TTC Pension Plan

Date: June 16, 2021
To: TTC Board
From: Chief Executive Officer – TTC Pension Plan

Summary

The attached 2020 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 is a defined benefit, multi-employer pension plan. It covers substantially all full time employees of the TTC and ATU (the employers) 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 2020 was $58,700. 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, 2020, TTC Pension Plan had approximately 15,400 active members and 9,700 pensioners and net assets of $8.0 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.

Contact

Sean Hewitt, Chief Executive Officer
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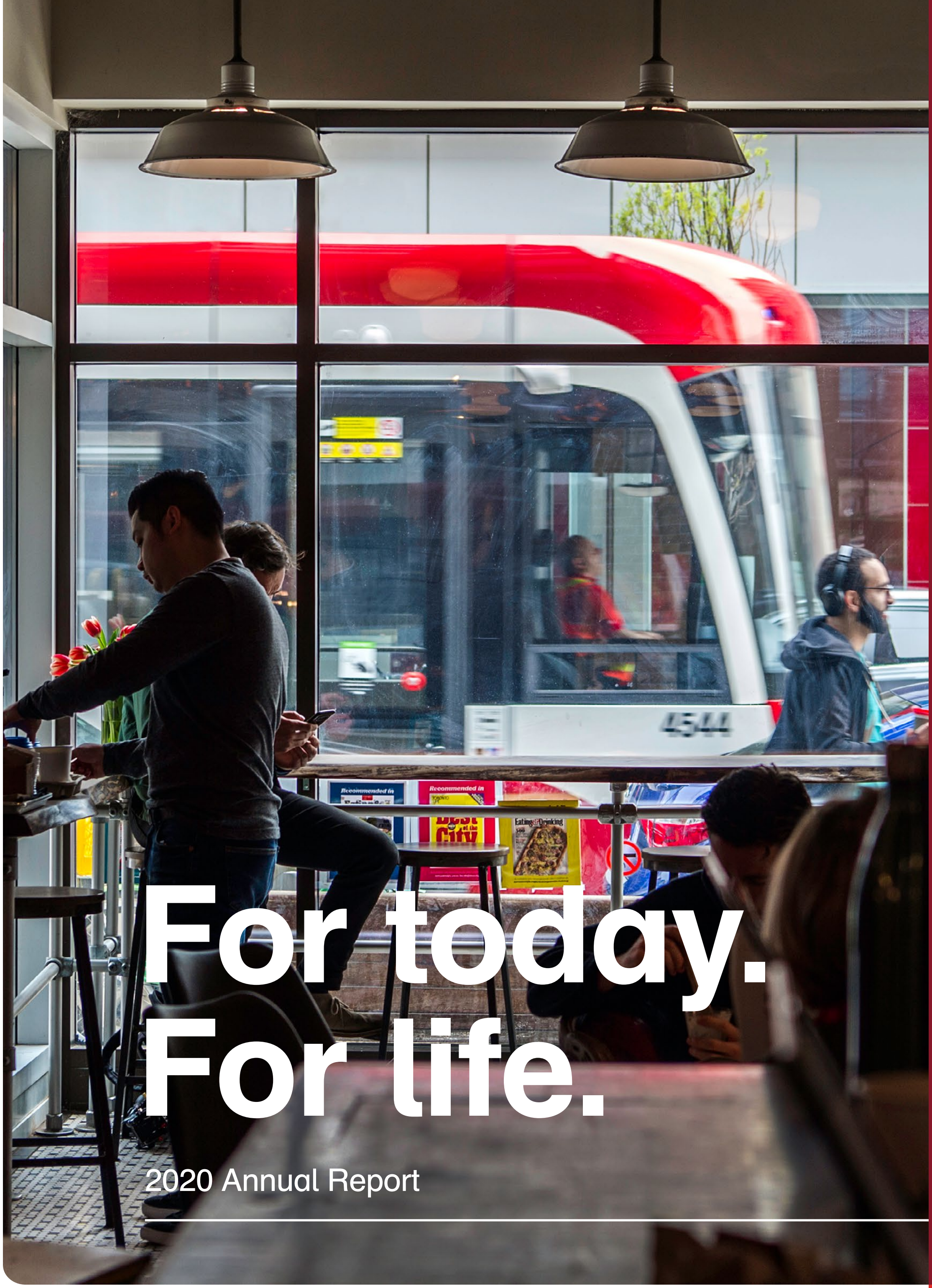
Sean.Hewitt@ttc.ca

Signature

Sean Hewitt
TTCPP Chief Executive Officer

Attachments

Attachment 1 – 2020 TTC Pension Plan Annual Report



For today. For life.

2020 Annual Report

TTC Pension Plan

80 Years and Counting

For the hard work you do every single day.
For the pride you take in a job well done.
For the loved ones you do this for.
And the life after work you want.
You can count on your TTC Pension Plan
to deliver the secure retirement you earned.

For today. For life.
We'll always be there for you.

Table of Contents

For the best start to a better future.

Our prudent long-term approach to pension plan management enables us to keep our sights on the horizon to deliver a sustainable pension for our members long into the future.

For the confidence that you're on track.

Whether it's providing responsive and helpful service to members during their working years or ensuring they have a pension income that will last through their retirement, we are committed to supporting our members throughout their lives.

For whatever the next chapter brings.

Throughout our 80-year history, our thoughtful investment approach and strong governance have enabled us to successfully navigate rough waters and continuously meet our pension obligations to our members in their retirement.

The pension plan our members rely on has a new name. **We are now the TTC Pension Plan (TTCPP).**

Same trusted pension provider, same exceptional service, now refreshed to reflect our forward-thinking approach to deliver for our members.

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.

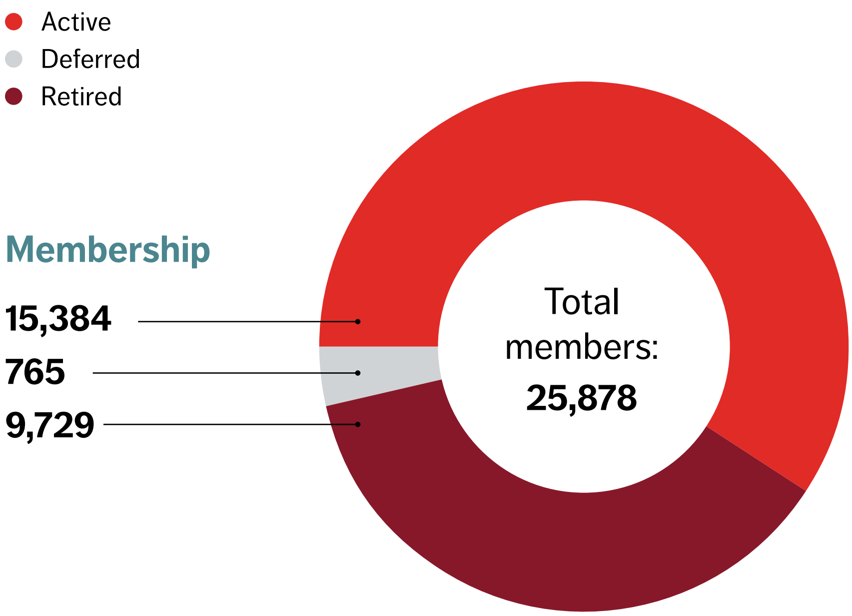
Communication: We are responsive to our members and strive to always keep them informed.

