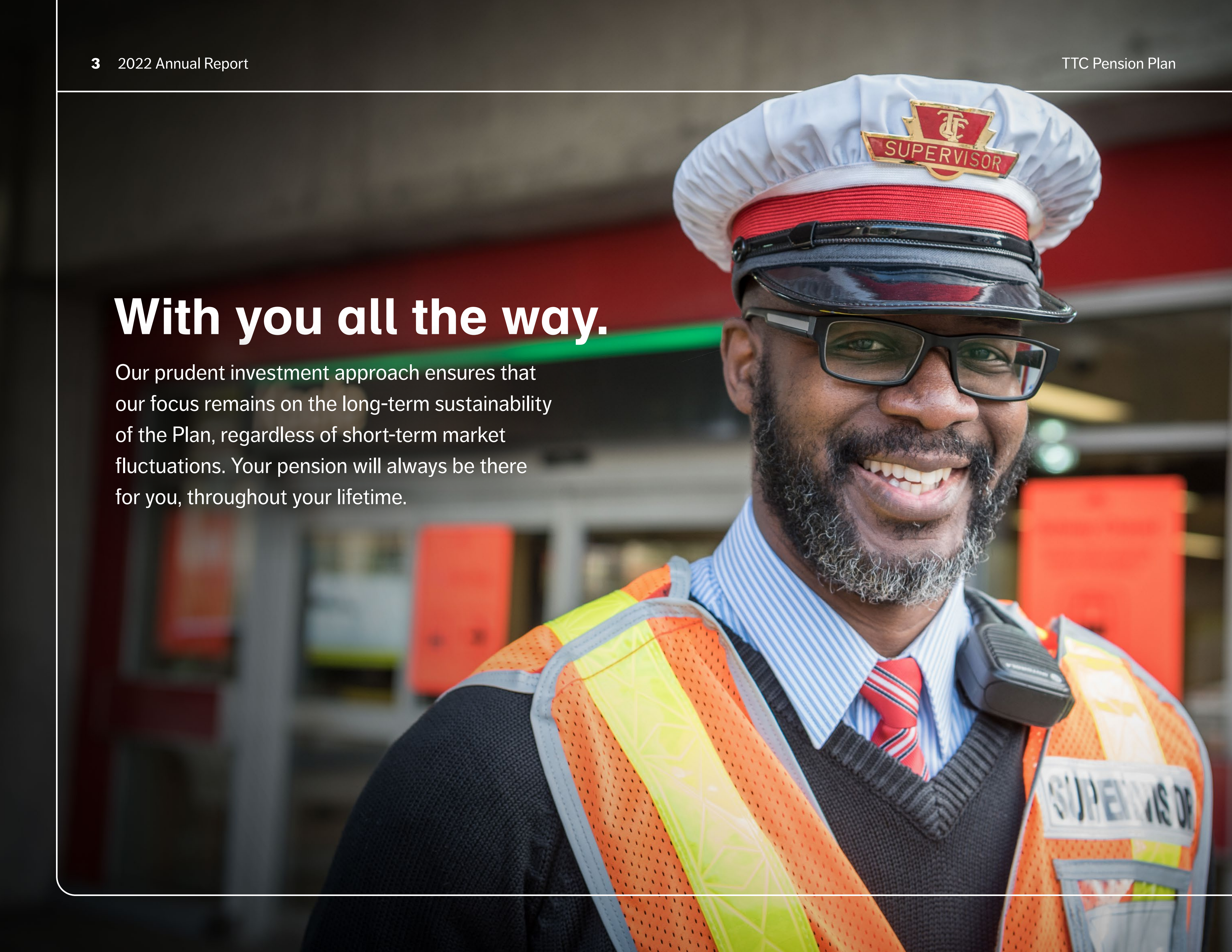
TTC Pension Plan

2022 Annual Report

For every stop on your journey and wherever your path takes you, you can count on us.

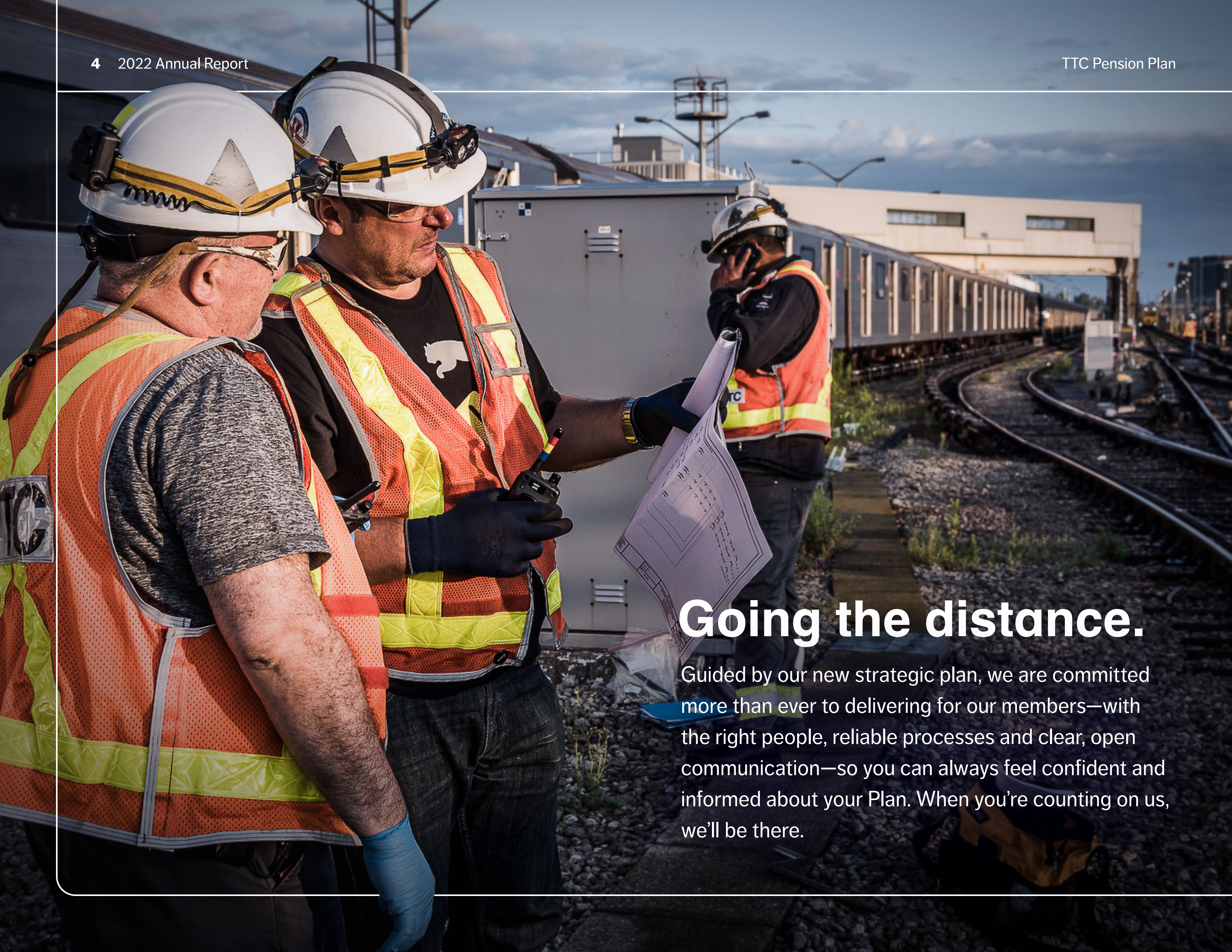
For what's around the next turn and all your milestones ahead, we will come through.

TTC Pension Plan will be there for you every step of the way. For today, for tomorrow. **For the long run.**



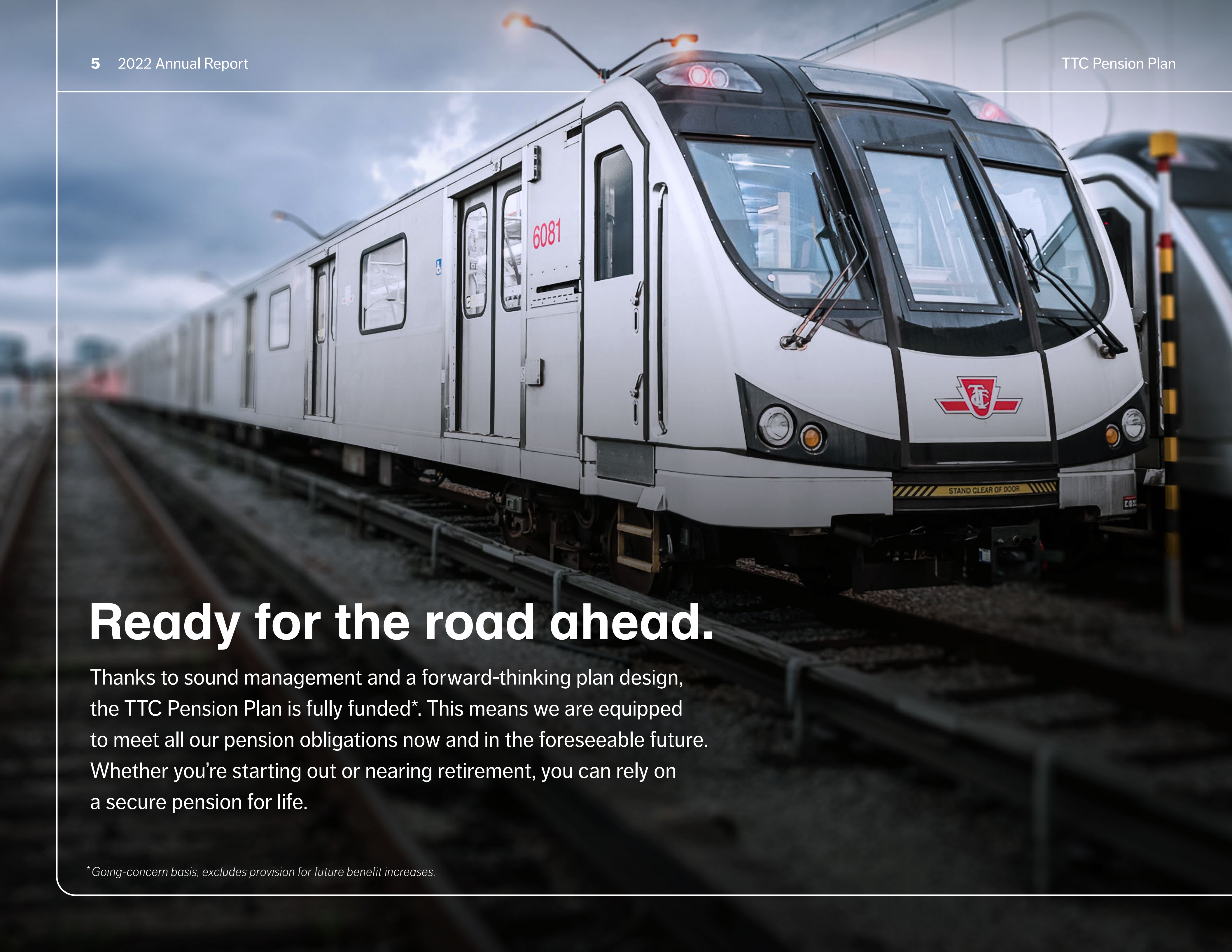
With you all the way.

Our prudent investment approach ensures that our focus remains on the long-term sustainability of the Plan, regardless of short-term market fluctuations. Your pension will always be there for you, throughout your lifetime.



Going the distance.

Guided by our new strategic plan, we are committed more than ever to delivering for our members—with the right people, reliable processes and clear, open communication—so you can always feel confident and informed about your Plan. When you're counting on us, we'll be there.



Ready for the road ahead.

Thanks to sound management and a forward-thinking plan design, the TTC Pension Plan is fully funded*. This means we are equipped to meet all our pension obligations now and in the foreseeable future. Whether you're starting out or nearing retirement, you can rely on a secure pension for life.

**Going-concern basis, excludes provision for future benefit increases.*

Mission, Vision and Values

OUR VISION IS CLEAR

To always be there for our members—today and for a lifetime.

THIS IS OUR MISSION

Providing a financially secure retirement for our members by delivering a pension for life at a reasonable cost.

Supporting our members with responsiveness, open communication and hands-on service, now and throughout their retirement.

WE LIVE OUR VALUES EVERY DAY

Sustainability

We take a long-term view because nothing is more important than ensuring our members can count on a retirement income for life.

Accountability

We are careful stewards of the funds our members have trusted to us. We know how important their pension is to them and we take that responsibility seriously.

Communication

We are responsive to our members and strive to always keep them informed.

Knowledge

We value expertise and continual learning, drawing on this wealth of understanding to make the best strategic investment decisions.

Professionalism

We take pride in our work and believe in always treating everyone with dignity and respect.