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

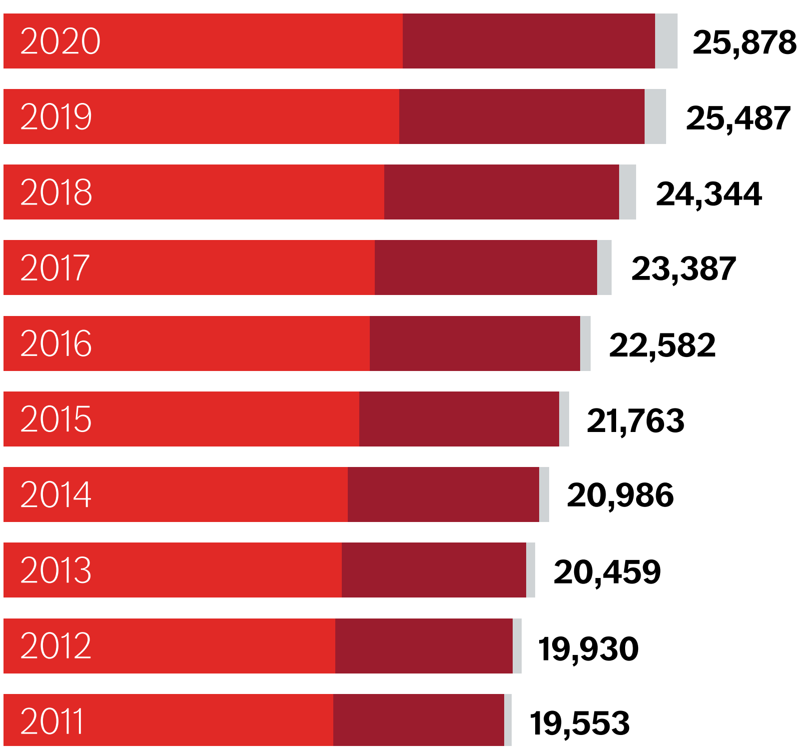
Professionalism: We take pride in our work and believe in always treating everyone with dignity and respect.

2020 Membership Highlights

Membership



Membership growth



439
Retirements in 2020

60.6
Average age of members retiring in 2020

5
Retired members over 100 years of age

41
Longest time in years for retired member collecting pension

$34,198
Average annual pension

2020 Financial Highlights

8.5% > **7.9%**
10-year annualized net return / 10-year benchmark return

10.9% > **9.4%**
2020 net return / 2020 benchmark

$7.97B
Market value of net Plan assets

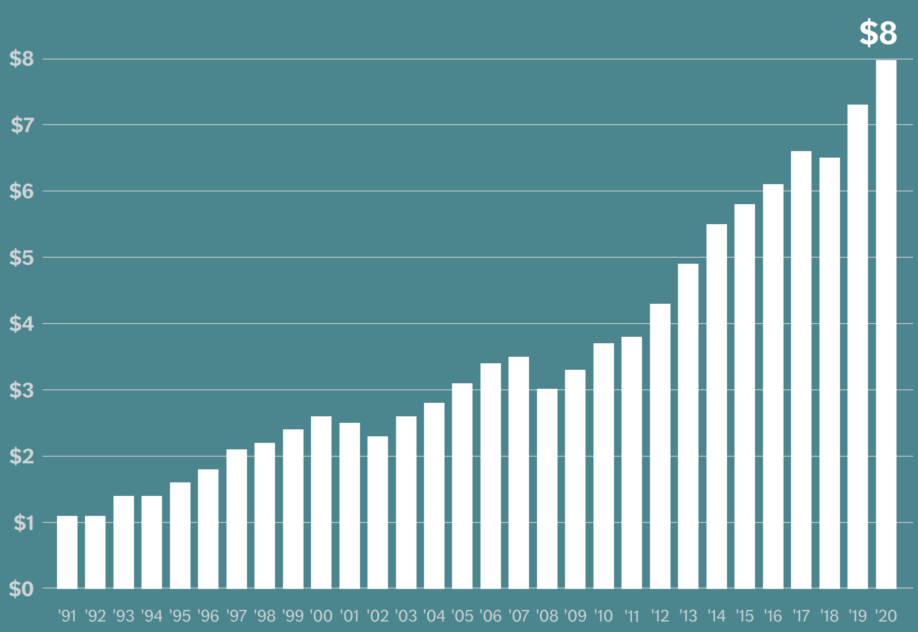
96%
Going concern funded status

4.8%
Discount rate

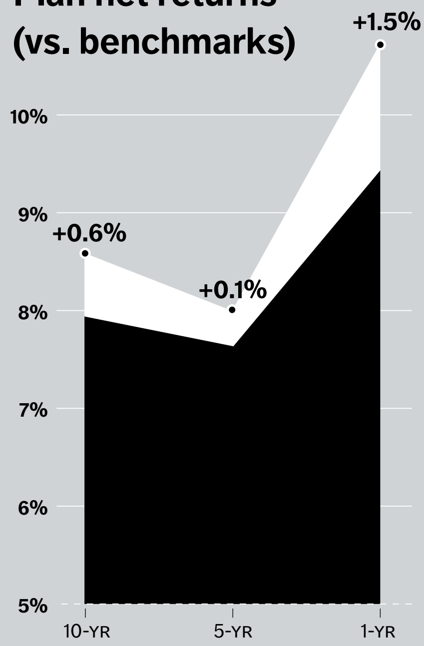
$258M
Contributions

$371M
Benefit payments

Growth of net assets available for benefits (in billions)



Plan net returns (vs. benchmarks)



2020 Member Service Highlights

Tracking our service and engagement is a priority for TTCPP. In 2020, we established a set of baseline metrics by which we will gauge our performance moving forward.

In 2021, our goal is to implement stronger measurement tools to prioritize communication with our membership.

Interactions with members

3,539
Calls answered (March–December)

1,529
Emails answered

2,788
Visits to Online Pension Estimator

191
One-on-one pension estimate reviews

293
Retirement meetings

999
Pension estimates

Message from the Board

In many ways, this was an extraordinary year for the Plan. In the face of the COVID-19 pandemic, our top priority as a Board was ensuring the continued delivery of our pension promise to our members. Thanks to the prudent strategies of our management team and dedication of our people, we are happy to report that 2020 was another highly productive year.

We know that members count on the Plan for a secure retirement pension for life, and it is our duty to support the pension management team and provide our employees with the resources they need to continue delivering for our members, particularly through crisis situations. The pandemic placed significant stress on all areas of the organization—from managing investments in a volatile market to ensuring our people were able to work safely while continuing to serve our members.

Despite the challenging environment in 2020, the Plan exceeded its targets for financial performance, continuing its long track record of sustained growth. As a result of our strong position, the Board approved an update to the base period and a cost-of-living increase of up to 1.03%, effective as of January 1, 2021, for members who retired in 2020 or earlier. This increase speaks to how the Plan has performed through this pandemic period, as well as our stable contribution regime and long-term focus.

We are proud of the performance of the Plan, but we recognize that challenges remain. The impact of the ongoing pandemic continues to be felt while lower forward-looking returns and other factors such as demographic changes continue to bear upon our pension liabilities. As ever, we will continue to manage the risks while pursuing investment strategies that will ensure the Plan is equipped to pay pensions today and preserve pensions well into the future.

Operating through this pandemic period has been a daunting task, but our people have proven to be up to the challenge. The commitment to provide exceptional member service is a hallmark of our organization. Our resolve to serve our members remained steadfast even as the pandemic forced us to change the way we work and how we delivered our services. For the first time in our Plan's history, we were forced to suspend in-person meetings with our members, which we then conducted remotely. We are proud of the way our staff, led by Sean Hewitt, Cheryl Uroda, James Clarkson, Andrew Greene and Donna Miyasaki, managed these changes while continuing to provide exceptional support to our members.

In 2020, our organization celebrated an important milestone: our 80th year in operation. To coincide with this milestone year, we unveiled a new name for the Plan: the TTC Pension Plan. In addition to the new name, the Board approved a new logo and a refined statement of our Mission, Vision and Values to better reflect the organization's member-focused approach.

We are proud of the accomplishments that our people have delivered in this extremely challenging environment. Our investment portfolio remains solid and stable for the foreseeable future. Our people are resilient and committed. And we will continue to work diligently to deliver the secure retirement income that our members count on for decades to come.

Message from the CEO

Sean Hewitt
Chief Executive Officer

For 80 years, the TTC Pension Plan (formerly known as the TTC Pension Fund Society) has successfully navigated the shifting winds and storms of the market to continuously deliver on our promise of a stable and secure pension for our members in their retirement.

Even now, despite the current challenges facing organizations everywhere, we are positioned to continue upholding our promise, today and well into the future.

While the COVID-19 pandemic has been unlike anything the Plan has faced in its history, we nevertheless exceeded our targets for financial performance. Our net assets continued to grow to $7.97 billion, representing an investment return of 10.9% after all fees and expenses. Our 10-year track record continued its consistent long-term trend, with the Pension Plan earning 8.5%, exceeding the return of our benchmark by 0.6%. Over that period, our asset values have more than doubled.

While we are aware that we will continue to face headwinds—including a sustained low interest environment, lower return expectations and a growing retirement population—we believe that we have the strategies to combat the challenges ahead and are well positioned to continue achieving our desired rate of return going forward. As a result of very strong returns over the last 10-plus years, we entered the pandemic in the best financial position the Plan has ever been in. This stability has helped us to weather the storm and now emerge in an even stronger position.

The long-term sustainability of the Plan is at the foundation of everything we do as an organization. In 2020, to reinforce our commitment, we embarked on a mission to clarify and strengthen our purpose and how we deliver on our promise to our members. Working with our stakeholders throughout the organization, we unveiled a new name—the TTC Pension Plan—and restated our Mission, Vision and Values to give greater clarity to our purpose.

Our new Mission, Vision and Values reflect the key themes that employees and leadership identified as the most important to the organization going forward. These statements express our commitment to support our members throughout their lives—whether that means providing responsive and helpful service during their working years or ensuring they have a pension income that will last through their retirement. Our new Mission statement balances both the human and fiscal sides of our organization and reflects how both facets are critical to our ability to always support our members—making it clear what we stand for, and how our people will live this every day.

As we continue to face the extraordinary challenges brought by the COVID-19 pandemic, I want to acknowledge and thank our entire staff for their diligent efforts to ensure that the Plan continues to run smoothly and that we can serve our members while supporting the health and safety of our people. Although we have had to adjust some of the ways we administer our services, we remain committed to delivering to our high standards despite the challenges.

I extend a special note of gratitude to Cheryl Uroda, our outgoing Corporate Secretary and Director, Pension Administration, who is enjoying her much-deserved retirement after 40 years of devoted service. Cheryl has been a trusted voice on the leadership team and a staunch advocate for our members. Her positive impact will continue to be felt throughout the organization.

I am also pleased to welcome Donna Miyasaki and Helen Redmond to the leadership team and look forward to their valuable contributions as we continue to drive our organization forward.

Looking ahead, we are focused on continuing to reinvest in our people and implementing new initiatives that will enable us to continue serving the best interests of our members. With renewed energy for our mission, we are focused on doing the work to ensure that the TTCPP will always be there for our members—today, and for a lifetime.

Board of Directors

Board of Directors

Rick Fox

Scott Gordon

Michelle Jones

Orest Kobylansky (President)

Rick Leary

Brian Leck

Megan MacRae

Frank Malta

Kevin Morton

Carlos Santos (Vice President)

Investment Committee

Rick Fox

Orest Kobylansky (Chair)

Megan MacRae

Frank Malta

Governance Committee

Scott Gordon

Brian Leck

Megan MacRae

Kevin Morton (Chair)

Audit Committee

Michelle Jones

Orest Kobylansky (Chair)

Kevin Morton

Carlos Santos

Board Advisor

James Knowles

Leadership Team

The CEO and leadership team are responsible for all operational matters and the implementation of strategic plans and policies.

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

Scott Clausen, Mercer

Karen Koop, Mercer

Auditor

KPMG LLP

Custodian

Northern Trust

Governance Structure

The Toronto Transit Commission Pension Fund Society (now known as the "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 five voting members, 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. They 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.

Governance Committee

The Governance Committee advises the Board on matters of governance and human resource policies.

Audit Committee

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

TTCPP is a jointly sponsored pension plan with sharing of costs, risks and decisions. The Board acts independently of the sponsors and has overall responsibility for pension administration, corporation management, investment strategy and reporting.

Enhancements to governance structure

In recent years, several improvements to the TTCPP governance structure have been made to enhance the prudent management of the Plan. This includes the conversion of TTCPP to a jointly sponsored pension plan in 2011, which ensures that Plan sponsors have an equal say on matters that impact members. In 2016, the Board hired an independent CEO to manage the day-to-day affairs of TTCPP, reporting directly to the Board.

These and other changes were designed to transition TTCPP to an independent pension organization that gives the Board full control over its evolving organizational needs. The responsibility for day-to-day administration, including office space, pension staff hiring and salary administration rests with the TTCPP CEO, who is directly accountable to the Board. This change marks a significant organizational enhancement and has important advantages over the previous organizational structure. It ensures that TTCPP continues to meet its fiduciary obligations confidently and systematically through adequate staffing and resourcing. It also enables TTCPP to continue its prudent management and administration of pension assets and to continue to deliver service in a manner that is consistent with a best-in-class pension organization.

> I sent a request for an updated entitlement statement, expecting an answer back in a day or two. Your staff got back to me within two hours! Superb service; above and beyond expectations. Please pass on my thanks, and keep up the good work.
>
> **Scott H.**
> Member since October 1990

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), Amalgamated Transit Union (ATU) Local 113 and TTCPP who have completed six months of continuous service. Active members contribute a percentage of their contributory 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.

As a Plan member, your pension is determined using a formula based on your 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 80.

30 Yrs Service

OR

60 Yrs Age

29 Yrs Service & Age + Service = 80

Reduced early retirement

→ Age 50 with less than 29 years of service.

> 50 Yrs Age & < 29 Yrs Service

Indexation in retirement

→ Indexing in retirement is 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 2020, this amount was $58,700.