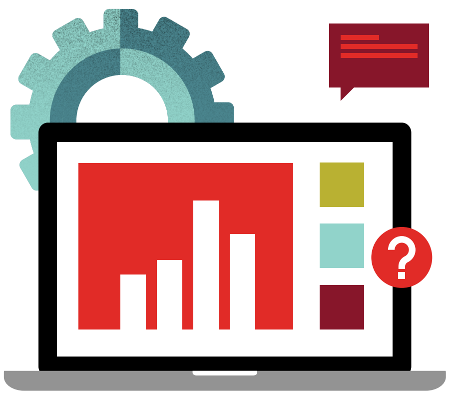
Membership Highlights

MEMBER SERVICE

15,066 visits to the website

5,454 calls answered

1,659 online pension estimates generated



99% would be somewhat or very likely to recommend attending a webinar to a coworker

81% had more understanding of the Plan after attending a webinar

398 members attended a pension webinar

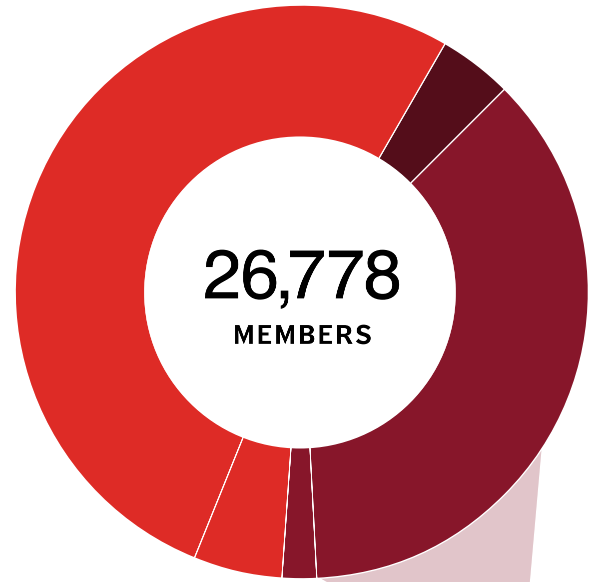
1:1 meetings resumed in-person

2,509 emails answered

477 retirement meetings

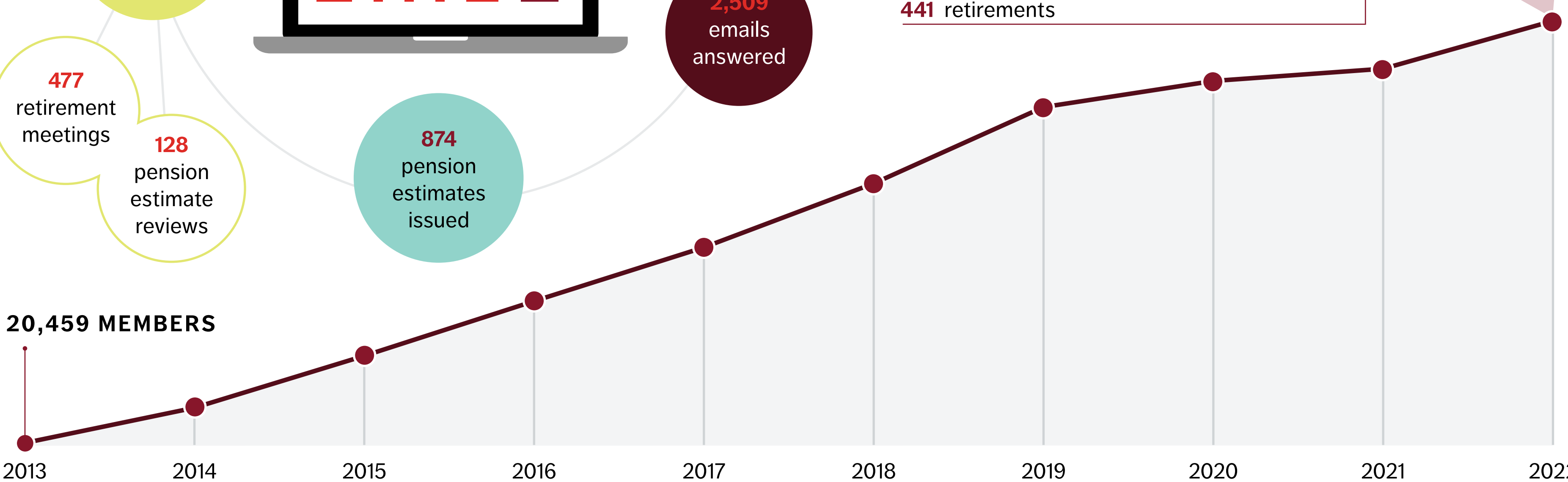
128 pension estimate reviews

874 pension estimates issued



1,371 new and returning members

441 retirements



Financial Highlights

Despite the global headwinds in 2022, the Plan's performance continued to match expectations and exceed our benchmarks.

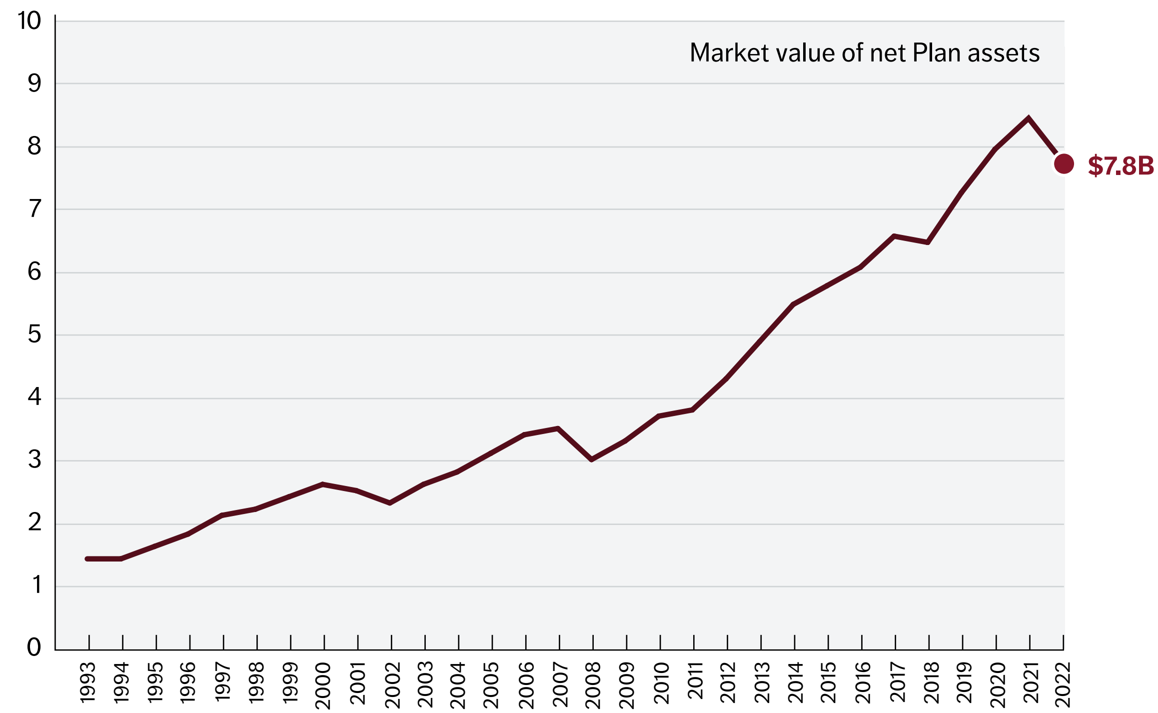
PLAN NET RETURNS VS. BENCHMARKS

7.3% 10-year net return > **6.7%** 10-year benchmark

5.1% 5-year net return > **4.6%** 5-year benchmark

(6.9%) 1-year net return > **(7.1%)** 1-year benchmark

GROWTH OF NET ASSETS AVAILABLE FOR BENEFITS ($B)



$268M Contributions

$428M Benefit payments

Fully funded* Going-concern funded status

Going-concern basis, excludes provision for future benefit increases.

Message from the Board

We remain vigilant in ensuring TTC Pension Plan continues to deliver on the promise of a sustainable pension for our members, now and in the future.

As the Board of Directors of TTC Pension Plan, we are responsible for oversight of the Plan and support the Management team in delivering a secure pension for our members throughout their retirement. In fulfilling our fiduciary duty, we continually monitor investment performance, funded status and expenses, while ensuring the Plan adheres to strong governance policies.

Amidst a challenging and disruptive year, the TTC Pension Plan remained in a fundamentally solid position owing to the prudent investment strategies of the Management team. The Plan continued to meet its targets for financial performance, exceeding its benchmarks. Despite the difficult year for markets, the Plan's benefit promise is now fully funded on a going-concern basis. This means it has enough funds to pay our current and future pensions (excluding any provisions for benefit increases that may be approved in the future).

On an annual basis, the Board assesses the ability to provide benefit improvements based on a careful actuarial review of the affordability and long-term health of the Plan. We are pleased to report that, for the 13th consecutive year, the Board approved an update to the base period and a cost-of-living increase, effective January 1, 2023. Together with these updates, the survivor benefit has been moved to January 1, 2023. This means that, for married members, the 60% survivorship option will have no cost for all pension service prior to January 1, 2023. As a reminder, there is no contractual obligation to provide benefit improvements, nor are future enhancements guaranteed. The Board will continue to manage the risks and pursue adjustments to our strategies as needed to ensure the Plan remains sustainable and meets the pension security needs of our members for the long term. In 2022, we conducted a scheduled review of the mandate for each of the Board committees to ensure they continue to address the governance requirements of the Plan. As an outcome of this review, we expanded the scope of two of the committees to recognize the full picture of the Board's mandate: the Audit Committee has been renamed the Audit and Risk Committee, and the Governance Committee has been renamed the Governance and Human Resources Committee.

The management and employees of TTCPP continue to pursue new ways to engage with our members and meet their needs. From a new strategic plan that focuses on enhancing member service and pension security, to our first-ever Members Survey that gauges the satisfaction of our membership, our team is united in our constant work to enhance how we deliver for our members.

We would like to express our gratitude to outgoing Board member Megan MacRae and retiring Board President Orest Kobylansky for their valuable guidance and dedication to our mission. The Board is thankful for their steady counsel and support over the years. We also welcome new Board members Anja Schiralli and Steve Anderson and look forward to their insights and expertise as we move forward.

Finally, we would like to thank our members for their continued support and trust in the TTC Pension Plan. We appreciate the importance of providing you with retirement security, and we are committed to doing all we can to ensure that we continue to meet this objective.

With our careful investment strategies and the hard work and commitment of our team, we remain confident in the long-term sustainability of the TTC Pension Plan and its ability to provide our members with the security they can rely on throughout their lifetime.

Message from the CEO

Despite continued global uncertainty, we remain steadfastly focused on the long-term sustainability of the Plan.

Sean Hewitt
Chief Executive Officer

TTC Pension Plan is committed to always being there for our members, and during the past year that responsibility was never clearer to us. In an economic climate marked by uncertainty on many fronts—from concerns about inflation to the continuing war in Ukraine—we kept our sights firmly fixed on the long-term viability of the Plan. Thanks to our forward-looking investment approach and prudent risk management, the Plan is well positioned to withstand the present challenges, and we remain confident about its long-term outlook.

Despite the headwinds in 2022, the Plan's performance continued to match our expectations. Our 10-year return of 7.3%, net of all fees and expenses, exceeded our benchmark by 0.6%, which translates to an excess return of roughly $500M over that period. I am happy to report that the Plan's benefit promise is fully funded, which means we are well equipped to meet all our current and long-term pension obligations (excluding any future benefit increases that may be approved).

Together with the Board, we finalized a new strategic plan for 2023–2026, which focuses on four key areas:

- Continue to enhance the sustainability of the Plan
- Enhance engagement with our Board, active and retired members, and stakeholders
- Enable service excellence by investing in our systems to get better information, faster
- Develop our talent and foster a purpose-driven workplace culture

This strategic plan now guides our organization as we continue working to strengthen our service to members and deliver long-term benefits security. In support of these goals, we are improving and expanding the opportunities for members to connect with us, and we continue to invest in new technology to make it easier for them to access the information they need. Our team has begun a multi-year journey to transition our pension administration book of record to a modern, cloud-based system. The new system will enable us to manage pension payments more efficiently through a paperless workflow and will expand our tools available to enhance member services. In preparation for this modernization, our team has begun the task of digitizing our records, and we have updated our Plan text, which will be presented to our membership for approval at the Annual General Meeting.

I am also pleased to announce that the results of our first Members Survey are now available on our website. I am proud of the work our team put into this survey, which provides us with valuable insight into our members' needs and their expectations of us. The responses show that members value the role TTCPP plays in their retirement security and also point us to areas where we can improve. We are committed to listening to this feedback. Our goal is to continue the survey annually and track our performance over time to ensure we are working to meet the needs of our members.

As always, I would like to thank our tireless staff for all their hard work and their dedication to our members. Whether it's introducing new seminars and communication tools to keep members informed about the Plan or travelling to their worksites to meet with them, our team is committed to being there for our members at every step of their journey.

After a year of ongoing global challenges, I am optimistic that we are headed in the right direction and well positioned for the future. We remain focused on ensuring the sustainability of our plan and on continuing to deliver for our members, for the long run.