Preretirement seminars

Each year, TTCPP holds seminars about Plan benefits and preparing for retirement. Due to the COVID-19 pandemic in 2020, in-person seminars were postponed. We are looking to conduct online webinars in fall 2021. Active members can register to be added to the waitlist for these webinars. The registration form can be found on the TTC intranet site in the Forms Repository. The form name is "Application to Attend Pre-Retirement Seminar." Once on the waitlist, members will be contacted directly about the attendance options available to them.

Plan updates

The following outlines operational and affordable Plan updates that have been set forth after careful consideration by the TTCPP Board of Directors. Voting is required on these enhancements, which will be presented to the TTC Board on June 16, 2021, and to the members at the annual general meeting (AGM) on June 26, 2021, for approval before the updates come into effect.

The following changes to the Plan benefits have been proposed based on the Plan's actuarial reports:

- → For members who retire on or after January 1, 2021, their pensionable earnings in 2020 will now be included in the base period for calculating the pension benefits. The base-period formula will now be the average of their best four years of pensionable earnings up to December 31, 2020.
- → Together with this formula update, the survivor benefit date has been moved to January 1, 2021. This means that for married members, the 60% survivorship option will have no cost for all pension service prior to January 1, 2021.
- → Also, members who retired before January 1, 2021, will receive an ad hoc cost-of-living increase of 1.03%. If they retired in 2020, their indexing will be prorated for the number of days they were retired in 2020.

The Board determines the amount of cost-of-living increases, but under the Canadian *Income Tax Act*, that percentage increase is not permitted to be more than the cumulative percentage increase in the Consumer Price Index.

There is no contractual obligation to provide benefit improvements. On an annual basis, the TTC Pension Plan Board of Directors assesses affordability of benefit improvements and grants them at its discretion. Future enhancements are not guaranteed.

The TTCPP Board of Directors also recommends the removal of Bylaw 3.06, which designates that the General Counsel of the TTC would act as solicitor for the pension plan. Over recent years, the Board has taken the approach of consulting specialized external counsel when needed.

Investment Management

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

The Investment Policy provides a framework for how we invest the Plan’s assets in relation to our pension obligations and acceptable level of risk. In adhering to the Investment Policy, the Plan uses a sustainable long-term approach, with assets diversified across a wide variety of classes, risk-return characteristics and degree of liquidity.

A professional investment management team oversees the Plan and is responsible for executing the investment framework set out in the Investment Policy. Our team selects highly qualified investment management firms that have the specific expertise to implement the required strategies and asset mix. The team continually monitors their performance 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.

At TTCPP, we have a 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 outperform.

Growth of the Plan’s assets comes from members’ contributions, the matching contributions of their employers and investment earnings. Our primary objective is to grow the Plan assets more than our pension obligations over the long term. This focus on maintaining our highly funded status strengthens our overall financial condition. Improvements in our funded status improves our ability to provide a base-period update and pension indexing.

> In a world where everyone is very busy and trying to cope with the current situation of COVID-19, your excellent customer service skills deserve recognition and applause.
>
> **Harjunder T.**
> Member since February 2005

Market overview

The year 2020 proved to be one of the most tumultuous in recent memory, marked by developments that were historically unprecedented. It saw the end of the longest positive economic cycle on record, driven by one of the worst pandemics in history. It saw a recovery aided by unprecedented monetary and fiscal policy action. Above all, it was a year that demonstrated the resilience of the human spirit, institutions and financial markets.

On top of the health crisis, widespread social, political and economic crises roiled the U.S. over the summer, as did a contested presidential election result in November of this unusual year. Some positive news did come at the end of 2020 with the development and initial dissemination of COVID-19 vaccines and additional legislation that provided pandemic-related stimulus.

Central banks around the globe slashed interest rates to near zero, flooded financial markets with ample liquidity and backstopped risk assets. Meanwhile, world governments provided trillions of dollars in relief to their citizens. The unprecedented, coordinated response delivered much-needed stability to capital markets for the rest of the year, ushering in a *V*-shaped recovery for risky assets and allowing most major equity indices to finish in the green. During the worst of the fear and uncertainty, sovereign bond yields tumbled to historic lows and credit spreads widened substantially.

Canadian equities fared worse than their global peers, with the S&P/TSX Composite Index rising 5.6% (total return) following the 22.8% jump in 2019. U.S. equity reached new highs (S&P 500 Index, Dow Jones Industrial Average, NASDAQ Composite Index, and Russell 2000 Index benchmarks all posted new records). The S&P 500 rebounded strongly following the sharp COVID-19 drawdown in March 2020, bouncing to a 16.3% (CAD) return over the year and outperforming other major developed markets. In international equities, the MSCI EAFE Index delivered a 5.9% total return in the year.

Emerging market equities had a strong year, up over 16% (CAD), due to two main tailwinds: favourable sector composition and China, Taiwan and South Korea's ability to better control the virus that allowed for a strong rebound in economic activity.

Global yields were on a rollercoaster ride in 2020, plummeting to historic lows in March and April before seeing curves steepen in the second half of the year on the back of positive vaccine news. The FTSE Canada Universe Bond Index produced a robust 8.7% total return, exceeding the 6.9% mark set last year.

On a sector level in Canada, investment-grade corporate bonds were able to recover quickly from their small losses earlier in the year and matched the 8.7% return of government bonds amid rapidly narrowing credit spreads. Within the government sector, the municipal and provincial bond indices outpaced the federal index. Within credit, investment-grade bonds edged out high-yield bonds for the year.

The Canadian dollar suffered during the worst of the fear and uncertainty, touching USD 68.9 cents on March 19, but rallied sharply off that low to gain 14% through year-end, aided by a general weakening of the U.S. dollar across the globe.