Board of Directors

Board of Directors

Marvin Alfred (President)
Michelle Jones (Vice-President)
Steve Anderson
Michael Atlas
Angie Clark
Scott Gordon
Rick Leary
Frank Malta
Max Matharu
Anja Schiralli

Investment Committee

Michelle Jones (Chair)
Steve Anderson
Angie Clark
Frank Malta

Governance and Human Resources Committee

Scott Gordon (Chair)
Michelle Jones
Max Matharu
Anja Schiralli

Audit and Risk Committee

Anja Schiralli (Chair)
Michael Atlas
Frank Malta
Max Matharu

External Advisor

Graham Pugh

Leadership Team

Sean Hewitt
Chief Executive Officer

James Clarkson
Treasurer and Managing Director, Finance

Andrew Greene
Managing Director, Investments

Donna Miyasaki
Director, Communications

Helen Redmond
Corporate Secretary and Director, Pension Administration

Actuaries

Geoffrey Melbourne
Mercer

Karen Koop
Mercer

Auditor

KPMG LLP

Custodian

Northern Trust

Governance Structure

The Toronto Transit Commission Pension Fund Society ("TTC Pension Plan" or "TTCPP") was incorporated in 1940 under Part XVI of *The Companies Act* of Ontario. Through its Board of Directors (the "Board"), TTCPP administers a contributory, defined benefit pension plan (the "Plan"). The Board consists of 10 voting members, five each from the Toronto Transit Commission and the Amalgamated Transit Union Local 113. The terms of the Plan are set out in the Bylaws of TTCPP (the "Bylaws"), as amended from time to time.

Providing effective guidance
The Board is supported by three committees:

Investment Committee

The Investment Committee advises the Board on investment management and oversight of the Plan. Members provide guidance on investment manager implementation and the construction of investment policies and strategies. They are also responsible for reviewing total plan and investment manager performance.

2022 highlights:

- → Developed an environmental, social and governance (ESG) workplan
- → Recommended the Board approve two multi-asset credit investment mandates
- → Oversaw the deployment of investments in infrastructure, real estate and private equity
- → Oversaw the development of internally generated stress testing modelling and results

Audit and Risk Committee

The Audit and Risk Committee advises the Board on financial reporting and internal controls. Members review the annual audited financial statements and annual budgets, and they make recommendations to the Board.

2022 highlights:

- → Confirmed the appointment of the external auditor (KPMG)
- → Approved the 2022 financial statements by the TTCPP Board
- → Approved the 2023 budget by the TTCPP Board
- → Reviewed the ongoing development of the enterprise risk management process

Governance and Human Resources Committee

The Governance and Human Resources Committee advises the Board on matters of governance and human resources policies.

2022 highlights:

- → Governed the development of the strategic plan
- → Monitored the development and execution of our first Members Survey
- → Worked with staff to develop the restatement of Plan bylaws
- → Conducted a review of each of the Committee mandates

Committee review
The scope of the mandate for the committees is reviewed every two years to ensure each continues to suitably address the governance requirements of the Plan. The next review is scheduled in 2025.

About the Plan

TTCPP is a defined benefit pension plan designed to provide secure pension retirement income for life. Active members of the Plan include employees of the Toronto Transit Commission (TTC), the Amalgamated Transit Union (ATU) Local 113 and TTCPP who have completed six months of continuous service. Active members contribute a percentage of their earnings to the Plan, and their employers contribute an equal amount to the Plan. The Board sets the contribution rates, subject to the funding requirements determined in the actuarial reports and subject to limitations in the Sponsors Agreement.

Contributions of Plan members and participating sponsors are collectively invested and managed by external investment managers.

Members' pensions are determined using a formula based on their eligible earnings and years of service in the Plan.

Plan features

Normal retirement

- 30 years of service, regardless of age; or
- 60 years of age, regardless of service; or
- 29 years of service and age plus service equals at least 80.

30 Years Service

OR

60 Years Age

29 Years Service & Age + Service ≥ 80 Years

Reduced early retirement

- At least age 50 with less than 29 years of service.

≥ 50 Years Age & < 29 Years Service

Cost-of-living adjustments (COLAs) in retirement

COLAs in retirement are conditional and provided by the Board when deemed affordable based on external actuarial reports.

Contributions

Every pay period, Plan members contribute a percentage of their earnings into the Plan, and these contributions are matched by participating employers. Plan members' contributions are as follows:

Earnings up to YMPE*	Above YMPE*
9.25%	10.85%

**The YMPE is the year's maximum pensionable earnings, which is an amount defined under the Canada Pension Plan. In 2022, this amount was $64,900.*

The following notice outlines Plan updates that have been set forth after careful actuarial consideration of the affordability and the long-term health of the Plan by the TTCPP Board of Directors. Additional approval is required on these updates, which will be presented to the TTC Board on June 12, 2023, and to the members at the Annual General Meeting (AGM) on June 24, 2023, before the updates come into effect.

Including the updates below, the Plan remains fully funded*.
The following changes to the Plan benefits have been proposed:

- For members who have retired on or after January 1, 2023, pensionable earnings in 2022 will now be included in the base period for calculating their pension benefits. The base period formula will now be the average of the best four years of pensionable earnings up to December 31, 2022.
- Together with this formula update, the survivor benefit date has been moved to January 1, 2023. This means that, for married members, the 60% survivorship option will have no cost for all pension service prior to January 1, 2023.
- Members who retired before January 1, 2023, will receive an ad hoc cost-of-living adjustment (COLA) increase of 5.35%. For members retired in 2022, their COLA will be prorated for the number of days they were retired in 2022.

On an annual basis, the TTCPP Board of Directors assesses affordability of benefit improvements and provides them at its discretion. There is no contractual obligation to provide benefit improvements, and future enhancements are not guaranteed. For answers to questions about this year's COLA increase and how it is determined, visit ttcpp.ca/planupdates2023.

→ Learn about our Bylaw amendments at ttcpp.ca/agm.

Going-concern basis, excludes provision for future benefit increases.

Additional Bylaw amendments

Aside from amendments required as a result of Board-approved formula improvements, the TTCPP administration and Board of Directors have undertaken a restatement of TTC Pension Plan Bylaws to incorporate housekeeping and regulatory updates. The last substantive update was done in 2012.

Housekeeping changes include:

- Rephrasing of Bylaw 1 (Establishment of the Society)
- Addition of new Definitions to enhance clarity: "Administrator", "Participating Employer", "Protected Leave" and "Statutory Leave"
- Revised Definitions of "Interruption of Service" and "Shortened Life Expectancy"
- Removal of requirements for Board approval for members' Shortened Life Expectancy application and for appointment of Pension Fund Society auditors

Regulatory changes include:

- Removal of "emergency leave" in "Interruption of Service" Definition and in Bylaw references related to credited service, repurchase of service and pensionable earnings, in order to align with current provisions in the *Employment Standards Act* (Ontario)
- Removal of references to "family medical leave" and replacement with new "Statutory Leave" Definition that will incorporate any leave provided for under the *Employment Standards Act* (Ontario)

Investment Management

The TTCPP investment portfolio is managed in accordance with the Statement of Investment Policies and Procedures (the "Investment Policy"), which is reviewed by the Board on an annual basis.

The Investment Policy provides a framework for how the Plan's assets are invested, which are done in a prudent manner to meet our pension promise with an acceptable level of risk. In adhering to the Investment Policy, the Plan uses a sustainable long-term approach that invests in a diversified manner across a wide variety of asset classes, with different risk–return characteristics and degrees of liquidity.

A professional investment management team oversees the Plan and is responsible for executing the investment framework set out in the Investment Policy. The approach utilized by TTCPP includes a mix of external and internal investment management. Our team selects highly qualified investment management firms that have the specific expertise to implement the required strategies and asset mix. In some investments, we may manage those investments alongside a Partner. The team continually monitors the firms and their investments on a qualitative and quantitative performance basis against targets for both returns and risk level. This approach helps ensure the sustainability of the Plan by reducing overall risk and balancing pension security with affordability.

We consider it part of our fiduciary duty to our members to consider all the risks related to the investment of the Plan's assets. This includes consideration of nonfinancial risks such as environmental, social and governance (ESG) factors. We believe that, over the long term, companies with sound corporate governance structures and practices are the companies that will remain sustainable and less likely to experience negative impacts.

Growth of the Plan's assets comes from members' contributions, the matching contributions of their employers and investment earnings. As the Plan continues to mature, more reliance is placed on investment returns. Our primary objective is to grow the Plan's assets at a rate that exceeds the amount of our pension obligations over the long term. This focus on maintaining our fully funded* status and contribution stability strengthens our overall financial condition. Improvements in our funded status strengthen our ability to provide a base-period update and pension indexing.

Market overview

The past year was characterized by widespread concern and uncertainty regarding inflation, monetary policies, geopolitical tensions and the possibility of an impending recession.

At the start of the year, there was a sense of optimism as most parts of the world continued to navigate through the year without experiencing significant increases in COVID-19-related restrictions. The initial optimism quickly faded with the Ukraine invasion and subsequent escalation of the Russo-Ukrainian War, which triggered a commodity price shock. This shock compounded the inflationary pressures already stemming from the demand surge associated with the reopening of economies.

Prompted by rising inflation, which reached the highest levels in four decades, central banks abandoned their complacency and implemented proactive measures. This included initiating the swiftest monetary tightening cycle in recent history, which resulted in a significant economic slowdown. As a consequence, asset valuations were adjusted to the end of the low interest rate environment that had persisted since the 2007–2008 global financial crisis.

** Going-concern basis, excludes provision for future benefit increases.*

Despite a difficult year, many countries were able to grow their economies at healthy rates. Supply chain bottlenecks continued to ease. The service sectors recovered strongly as consumers shifted from consuming goods to services. All developed market economies continued to grow, although slower than in 2021. The resilience of the labour market and the strong financial positions of households, even after significant monetary tightening and potentially peaking inflation, increased the hope and likelihood of a soft landing in the near future, providing grounds for optimism as we look ahead.

Canadian equities performed relatively well comparable to their global peers, with the S&P/TSX Composite Index down only 5.8% (total return) in 2022, after a cheerful 25.1% return in 2021, led by energy and consumer staples. The U.S. equity market also retreated from new highs (the S&P 500 Index, Dow Jones Industrial Average, NASDAQ Composite Index and Russell 2000 Index benchmarks all declined), particularly the technology and consumer discretionary sectors. The S&P 500 declined 12.2% (CAD) for the year and underperformed other major developed markets. In international equities, the MSCI EAFE Index declined 8.2% (CAD) total return in 2022.

Emerging market equities underperformed their developed peers, declining 14.3% (CAD), as investors became anxious about the significant economic policy changes impacting China's economic growth, as well as the continuous tension between the U.S. and China.

Global bond yields moved up significantly as central banks raised rates aggressively in 2022. The Canadian treasury yield curve became inverted in July and the inversion continued to deepen towards the end of the year (an inverted yield curve signals a recession will occur within 6 to 12 months). The FTSE Canada Universe Bond Index returned negative 11.7%, while long-term bonds fell 21.8% (bond prices declined when bond yields moved higher).

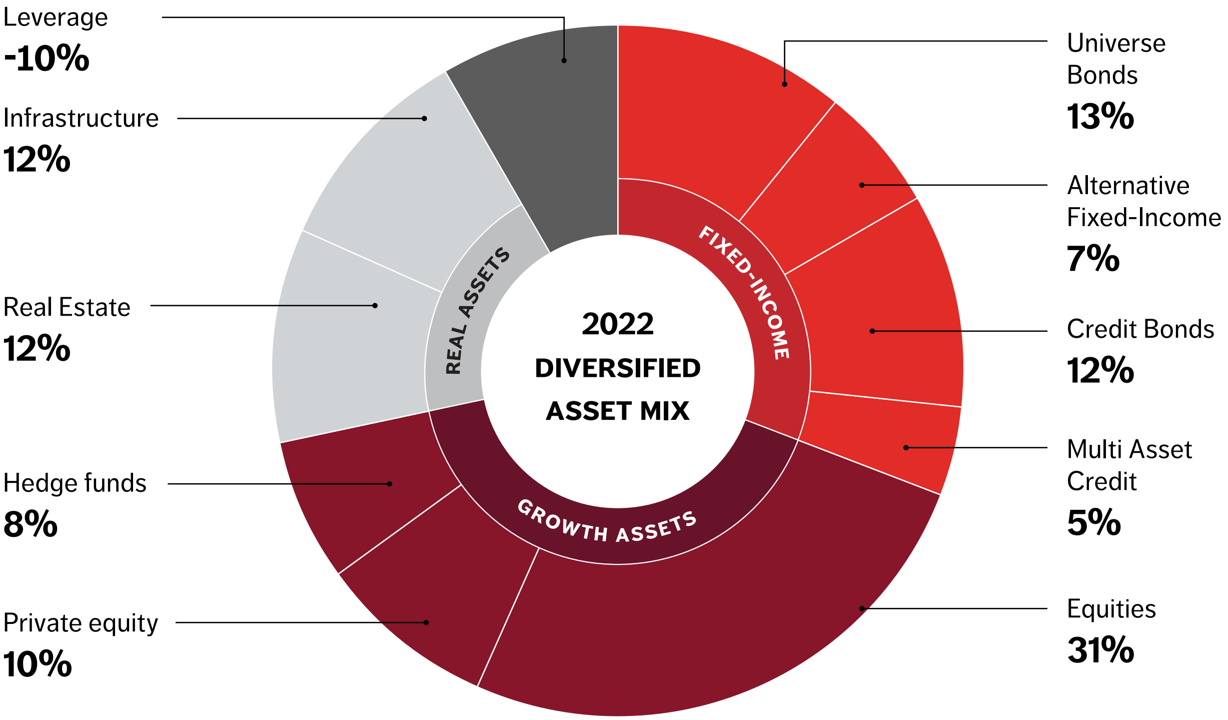
Credit spreads, which represent the additional compensation that investors demand for holding a security with a higher risk of default, remained largely unchanged compared to the previous year. Investment grade corporate bonds (usually classified as having a lower risk of default) continued to outperform government debt while high-yield bonds (usually classified as having a higher risk of default) once again outperformed investment grade bonds in 2022. Within the government sector, federal bonds outperformed provincial and municipal bonds, consistent with the trend observed in 2021.

The Canadian dollar's performance varied against other major currencies. While it lost ground against the U.S. dollar, it gained strength against the Japanese yen and the British pound. The Canadian dollar initially appreciated against the euro, but this trend reversed when the European Central Bank began raising interest rates in July, causing the appreciation to vanish entirely.

Building a diversified portfolio
At TTCPP, we include an array of investments that can be summarized into three broad categories*:

Fixed-income investments
Investments that reduce funded-status volatility from year to year. They include interest rate–sensitive investments in Canadian government, and provincial and corporate bonds of a variety of maturities (short, medium and long). Fixed-income investments represent 37% of the Plan.

Growth assets
Investments that seek a higher return than liability-matching assets, but they are also characterized by higher volatility. Our Growth Assets Portfolio contains Canadian and non-Canadian equities, private equity and absolute return investments. Growth assets represent 49% of the Plan.



Real assets
Investments that share characteristics of both liability-matching assets and growth assets. They tend to offer higher long-term returns than bonds but generally don't have the volatility associated with growth assets, and they provide some protection against inflation. Our holdings in real estate and infrastructure are included in this category. Real assets represent 24% of the Plan.

Return vs. policy benchmark
To evaluate the success of our investment strategies, we use a set of Board-approved policy benchmarks as a comparison tool. The total fund benchmark return is calculated by aggregating the benchmark returns of each individual asset class and weighting them according to the Plan's policy benchmark. Net assets in the Plan totalled $7.8 billion at year-end. The Plan delivered a negative 6.9% return for the year vs. benchmark negative 7.1%. Net investment return for the five-year period ending December 31, 2022, is a positive 5.1% vs. benchmark 4.6%. Net investment return for the 10-year return period is 7.3% vs. benchmark 6.7%.

**Asset categories are gross of leverage (10%)*

Investment Highlights

TTCPP's long-term approach to investing reflects our focus on pursuing investment strategies and selecting assets that support the sustainability of the Plan well into the future. We seek out companies that have sound corporate governance structures and practices while also considering nonfinancial risks, including environmental and social factors. This prudent approach helps ensure that we will be able to meet our pension obligations to our members in retirement—now and in the future.

INTELLIHUB
EXPLORE THE POSSIBLE

Intellihub

Intellihub is a smart metering and data intelligence provider to electricity retailers under long-term contracts in Australia and New Zealand. In exchange for these services, retailers pay Intellihub an annual charge throughout the life of the meter. Intellihub serves over 55 major retailers in Australia and New Zealand, covering almost the entire market. Smart metering is becoming increasingly important in the electricity network due to digitalization, decentralization and decarbonization goals.

Partner:
Brookfield Asset Management

Investment date:
April 2022

Locations:
Australia and New Zealand

Website:
intellihub.com.au

Medical Solutions™

Medical Solutions LLC

Medical Solutions LLC is a provider of total workforce solutions in the healthcare industry. The company offers various benefits to travel nurses, including customized pay packages, medical and dental insurance, paid private housing, loyalty programs, pet care, education and training, and housing relocation services. The company primarily serves customers in the United States.

Partner:
Centerbridge Partners

Investment date:
November 2021

Location:
United States

Website:
thebestjobieverhad.com

Westside 35

Westside 35

Westside 35 is a two-building logistics asset located in the Dallas–Fort Worth Metroplex, covering a total of 540,000 square feet. The property is newly constructed and is 100% pre-leased to three tenants. The asset features multiple modes of transportation, making it an ideal location for its tenants to operate fulfillment and last-mile distribution to efficiently serve their densely populated end-consumer base.

Partner:
CBRE Investment Management

Investment date:
December 2022

Location:
United States

Website:
cbreim.com

10-Year Snapshot

	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Financials ($M)										
Fixed income and cash	2,316	2,675	2,534	2,358	2,574	2,902	2,681	2,788	2,613	2,051
Equities	2,662	3,359	3,238	2,805	2,445	2,558	2,356	2,526	2,415	2,513
Alternative investments	3,184	2,810	2,449	2,393	1,831	1,449	1,389	819	710	562
Investment receivables and other	34	20	65	44	18	59	38	23	46	54
Investment liabilities	(401)	(329)	(311)	(284)	(332)	(322)	(328)	(346)	(286)	(276)
Total net assets	7,795	8,535	7,975	7,316	6,536	6,646	6,136	5,810	5,498	4,904
Contributions	268	260	258	255	239	234	224	216	207	202
Investment income (loss)	(549)	726	796	894	(15)	583	377	352	621	647
Benefit payments	(428)	(395)	(371)	(350)	(320)	(291)	(258)	(239)	(216)	(200)
Expenses	(31)	(31)	(24)	(19)	(14)	(16)	(17)	(17)	(18)	(16)
Change in net assets	(740)	560	659	780	(110)	510	326	312	594	633
Membership										
Active	15,393	14,860	15,384	15,217	14,649	14,287	14,091	13,686	13,237	13,013
Retired	10,332	10,065	9,729	9,457	9,027	8,539	8,091	7,699	7,375	7,092
Deferred	1,063	1,136	765	813	668	561	400	378	374	354
Total members	26,778	26,061	25,878	25,487	24,344	23,387	22,582	21,763	20,986	20,459
Active members per retiree	1.49	1.48	1.58	1.61	1.62	1.67	1.74	1.78	1.79	1.83
Retirements	441	581	439	544	621	613	572	431	443	409

Strategic Plan

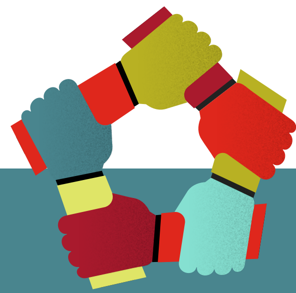
DRIVING US FORWARD

In 2022, we launched our new strategic plan to guide us in our goal to enhance our service to TTC Pension Plan members and deliver long-term pension security. The new strategic plan focuses on four key pillars:

Sustainability

Continue to enhance sustainability of the Plan

- Improve the financial sustainability of the Plan
- Better understand investment risks
- Implement a robust and transparent enterprise risk management framework to govern the organization



Engagement

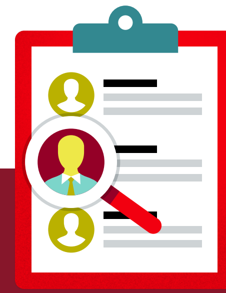
Enhance engagement with our Board, members and stakeholders

- Deliver a comprehensive communication strategy
- Eliminate information barriers, siloed responsibilities and inefficient decision-making processes
- Continue to nurture and build relationships

Service

Enable service excellence by investing in our systems to get better information, faster

- Transform the pension administration function through technology
- Enhance feedback mechanisms in order to gauge member satisfaction



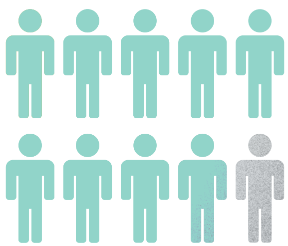
Talent

Develop our talent and foster a purpose-driven workplace culture

- Execute staff resourcing and retention strategies to meet the challenges of tomorrow
- Enhance the clarity of our Mission, Vision and Values through a purpose-driven positive workplace culture

Members Survey

One of the important pillars of our new strategic plan is a commitment to enhancing member outreach and engagement. As part of this commitment, TTC Pension Plan conducted its first annual Members Survey in 2022. We wanted to hear directly from our members—to learn what we're doing right, where we can improve and which priorities are most important to them. Thank you to everyone who took part in our first annual survey. Your input will help guide us in our ongoing commitment to strengthen the ways we serve our members. See the full summary of our survey responses on our website at **ttcpp.ca/news**.



90%

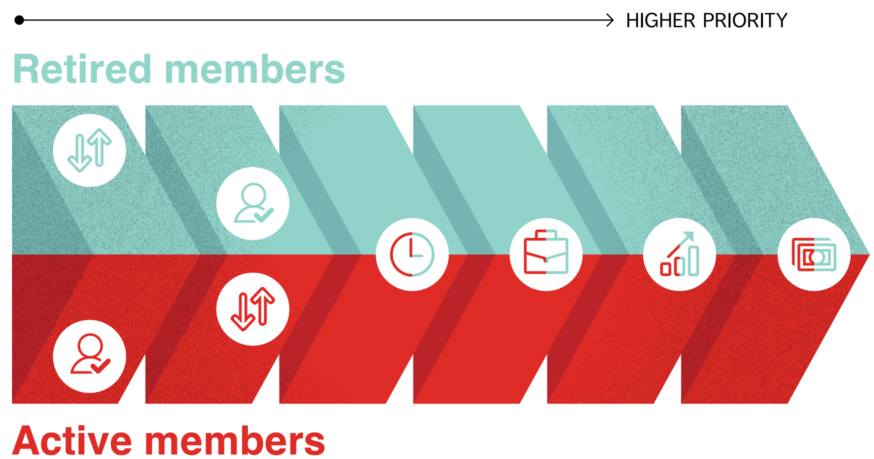
of retired members are very or somewhat satisfied with TTCPP.

78%

of respondents rated interaction with TTCPP as excellent or very good.

62% of active members feel very or somewhat secure about retirement.

For both active and retired members, their top priority for the Plan is to ensure that it provides retirement income that will last their lifetime.



Providing retirement income that will last my lifetime

Hiring the best investment professionals to manage the Plan's assets

Providing a survivorship option so my spouse has some income after I pass on

Periodically increasing payments to retired members for inflation

Delivering payments to retirees on time

Making sure TTCPP is viable for future generations of members

Financial Statements

Mercer

welcome to brighter

Actuaries' Opinion

Mercer (Canada) Limited was retained by the Board of the Toronto Transit Commission Pension Fund Society (the TTC Pension Plan) to perform an actuarial valuation of the assets and Section 4600 accounting liabilities of the TTC Pension Plan as at December 31, 2022, for inclusion in the TTC Pension Plan's financial statements. We have completed such a valuation and provided our report to the Board.

The valuation of the TTC Pension Plan's Section 4600 accounting liabilities was based on:

- Membership data as at January 1, 2022, supplied by the TTC Pension Plan and used to extrapolate valuation results to December 31, 2022,
- Methods prescribed by Section 4600 of the CPA Canada Handbook – Accounting for pension plan financial statements, and
- Assumptions about future events (including mortality levels, future investment returns, and future pay levels), which have been developed by the Board with input from the actuaries and the auditors, and have been adopted by the Board as its best estimates for accounting purposes, in accordance with Section 4600 of the CPA Canada Handbook.

The valuation of the TTC Pension Plan's assets was based on information provided by the TTC Pension Plan.

The objective of the financial statements is to fairly present the financial position of the TTC Pension Plan on December 31, 2022, in accordance with accounting practices. This is very different from the statutory funding valuation required by the Pension Benefits Act to ensure that the TTC Pension Plan meets the funding requirements for the benefits being provided. As a result, the valuation results presented in the financial statements and notes are not indicative of the TTC Pension Plan's ability to meet its funding requirements or of the benefit levels which it is able to provide.

While the actuarial assumptions used to estimate liabilities for the TTC Pension Plan's financial statements represent the Board's best estimate of future events and market conditions at the end of 2022, the TTC Pension Plan's future experience will inevitably differ, perhaps significantly, from the actuarial assumptions. Any differences between the actuarial assumptions and future experience will emerge as gains and losses in future valuations.

We have tested the data used for the valuation for reasonableness and consistency, and in our opinion, the data are sufficient and reliable for purposes of the valuation and we believe that the methods employed are appropriate for purposes of the valuation. Our opinions have been given, and our valuation has been prepared, in accordance with accepted actuarial practice in Canada.

Karen E. Koop

Geoffrey Melbourne
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

June 8, 2023

Karen E. Koop
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

June 8, 2023

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Canada
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INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of Toronto Transit Commission Pension Fund Society

Opinion

We have audited the financial statements of Toronto Transit Commission Pension Fund Society Plan (the Plan), which comprise:

- the statement of financial position as at December 31, 2022
- the statement of changes in net assets available for benefits for the year then ended
- the statement of changes in pension benefit obligations 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 Plan as at December 31, 2022, and its changes in net assets available for benefits and its changes in pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for Opinion

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

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

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

KPMG

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

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

In preparing the financial statements, management is responsible for assessing the Plan'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 Plan or to cease operations, or has no realistic alternative but to do so.