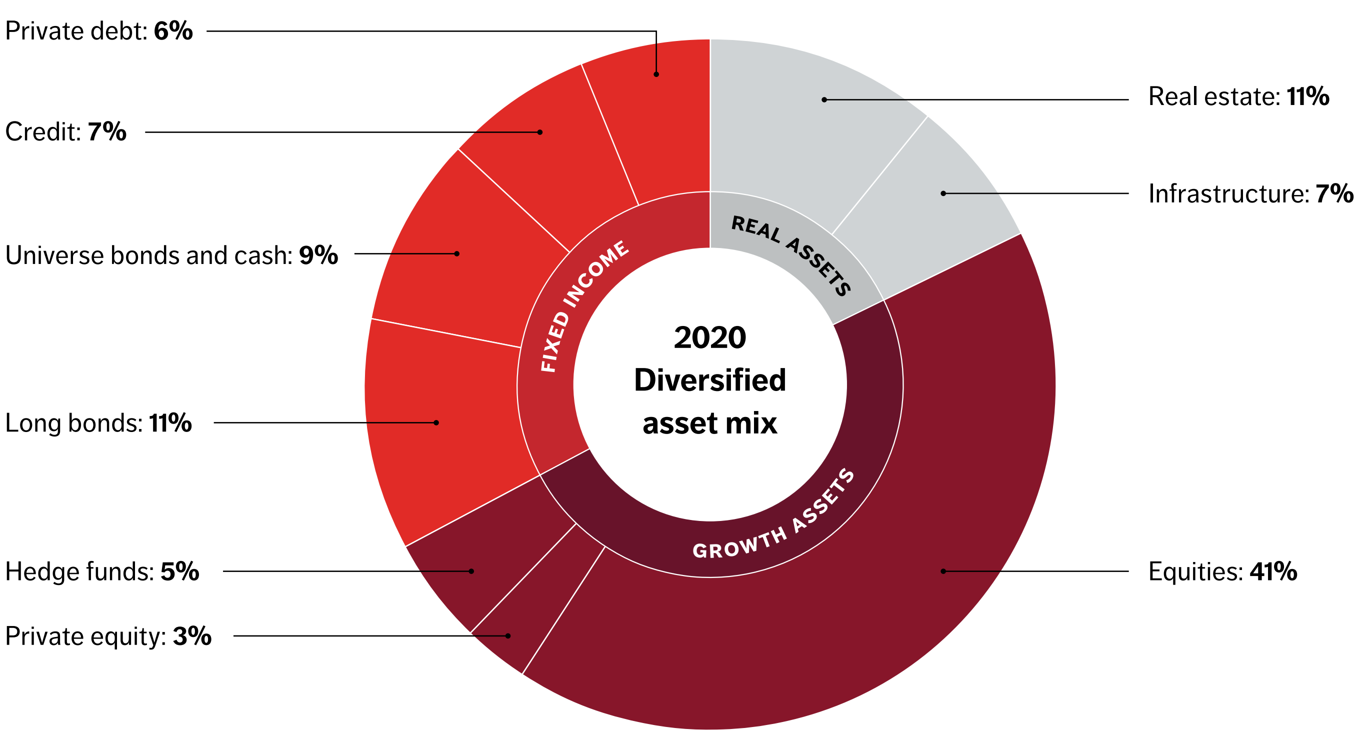
Building a diversified portfolio

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, provincial and corporate bonds of a variety of maturities (short, medium and long). Fixed-income investments represent 33% 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.

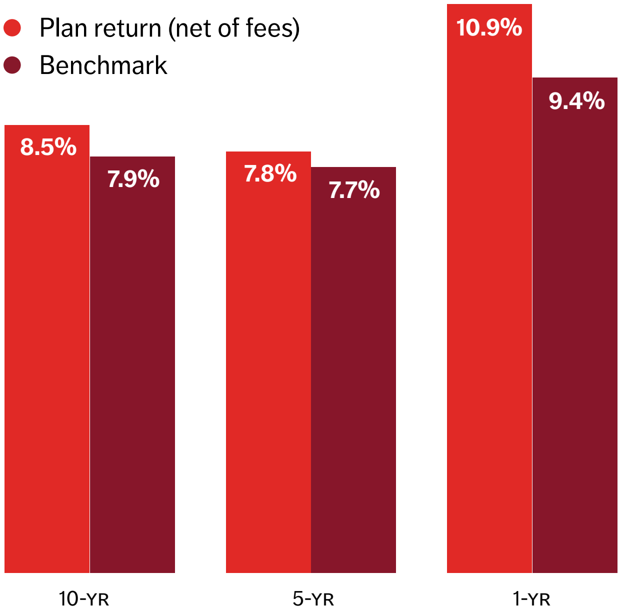
Real assets
Investments that share characteristics of both liability-matching assets and growth assets. They tend to offer higher long-term returns than bonds but generally don't have the volatility associated with growth assets, and they provide some protection against inflation. Our holdings in real estate and infrastructure are included in this category. Real assets represent 18% 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 $7.97 billion at year-end. The Plan delivered a solid 10.9% return for the year, exceeding the policy benchmark. Over the past 5- and 10-year periods ending 2020, the Plan has earned an annualized rate of return of 7.8% and 8.5%, respectively, exceeding the benchmark returns.



The 5-year 7.8% annualized return, net of investment management fees, exceeded the policy benchmark return of 7.7% by 0.1%.

Asset class	5-YR net returns	Benchmark
Canadian equity	8.7%	9.3%
U.S. equity	12.9%	13.4%
Emerging markets equity	11.6%	10.9%
Private equity	12.8%	13.4%
Long bonds	6.9%	6.8%
Universe bonds	5.0%	4.5%
Credit bonds	7.1%	5.0%
Infrastructure	9.2%	6.5%
Real estate	7.2%	5.7%
Total fund return (net of fees)	**7.8%**	**7.7%**

NOTE: *Global equity and alternative fixed-income investments have been held in the Plan for less than five years; therefore, the return is not reflected in the table. Public equity and bond investment returns are shown gross of fees, while private equity, infrastructure, real estate, and total fund return are shown net of fees.*

Asset class	Benchmark Index
Canadian equity	S&P/TSX Composite
U.S. equity	S&P 500
Global equity	MSCI World
Emerging markets equity	MSCI Emerging Markets
Private equity	MSCI World + 3%
Cash and cash equivalents	91-day T-bills
Long bonds	FTSE Canada Long Bond
Universe bonds	FTSE Canada Universe Bond
Credit bonds	FTSE Canada Corporate Bond
Infrastructure	CPI + 4%
Real estate	CPI + 4%

Investment Highlights

At TTCPP, we invest with a view to the long term. Just as we are committed to supporting our members throughout their retirement, our investment portfolio reflects our focus on selecting investment strategies and assets that support the long-term sustainability of the Plan. We seek out companies that have sound corporate governance structures and practices, while also considering other non-financial risks, including environmental and social factors.

To us, always being there for our members means being invested in companies that have solid and sustainable potential. This helps ensure that our Plan will continue to provide the pension income our members can count on—for their whole life, and for generations of members to come.

Recent investment highlights

Vantage

Vantage designs, develops and operates flexible and scalable data centres for hyperscalers, cloud providers and large enterprises. Developing and operating across six markets in North America and six markets in Europe, Vantage has evolved data centre design in innovative ways to deliver dramatic gains in reliability, efficiency and sustainability in flexible and scalable environments.

Partner:
Digital Colony

Acquisition Date:
2017 (restructured in 2020)

Locations:
North America, Europe

Website:
vantage-dc.com

Pattern Energy

Pattern Energy is one of the world's largest private renewable energy companies, with 28 utility-scale renewable energy facilities in the U.S., Canada and Japan. The company develops and operates wind, solar, transmission and energy storage projects.

Partner:
CBRE Caledon, CPPIB

Acquisition Date:
2019

Locations:
U.S., Canada, Japan

Website:
patternenergy.com

Genesee & Wyoming

Genesee & Wyoming is an international organization with over 110 railroads operating across Canada, Europe, the UK and the U.S. The company has exposure to key industrial commodities driving volume growth (minerals and stone, agriculture, pulp and paper, chemicals and plastics, and lumber and forest products).