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

Auditor's Responsibilities for the Audit of the Financial Statements

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

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

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

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

We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion.

  The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan'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 Plan's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Plan to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

KPMG LLP

Chartered Professional Accountants, Licensed Public Accountants

Vaughan, Canada

June 8, 2023

Statement of Financial Position

(In thousands of Canadian dollars)

Year ended December 31, 2022, with comparative information for 2021

	2022	2021
Assets		
Cash	$33,943	$31,977
Investments (NOTE 3)	8,128,320	8,812,186
Investment-related receivables (NOTE 3)	45,448	34,329
Contributions receivable:		
Members	5,147	4,795
Employers	5,151	4,818
Other assets	3,198	2,450
Total assets	8,221,207	8,890,555
Liabilities		
Investment-related liabilities (NOTE 3)	401,225	329,340
Other liabilities (NOTE 7)	24,710	26,225
Total liabilities	425,935	355,565
Net assets available for benefits	7,795,272	8,534,990
Pension benefit obligation (NOTE 9)	5,754,916	6,104,066
Surplus	**$2,040,356**	**$2,430,924**

See accompanying notes to financial statements.

MARVIN ALFRED, DIRECTOR

MICHELLE JONES, DIRECTOR

Statement of Changes in Net Assets Available for Benefits

(In thousands of Canadian dollars)
Year ended December 31, 2022, with comparative information for 2021

	2022	2021
Increase in net assets available for benefits		
Net investment income (NOTE 11)	$274,485	$311,766
Net increase in fair values of investments (including total gains and losses) (NOTE 11)	–	414,609
Contributions:		
Members	131,914	127,924
Employers	136,013	131,863
	542,412	986,162
Decrease in net assets available for benefits		
Net decrease in fair values of investments (including total gains and losses) (NOTE 11)	823,814	–
Benefit payments:		
Pension	380,933	359,038
Death	10,667	3,817
Termination refunds	34,772	32,061
Marriage breakdown	1,263	202
Investment and plan administration expenses (NOTE 12)	30,681	30,714
	1,282,130	425,832
Increase (decrease) in net assets available for benefits	(739,718)	560,330
Net assets available for benefits, beginning of year	8,534,990	7,974,660
Net assets available for benefits, end of year	**$7,795,272**	**$8,534,990**

See accompanying notes to financial statements.

Statement of Changes in Pension Benefit Obligations

(In thousands of Canadian dollars)
Year ended December 31, 2022, with comparative information for 2021

	2022	2021
Pension benefit obligation, beginning of year	$6,104,066	$6,608,702
Benefits accrued	160,929	191,903
Benefits paid	(427,635)	(395,118)
Interest accrued on benefits	381,661	350,464
Changes in actuarial assumptions	(584,490)	(735,784)
Experience losses	15,742	11,446
Plan amendments	104,643	72,453
Net increase (decrease) in pension benefit obligation	(349,150)	504,636
Pension benefit obligation, end of year	**$5,754,916**	**$6,104,066**

See accompanying notes to financial statements.

Notes to Financial Statements
(In thousands of Canadian dollars)
Year ended December 31, 2022

1. Description of the Plan:

The following is a description of the Toronto Transit Commission Pension Fund Society (the "Plan"). For more complete information, reference should be made to the Bylaws of the Plan. The Plan is administered by Toronto Transit Commission Pension Plan ("TTCPP").

(A) GENERAL:

The Plan commenced operations on January 3, 1940 as a corporation pursuant to letters patent under Part XVI of the Corporations Act of the Province of Ontario. The Board of Directors (the "Board"), which consists of ten voting members, five of whom are appointed from the Toronto Transit Commission ("TTC") and five of whom are appointed by Amalgamated Transit Union Local 113 ("ATU"), administers the affairs of the Plan. Pursuant to the Sponsors' Agreement between ATU and TTC (the "Sponsors"), the Plan is registered as a Jointly Sponsored Pension Plan ("JSPP") effective January 1, 2011.

The Plan covers substantially all employees of the TTC, ATU and TTCPP who have completed six months of continuous service. Under the Plan, contributions are made by members and matched by their employers. The Plan is registered with the Financial Services Regulatory Authority of Ontario ("FSRA") under the Pension Benefits Act (Ontario) ("PBA") and the Income Tax Act (Canada) (registration number 0317586) and, therefore, is exempt from taxation on its income under Part I of the Income Tax Act (Canada). The Plan may be liable for taxes in other jurisdictions where full tax exemptions are not available.

The Plan is a defined benefit plan. The Board sets the employer and employee contribution rates, subject to the funding requirements determined in the actuarial report and subject to limitations in the Sponsors' Agreement between the ATU and TTC. Members' benefits are determined using a modified career average formula based on pensionable earnings and years of credited service. Plan improvements, including increases to the career average base period and pension indexing may be adopted by the Board. Improvements may be granted if affordable, taking into account the Plan's funded status. There is no contractual obligation to provide benefit improvements, and future enhancements are not guaranteed.

(B) FUNDING:

The Plan is funded by contributions and investment earnings. The Board has adopted a Funding Policy that aims to achieve long-term funding stability, with the objective of supporting benefit levels higher than the contractual benefits, including base period updates and pension increases as stipulated in the bylaws. Actuarial funding valuations are conducted to determine the pension liabilities, the funded position and the contribution rates of the Plan.

(C) CONTRIBUTIONS:

In 2022, each member employed by the TTC, ATU and TTCPP contributed 9.25% (2021 – 9.25%) of their earnings to the Plan up to the year's maximum pensionable earnings ("YMPE") of $64,900 (2021 – $61,600) and 10.85% (2021 – 10.85%) of earnings above the YMPE. The TTC, ATU and TTCPP contributed an amount equivalent to each member's annual contribution.

In an effort to provide greater flexibility and autonomy, the Plan's Board submitted a proposal to the TTC in 2018, whereby the Plan would fund most administrative expenses (salaries, benefits, overhead expenses) in exchange for an ongoing, additional cash and notional contribution. In 2022, this amount was $2,375 (2021 – $2,300). The contribution is indexed to a positive change in the Toronto consumer price index ("CPI"), for a 12-month period ending in August.

The Board establishes and maintains the contribution rate for members, within an upper and lower limit. The limits are defined in the Memorandum of Agreement, dated May 27, 2011, which established the Plan as a JSPP. A contribution rate outside of this corridor must be approved by the Sponsors.

The TTC is also obligated to make contributions for certain early retirement benefits after 29 years of service and some temporary supplements. These payments are indefinite and are adjusted based on the most recent actuarial valuation filed.

(D) BENEFITS:

Pensions are payable from the Plan based primarily on years of credited service and members' highest four-year career average pensionable earnings up to the current base period-end date of December 31, 2021 (2021 – December 31, 2020). The benefits provided are those that can be actuarially supported by the Plan's assets and the contributions to the Plan based on funding requirements specified in the PBA and priorities outlined in the bylaws.

Death benefits, marriage breakdown and lump sum payments on termination before eligibility for retirement are also available from the Plan. Death benefits may take the form of a survivor pension or lump-sum payments.

2. Significant accounting policies:

(A) BASIS OF ACCOUNTING:

These financial statements are prepared in accordance with the accounting standards for pension plans in Part IV of the Chartered Professional Accountants ("CPA") Canada Handbook – Accounting ("Section 4600") and the relevant sections of the Canadian accounting standards for private enterprises ("ASPE") in the CPA Canada Handbook – Accounting. The financial statements also include current disclosure requirements outlined by FSRA, under PE0139ORG (Disclosure of Expectations for Financial Statements Filed Pursuant to Regulation 909.76).

These financial statements are prepared on a going concern basis and present the information of the Plan as a separate financial reporting entity independent of the Sponsors and members.

(B) INVESTMENT ASSETS AND INVESTMENT LIABILITIES:

Investment assets and investment liabilities are recorded at fair value in accordance with International Financial Reporting Standard ("IFRS") 13, Fair Value Measurement. All investment transactions are recorded when the risks and rewards of ownership are transferred. Investment transactions relating to marketable securities and derivatives are recorded as of the trade date. Transactions that have not yet been settled are reflected in the statement of financial position as investment-related receivables/liabilities.

(C) SUBSIDIARIES AND AFFILIATES:

The Plan does not consolidate investment related subsidiaries and affiliates; all investment-related units are recorded at fair value.

(D) FAIR VALUES:

The fair values of the investments are determined as follows:

(i) cash includes both cash and cash equivalents and is valued at cost, which approximates fair value;

(ii) short-term investments are valued at cost, which together with accrued income, approximates fair value;

(iii) bonds are valued based on quoted market prices obtained from independent third-party pricing sources; where quoted market prices are not available, estimated values are calculated using discounted cash flows based on current market yields for comparable securities;

(iv) securities sold under agreements to repurchase are valued using discounted cash flows based on current market yields;

(v) publicly traded Canadian and non-Canadian stocks are valued at the closing price on the applicable stock exchange;

(vi) real estate property values are generally based on estimated fair values determined through independent annual appraisals of the property or the adjusted acquisition price in the year of purchase; the associated mortgages payable are measured at amortized cost;

(vii) infrastructure, private equity, private debt and hedge fund investments are valued by the general partner based on the most appropriate industry valuation models applied on an investment by investment basis;

(viii) the investment values of pooled funds and funds of hedge funds are supplied by the fund administrators which represent the Plan's proportionate share of underlying net assets at fair values determined using closing market prices; and

(ix) exchange traded derivatives, such as futures, are valued at quoted market prices; for other derivative financial instruments, where market prices are not available, appropriate valuation techniques are used to estimate fair values.

(E) INVESTMENT INCOME:

Dividend income is recognized based on the ex-dividend date, and interest income is recognized on the accrual basis as earned.

Net realized gain (loss) on sale and settlement of investment assets and investment liabilities during the year represents the difference between sale or settlement proceeds and average cost. The net change in unrealized gains (losses) on investment assets and investment liabilities represents the change in the difference between the fair value and cost of investment assets and investment liabilities at the beginning and end of the year. All realized and net changes in unrealized gains and losses on investment assets and investment liabilities are recorded in the statement of changes in net assets available for benefits in the year in which they occur.

(F) FOREIGN CURRENCY TRANSLATION:

These financial statements are prepared in Canadian dollars, the Plan's functional currency. Transactions denominated in foreign currencies are translated into Canadian dollars at the rates of exchange prevailing at the dates of the transactions. Assets and liabilities denominated in foreign currencies are translated at the rates in effect at year-end. The resulting realized and unrealized gains or losses are included in the statement of changes in net assets available for benefits as net increase in fair values of investments (including total gains and losses).

(G) DERIVATIVES:

Derivative financial instruments are financial contracts, the value of which is derived from the value of the underlying assets, interest rates, indices or foreign currency exchange rates. Derivative contracts are transacted either in the over-the-counter ("OTC") market or on regulated exchanges.

(H) PENSION BENEFIT OBLIGATION:

Valuation of the pension benefit obligation and changes therein during the year are based on an actuarial valuation prepared by Mercer (Canada) Limited, an independent firm of actuaries. The valuation is based on data as at the beginning of the year extrapolated to the year-end. It uses the projected benefit method pro-rated on service and the Board's best estimate of various economic and non-economic assumptions. The discount rate reflects the best estimate of the long-term expected return on plan assets.

(I) CONTRIBUTIONS:

Contributions from members and employers due to the Plan at year-end are recorded on an accrual basis. Contributions for past service purchases are recorded when received. Cash transfers from other pension plans are not permitted.

(J) BENEFITS:

Benefits paid to pensioners are recorded in the year in which they are due. Refunds to former members and the estates of deceased members are recorded in the year in which they are paid. Refunds attributable to the current year but paid after year-end are reflected in accrued pension benefits.

(K) ADMINISTRATIVE EXPENSES:

In 2019, the Plan became responsible for TTCPP administration expenses, including salaries, office expenses and other overhead, in exchange for an additional employer contribution (NOTE 1). The sole cost that the TTC continues to bear is for information technology (network, infrastructure, end user devices and software).

(L) USE OF ESTIMATES:

The preparation of financial statements in accordance with Canadian accounting standards for pension plans requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets available for benefits during the reporting period. Estimates and assumptions are evaluated on an ongoing basis and take into account historical experience and other factors, including expectations of future events that are believed to be reasonable and relevant under the circumstances. Significant estimates are used, primarily in the determination of the pension obligation and the fair value of certain investments. NOTE 9 explains how estimates and assumptions are used in determining accrued pension benefits. NOTE 4 explains how estimates are used to determine the fair value of investments. Actual results could materially differ from those estimates.

By their very nature, the judgments and estimates made for the purposes of preparing these financial statements relate to matters that are inherently uncertain. The Plan has detailed controls and procedures, consistently applied from period to period, that are intended to ensure these judgments and estimates are well controlled and independently reviewed. Management believes that the estimates of the value of the Plan's assets and liabilities are appropriate as at December 31, 2022.

3. Investments:

The Plan invests, directly or through derivatives and/or pooled funds, in fixed income, equities or alternative investments in accordance with the Statement of Investment Policies and Procedures ("SIP&P").

The following schedule summarizes the Plan's investments and investment-related receivables and liabilities before allocating the effect of derivative financial instruments:

	2022		2021	
	Fair value	Cost	Fair value	Cost
Investments (a):				
Fixed income:				
Invested cash	$98,435	$98,435	$103,187	$103,187
Short-term money market securities	19,469	21,688	45,343	44,310
Canadian bonds	1,693,448	1,804,621	2,297,540	2,269,787
Non-Canadian bonds	464,532	480,610	191,172	181,086
Funds of hedge funds	5,694	2,804	5,794	4,161
	2,281,578	2,408,158	2,643,036	2,602,531
Equities:				
Canadian	167,433	131,999	407,902	268,181
Non-Canadian	2,494,972	2,361,834	2,951,409	2,143,675
	2,662,405	2,493,833	3,359,311	2,411,856
Alternative investments:				
Real estate	823,085	537,149	759,327	536,973
U.S. real estate (NOTE 14)	224,515	179,645	176,606	156,465
Infrastructure (NOTE 14)	752,692	575,543	619,189	488,534
Hedge fund secondaries	1,836	1,184	13,561	—
Hedge funds	594,592	529,398	440,654	416,419
Private debt (NOTE 14)	366,831	248,755	446,958	418,632
Private equity (NOTE 14)	420,786	294,030	353,544	230,533
	3,184,337	2,365,704	2,809,839	2,247,556
	8,128,320	**7,267,695**	**8,812,186**	**7,261,943**
Derivative financial instruments:				
Receivable (NOTE 6(b))	12,056	—	—	—
Payable (NOTE 6(b))	(13,611)	—	(6,953)	—
	(1,555)	—	(6,953)	—
Investments-related receivables:				
Pending trades	19,619	19,589	20,819	20,887
Accrued investment income	13,773	13,773	13,510	13,510
	33,392	33,362	34,329	34,397
Investments-related liabilities:				
Bonds sold under repurchase agreements (b)	(384,708)	(384,707)	(322,266)	(322,266)
Pending trades	(2,906)	(2,907)	(121)	(123)
	(387,614)	(387,614)	(322,387)	(322,389)
	$7,772,543	**$6,913,443**	**$8,517,175**	**$6,973,951**

(a) *Includes investments in pooled funds, details of which are provided in NOTE 13(c).*

(b) *Bonds sold under repurchase agreements are secured by collateral of $427,349 (2021 – $370,832). The collateral amount in excess of the amount noted for bonds sold under repurchase agreements in the statement of financial position is $43,270 (2021 – $48,566). Collateral on the bond repurchase agreement is pledged through cash equivalent and short-term fixed income securities.*

4. Financial risk management:

(A) CAPITAL MANAGEMENT:

The capital of the Plan is represented by the net assets available for benefits less the pension benefit obligation referred to in NOTE 9. The objective of managing the Plan's capital is to ensure it is fully funded and sufficient assets are available to pay for the benefit obligations over the long term. The Board manages the Plan's capital by mandating an annual actuarial valuation on both the going concern and solvency basis to determine the Plan's funded status. Based on the results of this valuation, the priorities set out in the Plan's bylaws and the funding policy, the Board makes decisions with respect to pension formula updates, pension indexing and Plan improvements. Investments and the use of derivatives are based on an asset mix that is projected to enable the Plan to meet or exceed its long-term funding requirements, within an acceptable level of risk, consistent with the Plan's SIP&P approved by the Board. No contributions remain past due as at December 31, 2022.

The Plan's administrator has adopted a SIP&P that states investment objectives, guidelines and benchmarks used in investing the capital of the Plan, permitted categories of investments, asset-mix diversification and rate of return expectations. The target asset mix in the SIP&P was reviewed by the Board, approved on December 10, 2021, and was effective as of January 1, 2022. The significant amendments included eliminating the interim target asset mix as well as refining the Plan's long-term target asset mix.

The Plan's investment objective, outlined in the SIP&P, is to achieve a long-term rate of return that equals or exceeds the Plan's going concern liability growth rate, consistent with available market opportunities, and at acceptable levels of expected investment risk. The discount rate derived from the Plan's financial position at December 31, 2022 under CPA 4600 is 7.10% (2021 – 6.20%).

		2022		2021	
		Portfolio weight year-end	Asset mix policy target weight	Portfolio weight year-end	Asset mix policy target weight
	Index benchmark	%	%	%	%
Fixed income:	Composite	33.9	37.0	36.5	37.0
Cash and overlay	FTSE TMX 91-day T-bill	1.0	—	1.0	—
Long-term bonds	FTSE TMX Long Bond	4.2	—	9.8	11.0
Universe bonds	FTSE TMX Universe Bond	12.1	13.0	12.9	12.0
Credit bonds	FTSE TMX All Corporate	9.2	12.0	7.4	7.0
Alternative fixed income**	FTSE TMX 91 T bills +3%	4.9	7.0	5.4	7.0
Multi Asset Credit		2.5	5.0	—	—
Equities:	Composite	34.6	31.0	39.7	39.0
Canadian	S&P/TSX Composite	34.6	31.0	39.7	39.0
U.S.	S&P 500, net in C$				
Non–North American	MSCI EAFE net in C$				
Global	MSCI World, net in C$				
Emerging Markets	MSCI EM, net in C$				
Private equity	MSCI World +3% in C$	5.2	10.0	4.2	3.0
Real estate	Consumer Price Index +4%	13.5	12.0	11.0	12.0
Infrastructure	Consumer Price Index +4%	9.9	12.0	7.3	8.0
Absolute return*	FTSE TMX 91-day T-bill	7.8	8.0	5.2	5.0
Leverage		(4.9)	(10.0)	(3.9)	(4.0)
Total portfolio	**Composite**	**100.0**	**100.0**	**100.0**	**100.0**

**Absolute return includes the asset class of Hedge Funds, but excludes Hedge Fund Secondaries.*
***Includes private debt.*

The Plan's investment portfolio is subject to various risks, which may adversely affect its income, cash flows and net assets available for benefits. These risks include market risk (including foreign currency risk, interest rate risk and equity price risk), credit risk and liquidity risk. The Plan manages investment-related risks through the SIP&P, which establishes long-term asset mix policies for the investment portfolio as a whole. This promotes investment diversification and limits exposure to individual investments, major asset classes, geographic markets and currencies. The long-term policy also specifies a target weighting for matching assets, which are expected to have a relatively high correlation with the Plan's actuarial liability. It also establishes mandate-specific policies for each investment manager of the Plan. The investment managers' compliance with the policies is confirmed quarterly.

(B) MARKET RISK:

Market risk is the risk of loss from changes in equity, interest and foreign exchange rates, and credit spreads. Changes are caused by factors specific to the individual investment or factors affecting all securities traded in the market.

The Plan mitigates market risk through diversification of its investment portfolio, across industry sectors, investment strategies and on a geographic basis, based on asset and risk limits established in the SIP&P and through the use of derivative financial instruments.

(i) CURRENCY RISK:

Currency risk arises from the Plan's exposure to foreign currency-denominated assets. Fluctuations in the value of the Canadian dollar relative to foreign currencies may significantly increase or decrease the Plan's fair value and returns.

The Plan invests in assets denominated in foreign currencies other than the Canadian dollar in order to improve its risk and return profile. The Plan's currency risk management policies are designed to limit the overall impact of currency fluctuations on Plan returns.

The Plan's currency manager mitigates risk through the use of forward contracts; 100% of alternative fixed income, foreign real estate and infrastructure and 75% of hedge funds, the majority of which are denominated in U.S. dollars.

The following schedule summarizes the Plan's currency exposure, net of foreign exchange forward contracts used in the passive currency programs:

			2022
Net currency exposure*	**Gross exposure**	**Notional amount**	**Net exposure**
United States dollar	$4,129,786	$(1,846,249)	$2,283,537
Euro	362,467	(53,563)	308,904
Hong Kong dollar	138,343	–	138,343
Japanese yen	132,967	(20)	132,947
Taiwan dollar	59,371	–	59,371
British pound sterling	57,747	–	57,747
South Korean won	49,162	–	49,162
Chinese yuan	45,865	–	45,865
Swiss franc	42,682	–	42,682
Brazilian real	24,809	–	24,809
Danish krone	22,263	–	22,263
Chinese yuan renminbi	18,660	–	18,660
Australian dollar	18,443	–	18,443
Indian rupee	16,204	–	16,204
Swedish krona	10,868	–	10,868
Other	94,131	(39,026)	55,105
Includes pooled funds.	**$5,223,768**	**$(1,938,858)**	**$3,284,910**

			2021
Net currency exposure*	**Gross exposure**	**Notional amount**	**Net exposure**
United States dollar	$3,621,982	$(1,548,417)	$2,073,565
Euro	319,603	(13,775)	305,828
Japanese yen	185,035	(987)	184,048
Hong Kong dollar	153,631	–	153,631
Taiwan dollar	88,906	–	88,906
British pound sterling	83,979	–	83,979
South Korean won	66,547	–	66,547
Swiss franc	54,127	–	54,127
Chinese yuan	35,299	–	35,299
Danish krone	28,776	–	28,776
Swedish krona	24,880	–	24,880
Chinese yuan renminbi	22,394	–	22,394
Indian rupee	18,945	–	18,945
Brazilian real	13,710	–	13,710
Australian dollar	2,859	–	2,859
Other	100,736	(39,224)	61,512
Includes pooled funds.	**$4,821,409**	**$(1,602,403)**	**$3,219,006**

The following sensitivity analysis summarizes the impact on the Plan's net assets available for benefits, following a reasonably possible 5% change in foreign currency exchange rates, with all other variables and underlying values held constant, for each currency to which the Plan has a significant exposure:

Change in net assets available for benefits*	2022	2021
United States dollar	$114,177	$103,678
Euro	15,445	15,291
Hong Kong dollar	6,917	7,682
Japanese yen	6,647	9,202
Taiwan dollar	2,969	4,445
British pound sterling	2,887	4,199
South Korean won	2,458	3,327
Chinese yuan	2,293	1,765
Swiss franc	2,134	2,706
Brazilian real	1,240	686
Danish krone	1,113	1,439
Chinese yuan renminbi	933	1,120
Australian dollar	922	143
Indian rupee	810	947
Swedish krona	543	1,244
Other	2,755	3,076
	$164,243	**$160,950**

Includes pooled funds.

A strengthening Canadian dollar, relative to foreign currency values, results in a decrease in the market value of foreign currencies in Canadian terms.

(ii) INTEREST RATE RISK:

Interest rate risk is the effect that changing interest rates have on the market value of both the Plan's assets and liabilities. The value of the Plan's net assets available for benefits is affected by changes in nominal interest rates. The pension benefit obligation is impacted by fluctuations in long-term nominal and real interest rates.

The Plan administrator views interest rate risk on interest bearing financial instruments as an offset to the larger interest rate risk on pension benefit liabilities. In order for this offset to significantly reduce the overall level (on assets and pension benefit liabilities) of the Plan's interest rate risk, the SIP&P has a target of 7% (2021 – 18%) of its holdings to be held in interest bearing financial instruments with long maturities.

The following sensitivity analysis summarizes the impact on the Plan's net assets available for benefits following a reasonably possible change in interest rates for all maturities (a parallel shift in the yield curve). An increase in interest rates results in a decrease in the market value of interest bearing financial instruments and vice versa for a decrease in interest rates.

Change in net assets available for benefits*	Interest rates	−/+ 2022	−/+ 2021
Interest bearing financial instruments	+/− 1%	$147,817	$242,861

Includes pooled funds.

As at December 31, 2022, assuming all other factors remain constant, a 1% decrease in the assumed long-term rate of return on assets would result in the pension benefit obligation increasing by 11% (2021 – 12.5%) or $634,866 (2021 – $760,919).

(iii) EQUITY PRICE RISK:

One item that affects equity prices is the risk that the fair value of equities decreases as a result of changes to their related indices.

The following sensitivity analysis summarizes the impact on the Plan's net assets available for benefits, following reasonably possible changes in equity prices for each stock market benchmark to which the Plan has a significant exposure.

Change in net assets available for benefits*	Stock benchmark	Change in index value	+/− 2022*	+/− 2021*
Canadian equities	S&P/TSX comp	+/− 10%	$11,496	$32,077
Non-Canadian equities	Various	+/− 10%	257,444	303,498
			$268,940	**$335,575**

Includes pooled funds.

(iv) GEOPOLITICAL RISK:

Terrorism, war, military confrontations and related geopolitical events (and their aftermath) can lead to increased short-term market volatility and may have adverse long-term effects on the Canadian, U.S., and world economies and markets generally.

(V) NATURAL DISASTERS:

Natural and environmental disasters, such as, for example, earthquakes, fires, floods, hurricanes, tsunamis and weather-related phenomena generally, as well as wide-spread disease and virus epidemics, can be highly disruptive to economies and markets into the medium term, adversely affecting individual companies, sectors, industries, markets, currencies, interest and inflation rates, credit ratings, investor sentiment, and other factors impacting the value of the Fund's investments.

(C) CREDIT RISK:

Credit risk is the loss potential associated with a counterparty's inability or unwillingness to fulfill its contractual obligations.