Partner:
Brookfield Infrastructure Partners

Deal Close Date:
January 2020

Locations:
U.S., Canada, Europe, UK

Website:
gwrr.com

10 Years of Continued Growth

	2020	2019	2018	2017	2016	2015	2014	2013	2012	2011
Financials (in millions)										
Fixed income and cash	2,534	2,358	2,574	2,902	2,681	2,788	2,613	2,051	2,055	1,782
Equities	3,238	2,805	2,445	2,558	2,356	2,526	2,415	2,513	2,040	1,783
Alternative investments	2,449	2,393	1,831	1,449	1,389	819	710	562	378	231
Investment receivables and other	65	44	18	59	38	23	46	54	288	64
Investment liabilities	(311)	(284)	(332)	(322)	(328)	(346)	(286)	(276)	(490)	(37)
Total net assets	7,975	7,316	6,536	6,646	6,136	5,810	5,498	4,904	4,271	3,823
Contributions	258	255	239	234	224	216	207	202	194	182
Investment income (loss)	796	894	(15)	583	377	352	621	647	457	120
Benefit payments	(371)	(350)	(320)	(291)	(258)	(239)	(216)	(200)	(188)	(166)
Expenses	(24)	(19)	(14)	(16)	(17)	(17)	(18)	(16)	(15)	(12)
Change in net assets	659	780	(110)	510	326	312	594	633	448	124
Membership										
Active	15,384	15,217	14,649	14,287	14,091	13,686	13,237	13,013	12,767	12,690
Retired	9,729	9,457	9,027	8,539	8,091	7,699	7,375	7,092	6,824	6,562
Deferred	765	813	668	561	400	378	374	354	339	301
Total members	25,878	25,487	24,344	23,387	22,582	21,763	20,986	20,459	19,930	19,553
Active members per retiree	1.58	1.61	1.62	1.67	1.7	1.8	1.8	1.8	1.9	1.9
Retirements	439	544	621	613	572	431	443	409	384	373

80 Years of Serving Our Members

1939

- TTC General Manager H. C. Patten establishes pension committee
- TTC makes initial payment of $250,000 to fund existing employee obligations

1940

- Original Board comprises five directors appointed by the Commission and four are union appointed
- Launch of the Plan officially known as the Toronto Transportation Pension Society
- First pensions for retiring members approved

Walter Black
FIRST RETIRED MEMBER
JAN. 17, 1940

83 retired members
DEC. 31, 1940

2,606 members
DEC. 31, 1940

1968

- Board is reconstituted with equal representation from Commission and Union

1975

$100 million
IN ASSETS

1982

- 2,000 retired members collecting pension

1986

Creation of pension office

$2.5 billion
IN ASSETS

$1 billion
IN ASSETS

Governance Committee established

Investment Committee established

6,551
INTERACTIONS WITH MEMBERS

$34,198
AVERAGE ANNUAL PENSION

1990s — Investment Committee established

1991 — $1 billion in assets

2000 — $2.5 billion in assets

2007 — Governance Committee established

2011 — Plan converts to a jointly sponsored pension plan

2016 — Plan's first independent CEO is hired

2019 — Move to new offices

TTC employees working in pension office become employees of TTC Pension Fund Society

2020 — 6,551 interactions with members; $34,198 average annual pension

2021 — New Mission, Vision and Values

TTC Pension Fund Society renamed as TTC Pension Plan (TTCPP) with a new logo

> "Thank you for continuing to work and support us, as pensioners and future retirees.
>
> **Wesley T.**
> Member since August 1974

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, 2020, 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, 2020, supplied by the TTC Pension Plan and used to extrapolate valuation results to December 31, 2020,
- 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, 2020, 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 2020, 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.

Scott Clausen

Scott Clausen
Fellow of the Society of Actuaries
Fellow of the Canadian Institute of Actuaries

June 4, 2021

Karen E. Koop

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

June 4, 2021

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Canada
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INDEPENDENT AUDITORS' 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, 2020
- 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, 2020, 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 ***"Auditors' Responsibilities for the Audit of the Financial Statements"*** section of our auditors' 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.

Page 2

Other Matter - Comparative information

The financial statements for the year ended December 31, 2019 were audited by another auditor who expressed an unmodified opinion on those financial statements on May 21, 2020.

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.

Auditors' Responsibilities for the Audit of the Financial Statements

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

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

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

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

We also:

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

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

KPMG

- 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 auditors' report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditors' report. However, future events or conditions may cause the 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 4, 2021

Statement of Financial Position

December 31, 2020, with comparative information for 2019

(In thousands of Canadian dollars)

	2020	2019
Assets		
Cash	33,049	34,767
Investments (NOTE 3)	8,188,183	7,521,585
Investment-related receivables (NOTE 3)	77,014	55,933
Contributions receivable:		
Members	4,577	3,660
Employers	4,577	3,659
Other assets	2,319	1,918
Total assets	8,309,719	7,621,522
Liabilities		
Investment-related liabilities (NOTE 3)	310,503	284,161
Other liabilities (NOTE 7)	24,556	21,640
Total liabilities	335,059	305,801
Net assets available for benefits	7,974,660	7,315,721
Pension benefit obligation (NOTE 9)	6,608,702	6,147,902
Surplus	**1,365,958**	**1,167,819**

O.Z. Kobylansky

OREST KOBYLANSKY, DIRECTOR

Carlos Santos

CARLOS SANTOS, DIRECTOR

See accompanying notes to financial statements.

Statement of Changes in Net Assets Available for Benefits

December 31, 2020, with comparative information for 2019

(In thousands of Canadian dollars)

	2020	2019
Increase in net assets available for benefits		
Net investment income (NOTE 11)	298,614	235,817
Net increase in fair values of investments (including total gains and losses) (NOTE 11)	498,047	657,938
Contributions:		
Members	127,255	125,833
Employers	130,837	129,014
Total increase	1,054,753	1,148,602
Decrease in net assets available for benefits		
Benefit payments:		
Pension	342,865	321,060
Death	8,234	4,143
Termination refunds	18,418	21,154
Marriage breakdown	1,848	3,169
Investment and Plan administration expenses (NOTE 12)	24,449	19,340
Total decrease	395,814	368,866
Increase in net assets available for benefits	658,939	779,736
Net assets available for benefits, beginning of year	7,315,721	6,536,405
Other post-retirement benefits transfer (NOTE 8)	–	(420)
Net assets available for benefits, end of year	**7,974,660**	**7,315,721**

See accompanying notes to financial statements.

Statement of Changes in Pension Benefit Obligations

December 31, 2020, with comparative information for 2019

(In thousands of Canadian dollars)

	2020	2019
Pension benefit obligation, beginning of year	6,147,902	5,374,106
Benefits accrued	181,394	159,476
Benefits paid	(371,364)	(349,526)
Interest accrued on benefits	343,627	340,808
Changes in actuarial assumptions	184,126	508,530
Experience losses	18,872	20,399
Plan amendments	104,145	94,109
Net increase in pension benefit obligation	460,800	773,796
Pension benefit obligation, end of year	**6,608,702**	**6,147,902**

See accompanying notes to financial statements.

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 the 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.

(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 2020, each member employed by the TTC, ATU and TTCPP contributed 9.25% (2019 – 9.25%) of their earnings to the Plan up to the year's maximum pensionable earnings ("YMPE") of $58,700 (2019 – $57,400) and 10.85% (2019 – 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 2020, this amount was $2,300 (2019 – $2,250). 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 or the Sponsors establish and maintain a contribution rate for members. 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, 2019 (2019 – December 31, 2018). 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 AND ADOPTION OF CANADIAN ACCOUNTING STANDARDS FOR PENSION PLANS

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 FSGN-100 (Financial Statement Guidance Note).