In order to mitigate against losses associated with credit risk, the Plan adheres to investment policies that require:

(i) having a minimum rating of R1 "low" by DBRS or equivalent for all cash and short-term investments;
(ii) limiting the maximum exposure to bonds issued or guaranteed by any one non-governmental entity or group of affiliated entities to 5% of the fair value of the total fixed income portfolio held by the Plan;
(iii) limiting the maximum exposure to non-investment grade bonds (defined as below BBB– or equivalent) to 10% of the fixed income portfolio held by the Plan;
(iv) dealing with counterparties to derivative transactions that have credit quality of no less than an A rating;
(v) securities lent will be secured by initial collateral of no less than 105%;
(vi) entering into International Swaps and Derivative Association Inc. agreements with over-the-counter derivative counterparties to limit the Plan's exposure to credit losses;
(vii) entering into derivative financial instruments only on an unlevered basis; and
(viii) where feasible, directing managers to enter into master netting arrangements.

Credit risk on equity and bond futures is minimal as the counterparty to every futures trade is a clearing corporation, which acts as a third party that matches trades and collects and maintains margins. These contracts are marked-to-market and margin receivables and payables are settled in cash daily.

The following are the interest bearing financial instruments, the exposure to credit risk and the Plan's share of it.

	December 31, 2022**	December 31, 2021**
AAA*	$476,375	$503,489
AA	396,716	827,796
A	533,726	605,946
BBB	277,078	400,174
R1 or equivalent	–	–
Non-investment grade/unrated	113,266	209,281
Total	**$1,797,161**	**$2,546,686**

**Includes cash balances from fixed-income accounts and accrued interest.*
***Includes pooled funds.*

(D) LIQUIDITY RISK:

Liquidity risk is the risk the Plan may be unable to meet obligations associated with pension payments and/or financial liabilities that are settled by delivering cash or another financial asset under both normal and stressed conditions.

Management of liquidity seeks to ensure that even under adverse conditions, the Plan has access to immediate cash that is necessary to cover benefits payable, withdrawals and other liabilities. The SIP&P requires a significant portion of the Plan's investments to be highly liquid so they can be converted into cash on short notice. Typically, the employee and employer contributions will offset a significant portion of the benefit payment requirements. Therefore, the Plan's exposure to liquidity risk is considered negligible.

The Plan's SIP&P (NOTE 3) was designed and stress tested, to ensure that under adverse economic conditions the Plan is able to meet its current and future obligations.

In order to meet short-term liquidity requirements, cash and short-term investments are available for $151,847 (2021 – $180,500). With the exception of the pension benefit obligation, all liabilities are current and due within one year.

In addition to cash and short-term investments, the bond holdings held also aid in managing liquidity risk and have the following maturities:

	December 31, 2022*	December 31, 2021*
1 year	$65,080	$98,348
1–5 years	599,449	611,052
5–10 years	445,546	518,582
10–20 years	320,538	500,771
20 years	366,548	817,933
Total	**$1,797,161**	**$2,546,686**

**Includes pooled funds.*

5. Fair value hierarchy:

Financial assets and liabilities are measured at fair value and can be classified based on the method used to determine their valuation. The fair value hierarchy has the following three levels:

- Level 1 — fair value is based on quoted market prices in markets for identical financial assets or financial liabilities. Level 1 financial assets generally include equity investments traded in an active market.
- Level 2 — fair value is based on observable inputs, other than quoted prices included within Level 1, such as quoted market prices for identical financial assets or financial liabilities in markets that are not active and other inputs that are observable or can be corroborated by observable market data for substantially the full term of the financial assets or financial liabilities. Level 2 financial assets and financial liabilities generally include pooled funds, short-term money market securities, Government of Canada, provincial and other government bonds, Canadian corporate bonds and certain derivative financial instruments.
- Level 3 — fair value is based on inputs that are not supported by observable market data. Valuation methodologies are determined by the fund administrators and independent appraisers. Level 3 financial assets and financial liabilities include the funds of hedge funds, real estate, infrastructure, hedge fund secondaries investments, private debt and private equity investments.

The following table presents the level within the fair value hierarchy for each of the financial assets and financial liabilities measured at fair value. The table excludes other financial assets and financial liabilities that are valued at their carrying amount, which represents a reasonable approximation of fair value due to their short-term nature.

December 31, 2022	Level 1	Level 2	Level 3	Total
Invested cash and short-term money market securities	$101,159	$16,745	$—	$117,904
Bonds*	—	1,960,563	197,417	2,157,980
Funds of hedge funds	—	—	5,694	5,694
Equities	2,662,405	—	—	2,662,405
Real estate	—	—	823,085	823,085
U.S. real estate	—	—	224,515	224,515
Infrastructure	—	—	752,692	752,692
Hedge funds secondaries	—	—	1,836	1,836
Hedge funds	—	—	594,592	594,592
Private equity	—	—	420,786	420,786
Private debt	—	—	366,831	366,831
Derivative financial instruments	—	(1,555)	—	(1,555)
Other investment-related assets and liabilities	(354,222)	—	—	(354,222)
	$2,409,342	**$1,975,753**	**$3,387,448**	**$7,772,543**

December 31, 2021	Level 1	Level 2	Level 3	Total
Invested cash and short-term money market securities	$125,502	$23,028	$—	$148,530
Bonds*	544,795	1,943,917	—	2,488,712
Funds of hedge funds	—	—	5,794	5,794
Equities	3,359,311	—	—	3,359,311
Real estate	—	—	759,327	759,327
U.S. real estate	—	—	176,606	176,606
Infrastructure	—	—	619,189	619,189
Hedge funds secondaries	—	—	13,561	13,561
Hedge funds	—	—	440,654	440,654
Private equity	—	—	353,544	353,544
Private debt	—	—	446,958	446,958
Derivative financial instruments	—	(6,953)	—	(6,953)
Other investment-related assets and liabilities	(288,058)	—	—	(288,058)
	$3,741,550	**$1,959,992**	**$2,815,633**	**$8,517,175**

**Bonds total is net of bonds sold under repurchase agreements of $384,708 (2021 – $322,266).*

There were no transfers between Levels 1, 2 and 3 in the years presented.

The following table summarizes the changes in the fair values of financial instruments classified in Level 3.

	Funds of hedge funds	Real estate	U.S. real estate	Infrastructure	Hedge fund secondaries	Hedge funds	Private equity	Private debt	Total
Fair value, December 31, 2020	$10,567	$709,589	$155,736	$562,731	$14,870	$367,398	$204,663	$433,868	**$2,459,422**
Total unrealized gains (losses)	(1,607)	19,144	8,312	(6,736)	(1,309)	24,166	45,574	(4,966)	82,578
Purchases	—	30,594	33,672	139,860	—	50,333	129,481	86,202	470,142
Disposition	(3,166)	—	(21,114)	(76,666)	—	(1,243)	(26,174)	(68,146)	(196,509)
Fair value, December 31, 2021	$5,794	$759,327	$176,606	$619,189	$13,561	$440,654	$353,544	$446,958	**$2,815,633**
Total unrealized gains (losses)	1,159	63,582	24,730	46,494	(12,909)	40,958	3,744	89,750	257,508
Purchases	—	176	24,905	125,632	1,184	112,980	106,859	48,225	419,961
Disposition	(1,259)	—	(1,726)	(38,623)	—	—	(43,361)	(218,102)	(303,071)
Fair value, December 31, 2022	$5,694	$823,085	$224,515	$752,692	$1,836	$594,592	$420,786	$366,831	**$3,109,031**

Investments that are classified as Level 3 have their fair values derived using valuation techniques. The values are provided by the general partner or other external manager and therefore, in the absence of specific information to support deviating from this value, no other reasonably possible alternative assumptions can be applied.

(A) SENSITIVITY TO CHANGES IN ASSUMPTIONS:

The following analysis demonstrates the sensitivity of several Level 3 valuations to potential changes in capitalization rates, discount rates or interest rates, where applicable. These sensitivities are hypothetical and in actual experience, the change in the key factor may be the result of changes in a number of underlying assumptions that could increase or decrease the effect on the valuation.

December 31, 2022

Asset type	Key factor	Fair value	+0.25%	−0.25%
Real estate	Capitalization rate	$1,047,600	$(36,828)	$51,758
Infrastructure	Discount rate	752,692	(8,899)	9,355
Hedge fund secondaries	Discount rate	1,836	(5)	5
Hedge funds	Discount rate	594,592	(2,438)	2,438
Private debt	Interest rate	366,831	(2,723)	2,872
Private equity	Discount rate	420,786	(2,119)	2,097
		$3,184,337	**$(53,012)**	**$68,525**

December 31, 2021

Asset type	Key factor	Fair value	+0.25%	−0.25%
Real estate	Capitalization rate	$935,933	$(38,744)	$42,098
Infrastructure	Discount rate	619,189	(12,724)	13,354
Hedge fund secondaries	Discount rate	13,561	(34)	34
Hedge funds	Discount rate	440,654	(2,446)	2,446
Private debt	Interest rate	446,958	(3,344)	3,374
Private equity	Discount rate	353,544	(2,156)	2,177
		$2,809,839	**$(59,448)**	**$63,483**

The sensitivity analysis for the fund of hedge funds has been excluded from the above table. The impact to the fair value of the investment is not practical to determine given the underlying nature of the holdings.

6. Derivative financial instruments:

(A) DERIVATIVE PRODUCTS AND INVESTMENT OBJECTIVES:

During the year, the Plan entered into the following types of derivative financial instruments:

(i) EQUITY AND BOND FUTURES:

Futures contracts involve an agreement to buy or sell standardized amounts of equity or bond indices at a predetermined future date and price in accordance with the terms specified by a regulated futures exchange and are subject to daily cash margining. These contracts were purchased and/or sold with the primary objective of rebalancing the Plan's actual asset mix to closely align with that specified in the SIP&P. At the end of the year, the Plan no longer held any of these contracts. Although the Plan has the ability to use equity and bond futures, it is not doing so at this time.

(ii) FOREIGN EXCHANGE FORWARD CONTRACTS:

A foreign exchange forward contract is a customized agreement negotiated between two parties to buy or sell a specific amount of a foreign currency at a price specified at the origination of the contract, with settlement at a specified future date. Foreign exchange forward contracts are used to mitigate the Plan's foreign currency risk.

(B) NOTIONAL AMOUNTS:

Notional amounts of derivative financial instruments represent the dollar value of the market exposure gained through the purchase/sale of a contract. Notional amounts are not recorded as financial assets or financial liabilities on the annual statements of financial position and accrued pension benefits and surplus. The aggregate notional amounts and fair values of derivative contracts can fluctuate significantly.

The following is a schedule of notional amounts and fair values of derivative financial instruments:

December 31, 2022	Notional amount	Fair value receivable	Fair value payable
Foreign exchange forward contracts	$3,936,898	$–	$(1,555)

December 31, 2021	Notional amount	Fair value receivable	Fair value payable
Foreign exchange forward contracts	$3,204,806	$–	$(6,953)

Derivative financial instruments held by the Plan generally have at least quarterly resets and all settle within one year.

(C) NET INVESTMENTS AFTER ALLOCATING MARKET EXPOSURE OF DERIVATIVE FINANCIAL INSTRUMENTS:
The following table summarizes the effective fair value of the Plan's investments after the allocation of market exposure of derivative financial instruments and investment-related receivables and liabilities:

	2022		2021	
	Effective net investments at fair value	Effective asset mix (%)	Effective net investments at fair value	Effective asset mix (%)
Fixed income:				
Invested cash and short-term money securities	$146,835	1.9	$175,785	2.1
Canadian bonds	1,308,740	16.8	1,975,274	23.2
Non-Canadian bonds	464,532	6.0	191,172	2.2
Funds of hedge funds	5,694	0.1	5,794	0.1
	1,925,801	24.8	2,348,025	27.6
Equities:				
Canadian	167,433	2.2	407,902	4.8
Non-Canadian	2,494,972	32.1	2,951,409	34.6
	2,662,405	34.3	3,359,311	39.4
Alternative investments:				
Real estate	1,047,600	13.5	935,933	10.9
Infrastructure	752,692	9.7	619,189	7.3
Hedge funds secondaries	1,836	0.0	13,561	0.2
Hedge funds	594,592	7.6	440,654	5.2
Private debt	366,831	4.7	446,958	5.2
Private equity	420,786	5.4	353,544	4.2
	3,184,337	40.9	2,809,839	33.0
	$7,772,543	**100.0**	**$8,517,175**	**100.0**

7. Other liabilities:

Other liabilities consist of the following:

	2022	2021
Accrued pension benefits	15,971	$15,160
Fees payable to custodian, investment consultants and other advisers	5,182	6,507
Other accounts payable*	3,557	4,558
	$24,710	**$26,225**

**Includes the post-retirement benefit obligation (NOTE 8) for the employees of TTCPP.*

8. Post-retirement liability obligation:

Other retirement and post-employment benefits consist of health, dental and life insurance coverage provided to eligible retirees of the TTCPP. In order to be eligible for retiree benefits, an employee must complete a minimum of ten years of service.

In exchange for an ongoing, additional annual employer contribution from the TTC, the Plan also became responsible for both pension and other employee future benefits. The current year impact for TTCPP employees can be seen below.