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:

- cash includes both cash and cash equivalents and is valued at cost, which approximates fair value;
- short-term investments are valued at cost, which together with accrued income, approximates fair value;
- 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;
- securities sold under agreements to repurchase are valued using discounted cash flows based on current market yields;
- publicly traded Canadian and non-Canadian stocks are valued at the closing price on the applicable stock exchange;
- 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;
- 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;
- the investment values of pooled funds and funds of hedge funds are supplied by the Fund administrators based on fair value quotations or appraisals, as appropriate; and
- 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 (decrease) 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 prorated 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.

The full extent of the impact that the COVID-19 pandemic will have on the Plan's net assets available for benefit remains uncertain and difficult to predict at this time. 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, 2020.

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:

	2020		2019	
	Fair value	Cost	Fair value	Cost
Investments*	**$**	**$**	**$**	**$**
Fixed income:				
Invested cash	76,489	76,489	68,350	68,350
Short-term money market securities	58,536	57,563	45,109	44,355
Canadian bonds	2,170,049	2,008,757	2,025,449	1,953,584
Non-Canadian bonds	185,594	168,921	167,670	159,008
Funds of hedge funds	10,567	7,334	16,547	11,114
	2,501,235	2,319,064	2,323,125	2,236,411
Equities:				
Canadian	347,345	254,226	499,604	371,958
Non-Canadian	2,890,748	2,196,348	2,305,808	1,764,422
	3,238,093	2,450,574	2,805,412	2,136,380
Alternative investments:				
Real estate	709,589	505,679	752,592	518,870
U.S. real estate (NOTE 14)	155,736	143,908	158,856	147,436
Infrastructure (NOTE 14)	562,731	425,340	488,592	392,927
Hedge fund secondaries (NOTE 14)	14,870	–	28,340	–
Hedge funds	367,398	367,330	349,183	352,575
Private debt (NOTE 14)	433,868	400,576	454,656	398,936
Private equity (NOTE 14)	204,663	127,225	160,829	93,842
	2,448,855	1,970,058	2,393,048	1,904,586
	8,188,183	**6,739,696**	**7,521,585**	**6,277,377**
Derivative financial instruments:				
Instruments receivable (NOTE 6b)	24,065	–	22,015	–
Instruments payable (NOTE 6b)	(20)	–	–	–
	24,045	–	22,015	–
	8,212,229	**6,739,696**	**7,543,600**	**6,277,377**
Investments-related receivables:				
Pending trades	39,905	39,905	19,483	19,483
Accrued investment income	13,044	13,044	14,435	14,435
	52,949	52,949	33,918	33,918
Investments-related liabilities:				
Bonds sold under repurchase agreements†	309,150	309,150	275,605	275,605
Pending trades	1,333	1,333	8,556	8,556
	310,483	310,483	284,161	284,161
	7,954,694	**6,482,162**	**7,293,357**	**6,027,134**

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

†Bonds sold under repurchase agreements are secured by collateral of $343,500 (2019 – $306,227). The collateral amount in excess of the amount noted for bonds sold under repurchase agreements in the statement of financial position is $34,350 (2019 – $30,623). 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.

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, effective November 1, 2020, and approved on October 29, 2020. The significant amendments included changes made to refine the Plan's interim 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 estimated current growth rate, inherent in the CPA Canada Accounting Handbook – Accounting Section 4600 Pension Plans Mercer valuation, is 5.25% (2019 – 5.5%).

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.

		2020		2019	
		Portfolio weight year-end	Asset mix policy target weight	Portfolio weight year-end	Asset mix policy target weight
Asset categories	**Index benchmark**	**%**	**%**	**%**	**%**
Fixed income:	Composite	37.2	37.0	38.4	38.0
Cash and overlay	FTSE TMX 91-day T-Bill	1.0	—	1.0	—
Long-term bonds	FTSE TMX Long Bond	11.3	11.0	12.1	12.0
Universe bonds	FTSE TMX Universe Bond	11.9	12.0	11.9	12.0
Credit bonds	FTSE TMX All Corporate	7.3	7.0	7.0	7.0
Alternative fixed income*	FTSE TMX 91-day T-Bills +3%	5.7	7.0	6.4	7.0
Equities:	Composite	43.6	42.0	39.2	39.0
Canadian	S&P/TSX Composite			6.9	8.0
U.S.	S&P 500, net in CAD			7.9	8.0
Non–North American	MSCI EAFE net in CAD	41.0	39.0	8.2	8.0
Global	MSCI World, net in CAD			10.8	10.0
Emerging Markets	MSCI EM, net in CAD			5.4	5.0
Private equity	MSCI World +3% in CAD	2.6	3.0	2.2	2.0
Real estate	Consumer Price Index +4%	10.9	12.0	12.5	12.0
Infrastructure	Consumer Price Index +4%	7.1	8.0	6.7	8.0
Absolute return†	FTSE TMX 91-day T-Bill	5.1	5.0	4.8	5.0
Leverage		(3.9)	(4.0)	(3.8)	(4.0)
Total portfolio	**Composite**	**100.0**	**100.0**	**100.0**	**100.0**

**Includes private debt*
†Absolute return includes the asset class of hedge funds, but excludes hedge fund secondaries.

(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.

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 hedging policies are designed to limit the overall impact of currency fluctuations on Plan returns.

The Plan's currency manager passively hedges 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:

			2020
Net currency exposure*	**Gross exposure**	**Notional amount**	**Net exposure**
United States dollar	3,167,320	(1,499,593)	1,667,727
Euro	228,059	–	228,059
Hong Kong dollar	170,636	–	170,636
Japanese yen	170,146	310	170,456
South Korean won	85,676	–	85,676
British pound sterling	80,802	–	80,802
Taiwan dollar	66,802	–	66,802
Swiss franc	56,521	–	56,521
Australian dollar	23,922	(475)	23,447
Brazilian real	33,516	–	33,516
Indian rupee	19,842	–	19,842
Other	141,392	(38,891)	102,501
	4,244,634	**(1,538,649)**	**2,705,985**

			2019
Net currency exposure*	**Gross exposure**	**Notional amount**	**Net exposure**
United States dollar	3,073,560	(838,949)	2,234,611
Euro	289,732	5,941	295,673
Japanese yen	146,181	31,271	177,452
British pound sterling	142,939	24,540	167,479
Hong Kong dollar	98,682	13,591	112,273
Swiss franc	64,739	2,095	66,834
South Korean won	60,859	(2,417)	58,442
Brazilian real	37,419	(5,627)	31,792
Australian dollar	29,423	(51)	29,372
Swedish krona	17,323	2,604	19,927
Other	275,418	(18,732)	256,686
	4,236,275	**(785,734)**	**3,450,541**

**Includes pooled funds.*

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:

Changes in net assets available for benefits*

	2020	2019
United States dollar	83,386	111,730
Euro	11,403	14,784
Hong Kong dollar	8,532	5,614
Japanese yen	8,523	8,873
South Korean won	4,284	2,922
British pound sterling	4,040	8,374
Taiwan dollar	3,340	1,812
Swiss franc	2,826	3,342
Australian dollar	1,172	1,469
Brazilian real	1,676	1,589
Indian rupee	992	1,255
Swedish krona	—	996
Other	5,125	9,767
	135,299	**172,527**

**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.

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 a hedge that offsets 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 18% (2019 – 19%) 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.