The Plan measured its accrued benefit obligations for accounting purposes as at December 31, 2022. The most recent actuarial valuation of the post-retirement benefits was performed as at October 1, 2021. Information about the TTCPP's post-employment benefit plans is as follows:

Post-retirement benefits	2022	2021
Benefit obligation, beginning of year	$651	$690
Current service cost	81	86
Interest cost	22	20
Actuarial (gain) loss	(276)	(144)
Benefit payments	(2)	(1)
Benefit obligation, end of year	$476	$651

9. Pension benefit obligation:

An estimate of the Plan's obligation for pension benefits has been made as at December 31, 2022 by Mercer (Canada) Limited for inclusion in the Plan's financial statements. The estimate is an extrapolation of the January 1, 2021 actuarial valuation based on membership data on that date, using the methods and assumptions summarized below. The Plan's obligation for pension benefits includes all employees of the TTC, ATU and TTCPP who have completed six months of continuous service.

(A) METHODS AND ASSUMPTIONS:

The valuation is based on the requirements outlined in Section 4600 of the CPA Canada Handbook – Accounting for pension plan financial statements. The estimated actuarial present value of accrued pension benefits is determined using the projected benefit method, pro-rated on service. The pension formula in effect in the Plan's bylaws, including the current base period (average of the four calendar years before 2021 with the highest average pensionable earnings) for credited service before 2021, is used to project the pension at retirement, without provision for future updates in the base period or other changes in the bylaws. The pro rata portion of the projected pension, which relates to past service, is then valued as the accrued pension.

Under NOTE 1, Description of the Plan, the Board has the authority to provide Plan improvements, including increases to the career average base period and also for ad hoc pension indexing. The following amendments to the Plan were adopted by the Board effective January 1, 2022:

(i) a one-year update of the base period to December 31, 2021;
(ii) a one-year update of the survivor benefit date to January 1, 2022; and
(iii) a one-time ad hoc pensioner increase of 2.41% (2021 – 1.03%) as at January 1, 2022.

As at December 31, 2022, the financial impact of these changes is $104,643 (2021 – $72,453).

Assets were valued at fair value as at December 31, 2022.

The major assumptions used as best estimates of the Plan's future experience for calculating the actuarial present value of accrued pension benefits are summarized as follows:

	2022	2021
Discount rate, net of expenses	7.10%	6.20%
Rate of inflation	2.00%	2.00%
Weighted average rate of salary increase*	3.25%	3.25%

**Assumed earnings increases from the April 1, 2021 arbitration award and additional information communicated to Mercer on September 2 and September 28, 2022 regarding wage increases from April 1, 2021 through March 31, 2024, with an additional 0.5% provision for individual factors. On and after April 1, 2024, 3.25% per annum increase.*

(B) STATUTORY ACTUARIAL VALUATIONS:

In accordance with the PBA and the Income Tax Act (Canada), an actuarial valuation is required to be filed at least every three years to report the Plan's surplus or deficit, and to determine the Plan's funding requirements. The most recent actuarial valuation for funding purposes was conducted as at January 1, 2022 and filed with regulators on September 26, 2022. The next required funding valuation filing with the regulators will be as at January 1, 2025. The two valuations required by the PBA, the going concern basis and the solvency basis, are determined using different valuation methods and assumptions and yield different surplus or deficit amounts than those disclosed in these financial statements. A solvency (hypothetical windup) valuation must be performed on the Plan, even though the risk of its being wound up, in management's view, is remote. As a JSPP, the Plan is permitted and has elected an exemption from solvency funding requirements.

10. Related party transactions and balances:

Related parties include the Plan's Sponsors and the Plan's subsidiaries. Expenses borne by the Sponsors are listed under NOTE 12, Administrative Expenses. Information technology costs are not charged back to the Plan.

Alternative investments held in subsidiary corporations are managed on behalf of the Plan by external advisers through investment management agreements. The Plan has 12 wholly owned subsidiary corporations. The assets held within the subsidiary corporations are investments in real estate, infrastructure, private equity, hedge funds and private debt. The subsidiary corporations are 100% owned by the Plan. Regular transactions include investment income and return of capital distributions, or capital contributions. For real estate investments, the market value is comprised of both an equity component and also a note payable to the Plan relating to the initial investment.

The following schedule summarizes the Plan's net related party alternative investments:

	2022		2021	
	Fair value	Cost	Fair value	Cost
PFS Exchange Inc.*	$147,962	$77,100	$167,145	$77,100
PFS GTA Industrial Inc.*	304,101	97,025	222,226	97,025
PFS Retail Two Inc.	56,817	51,500	55,283	51,500
PFS Office One Inc.*	191,654	204,700	194,107	204,700
PFS Retail One Inc.	40,875	15,980	38,476	15,980
PFS Faubourg Inc.*	81,676	90,845	82,090	90,668
Net investment in real estate	823,085	537,150	759,327	536,973
1793177 Ontario Inc.*	390,315	306,564	331,539	265,875
TTC PFS Secondaries Inc.	1,836	1,184	13,561	–
TTC PFS Private Equities Inc.*	211,433	119,655	306,741	187,344
TTC PFS Private Debt Inc.*	207,474	222,622	212,052	222,857
TTC PFS Taurus Inc.*	189,481	121,192	167,415	112,661
TTC PFS HL Inv Blocker Inc.	15,791	16,352	2,437	2,550
	1,016,330	787,569	1,033,745	791,287
Net related party alternative investments	**$1,839,415**	**$1,324,719**	**$1,793,072**	**$1,328,260**

**Exceeds 1% of the fair value or cost of the Plan in either 2022 or 2021.*

11. Net investment income:

The following schedule summarizes investment income (loss), broken down by earned income (loss), realized gain/loss and unrealized gain/loss:

December 31, 2022	Earned income (loss)	Realized gain (loss)	Unrealized gain (loss)	Total
Fixed income:				
Invested cash	$2,917	$—	$—	$2,917
Short-term money market securities	(5,727)	1,212	(3,252)	(7,767)
Canadian bonds	60,078	(259,175)	(140,173)	(339,270)
Non-Canadian bonds	4,595	1,842	(15,154)	(8,717)
Fund of hedge funds	—	258	1,265	1,523
Derivatives	—	(128,470)	5,493	(122,977)
Equities:				
Canadian	6,829	107,611	(224,734)	(110,294)
Non-Canadian	55,078	136,618	(554,167)	(362,471)
Alternative investments:				
Real estate	29,856	—	88,313	118,169
Infrastructure	54,777	—	46,493	101,270
Hedge funds secondaries	6,844	—	(12,909)	(6,065)
Hedge funds	—	(587)	40,959	40,372
Private debt	11,712	-	79,959	91,671
Private equity	47,526	1,041	3,744	52,311
Pending Foreign Exchange	—	—	(1)	(1)
	$274,485	**$(139,650)**	**$(684,164)**	**$(549,329)**

December 31, 2021	Earned income (loss)	Realized gain (loss)	Unrealized gain (loss)	Total
Fixed income:				
Invested cash	$1,020	$–	$–	$1,020
Short-term money market securities	928	85	60	1,073
Canadian bonds	73,651	(3,432)	(135,357)	(65,138)
Non-Canadian bonds	7,468	7,943	(6,590)	8,821
Fund of hedge funds	–	(386)	(1,607)	(1,993)
Derivatives	–	45,400	(31,063)	14,337
Equities:				
Canadian	9,042	27,101	48,430	84,573
Non-Canadian	42,194	271,388	113,335	426,917
Alternative investments:				
Real estate	33,978	–	27,456	61,434
Infrastructure	81,680	–	(6,736)	74,944
Hedge funds secondaries	1,033	–	(1,309)	(276)
Hedge funds	2	(4,892)	24,166	19,276
Private debt	18,649	–	(4,966)	13,683
Private equity	42,121	–	45,574	87,695
Pending Foreign Exchange	–	–	9	9
	$311,766	**$343,207**	**$71,402**	**$726,375**

12. Investment and Plan administration expenses:

The following summarizes the expenses paid by the Plan:

	2022	2021
Investment managers' fees	$21,889	$23,223
Other plan administration expenses	7,105	5,881
Actuarial fees	704	544
Custodial fees	501	568
Legal fees	336	235
Investment consultants' fees	146	263
	$30,681	**$30,714**

13. Significant investments and statutory disclosure:

(A) SIGNIFICANT INDIVIDUAL SECURITIES**:

As at December 31, 2022, the Plan held the following investments with fair value or cost exceeding 1% of the fair value or cost of the Plan, besides the pooled funds disclosed in (c):

			2022		2021	
Fund name	Fund operator	Nature of investments held	Fair value	Cost	Fair value	Cost
PFS GTA Industrial Inc.^	Triovest	Real Estate	$304,101	$97,025	$222,226	$97,025
Northleaf Star Investor Corp.^	Northleaf	Private Debt	237,479	139,477	161,587	138,884
Prima Mortgage Investment Trust^	Prima	Private Debt	197,417	201,697	202,046	200,131
PFS Exchange Inc.^	Triovest	Real Estate	147,962	77,100	167,145	77,100
PFS Office One Inc. – Tahoe^	Triovest	Real Estate	130,188	109,700	128,271	109,700
Brookfield Americas Infrastructure Fund IV^	Brookfield	Infrastructure	90,181	72,915	65,564	60,691
PFS Faubourg Inc.^	Crestpoint	Real Estate	81,677	90,845	82,090	90,668
PFS Office One Inc. Twin Atria^	Triovest	Real Estate	61,466	95,000	65,836	95,000

^In 2022, asset represented 1% of the fair value or cost of the Plan.

(B) SIGNIFICANT ISSUERS**:

Fixed Income and Equities, invested by the Plan, were examined and the following Fixed Income issuers exceeded 1% of the fair value or cost of the Plan's net assets:

	2022		2021	
	Fair value	Cost	Fair value	Cost
Government of Canada	$231,642	$233,192	$254,349	$255,186
Province of Ontario	132,641	141,900	280,542	277,106
Province of Quebec	90,795	95,061	139,535	138,674

(C) POOLED FUND INVESTMENTS:

The Plan owns the following pooled fund investments as at December 31. The fair value of these pooled fund investments is included in the statement of financial position under the investment type to which they relate.

	2022		2021	
	Fair value	Cost	Fair value	Cost
Short-term money market securities:				
PHN Institution short-term investment fund	$3,123	$3,123	$19,756	$19,756
PHN Municipal Plus Bond Series O	9,938	12,100	17,113	17,446
PHN 9028 RBC O Fund	934	1,038	2,312	2,202
TDAM TD Emerald Canada Treasury	2,750	2,715	2,560	2,560
	16,745	18,976	41,741	41,964
Fixed income:				
Canso Corp. & Infrastructure Debt	31,213	33,677	39,204	37,682
Canso Private Loan Fund	14,297	14,528	14,986	15,288
Black Rock Universe Bond Fund*	–	–	281,230	281,381
PHN Long Bond Pension Trust*	100,416	132,309	369,394	370,581
PHN Investment Grade Corp Bond Trust*	106,973	122,399	126,889	130,105
PHN Mortgage Pension Trust Fund	12,534	13,290	13,832	13,604
Mesirow Absolute Return Fund (institutional)	4,174	2,909	5,794	4,168
PHN High Yield Bond Fund, Series O	8,694	9,004	9,921	9,416
TDAM Canadian Bond Pooled Fund Trust 1512	229,667	234,262	–	–
TDAM Long Bond Broad Market Pooled Fund Trust	222,567	209,497	–	–
Wellington Multi Asset Credit Pooled Fund	91,101	91,004	–	–
Ares Multi Asset Credit Pooled Fund	100,526	100,000	–	–
	922,162	962,879	861,250	862,225
Non-Canadian equities:				
Arrowstreet Global All Country Fund I PVAC*	613,572	593,897	699,208	614,932
Harding Loevner Emerging Market Equity*	163,180	123,331	249,217	147,527
Oaktree Capital Emerging Market Equity*	157,587	133,674	134,948	93,679
TDAM Emerald US Equity Pooled Fund	273,424	291,067	–	–
	1,207,763	1,141,969	1,083,373	856,138
Real estate:				
Blackstone U.S. Real Estate Fund*	126,312	97,996	100,400	97,308
CBRE V8 U.S. Real Estate Fund	52,608	47,012	57,773	47,080
CBRE V9 U.S. Real Estate Fund	31,191	30,546	18,432	18,569
Henderson Park Real Estate Fund II	14,403	11,259	–	–
	224,514	186,813	176,605	162,957
	$2,371,184	**$2,310,637**	**$2,162,969**	**$1,923,284**

**Exceeds 1% of the fair value or cost of the Plan in either 2022 or 2021.*
***Excludes currency (NOTE 4(b)), derivatives (NOTE 6(b)), pooled fund investments (NOTE 13(c)) and alternative investments (NOTE 3).*

14. Commitments:

As part of normal business operations, the Plan enters into commitments to the funding of investments. Future commitments to fund investments include investment in infrastructure, private debt, private equity and U.S. real estate. The future commitments are generally payable on demand based on the capital needs of the investment.

In particular, the Plan is committed to investing up to an additional $346,321 (2021 – $223,218) in existing infrastructure investments, $203,056 in private debt (2021 – $122,779), $421,826 in private equities (2021 – $303,113) and an additional $80,701 in U.S. real estate (2021 - $64,858).

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