Changes in net assets available for benefits*

	Interest rates	2020	2019
Interest bearing financial instruments	+ / – 1%	266,282	236,823

**Includes pooled funds.*

As at December 31, 2020, 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 13.9% (2019 – 13.6%) or $916,445 (2019 – $836,127).

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.

	Stock benchmark	Change in Index value	2020*	2019*
Canadian equities	S&P/TSX comp	+ / − 10%	27,298	47,073
Non-Canadian equities	Various	+ / − 10%	297,972	225,783
			325,270	**272,856**

**Includes pooled funds.*

(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:

- having a minimum rating of R1 "low" by DBRS or equivalent for all cash and short-term investments;
- 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;
- 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;
- dealing with counterparties to derivative transactions that have credit quality of no less than an A rating;
- securities lent will be secured by initial collateral of no less than 105%;
- entering into International Swaps and Derivative Association Inc. agreements with over-the-counter derivative counter-parties to limit the Plan's exposure to credit losses;
- entering into derivative financial instruments only on an unlevered basis; and
- 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 mark-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, 2020*	December 31, 2019*
AAA†	474,823	587,579
AA	743,216	688,667
A	597,508	514,609
BBB	393,084	309,507
R1 or equivalent	—	—
Non-investment grade/unrated	223,541	144,824
Total	**2,432,172**	**2,245,186**

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

(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. While COVID-19 has caused a significant impact to the global economy, the Plan's diversified investment strategy is designed to preserve benefits for all Plan members.

In order to meet short-term liquidity requirements, cash and short-term investments are available for $168,000 (2019 – $148,000). 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, 2020	December 31, 2019*
1 year	128,936	40,013
1–5 years	523,574	553,816
5–10 years	401,602	339,891
10–20 years	425,185	523,467
20 years	952,875	787,999
Total	**2,432,172**	**2,245,186**

**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, 2020	Level 1	Level 2	Level 3	Total
Invested cash and short-term money market securities	76,489	58,536	—	135,025
Bonds*	—	2,355,643	—	2,355,643
Funds of hedge funds	—	—	10,567	10,567
Equities	2,132,247	1,105,846	—	3,238,093
Real estate	—	—	709,589	709,589
U.S. real estate	—	—	155,736	155,736
Infrastructure	—	—	562,731	562,731
Hedge funds secondaries	—	—	14,870	14,870
Hedge funds	—	—	367,398	367,398
Private equity	—	—	204,663	204,663
Private debt	—	—	433,868	433,868
Derivative financial instruments	—	24,045	—	24,045
Other investment-related assets and liabilities	(257,534)	—	—	(257,534)
	1,951,202	**3,544,070**	**2,459,422**	**7,954,694**

**Bonds total is net of bonds sold under repurchase agreements of $309,150 (2019 – $265,605).*

December 31, 2019	Level 1	Level 2	Level 3	Total
Invested cash and short-term money market securities	68,350	45,109	—	113,459
Bonds*	—	2,193,119	—	2,193,119
Funds of hedge funds	—	—	16,547	16,547
Equities	2,002,769	802,643	—	2,805,412
Real estate	—	—	752,592	752,592
U.S. real estate	—	—	158,856	158,856
Infrastructure	—	—	488,592	488,592
Hedge funds secondaries	—	—	28,340	28,340
Hedge funds	—	—	349,183	349,183
Private equity	—	—	160,829	160,829
Private debt	—	—	454,656	454,656
Derivative financial instruments	—	21,765	—	21,765
Other investment-related assets and liabilities	(249,993)	—	—	(249,993)
	1,821,126	**3,062,636**	**2,409,595**	**7,293,357**

Bonds total is net of bonds sold under repurchase agreements of $309,150 (2019 – $265,605).

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	Infra-structure	Hedge fund secondaries	Hedge funds	Private equity	Private debt	Total
Fair value, December 31, 2018	210,557	697,633	125,545	351,586	47,887	—	164,948	443,783	2,041,939
Total unrealized gains (losses)	(58,072)	54,284	(4,301)	2,926	(12,971)	(3,392)	(10,247)	9,974	(21,799)
Purchases	—	675	45,126	156,835	—	352,575	18,709	36,379	610,299
Disposition	(135,938)	—	(7,514)	(22,755)	(6,576)	—	(12,581)	(35,480)	(220,844)
Fair value, December 31, 2019	16,547	752,592	158,856	488,592	28,340	349,183	160,829	454,656	2,409,595
Total unrealized gains (losses)	(2,201)	(29,812)	409	41,726	(13,470)	3,460	10,451	(22,428)	(11,865)
Purchases	—	1,809	2,694	92,584	—	14,755	46,555	3,070	161,467
Disposition	(3,779)	(15,000)	(6,223)	(60,171)	—	—	(13,172)	(1,430)	(99,775)
Fair value, December 31, 2020	10,567	709,589	155,736	562,731	14,870	367,398	204,663	433,868	2,459,422

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; 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, 2020				
Asset type	**Key factor**	**Fair value**	**+0.25%**	**−0.25%**
Real estate	Capitalization rate	865,325	(36,198)	39,392
Infrastructure	Discount rate	562,731	(8,973)	9,061
Hedge fund secondaries	Discount rate	14,870	(37)	37
Hedge funds	Discount rate	367,398	(3,674)	3,674
Private debt	Interest rate	433,868	(3,400)	3,442
Private equity	Discount rate	204,663	(1,405)	1,420
		2,448,855	**(53,687)**	**57,026**

December 31, 2019				
Asset type	**Key factor**	**Fair value**	**+0.25%**	**−0.25%**
Real estate	Capitalization rate	911,448	(38,025)	41,861
Infrastructure	Discount rate	488,592	(8,910)	9,172
Hedge fund secondaries	Discount rate	28,340	(85)	—
Hedge funds	Discount rate	349,183	(2,095)	2,095
Private debt	Interest rate	454,656	(3,922)	3,955
Private equity	Discount rate	160,829	(1,478)	1,498
		2,393,048	**(54,515)**	**58,581**

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:

- 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.
- 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, 2020	Notional amount	Fair value receivable	Fair value payable
Foreign exchange forward contracts	3,089,433	24,065	(20)

December 31, 2019	Notional amount	Fair value receivable	Fair value payable
Foreign exchange forward contracts	2,608,435	23,015	(1,000)

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:

	2020		2019	
	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	210,686	2.6	160,836	2.2
Canadian bonds	1,860,899	23.4	1,749,844	24.0
Non-Canadian bonds	185,594	2.3	167,670	2.3
Funds of hedge funds	10,567	0.1	16,547	0.2
	2,267,746	28.4	2,094,897	28.7
Equities:				
Canadian	347,345	4.4	499,604	6.8
Non-Canadian	2,890,748	36.3	2,305,808	31.7
	3,238,093	40.7	2,805,412	38.5
Alternative investments:				
Real estate	865,325	10.9	911,448	12.5
Infrastructure	562,731	7.1	488,592	6.7
Hedge funds secondaries	14,870	0.2	28,340	0.4
Hedge funds	367,398	4.6	349,183	4.8
Private debt	433,868	5.5	454,656	6.2
Private equity	204,663	2.6	160,829	2.2
	2,448,855	30.9	2,393,048	32.8
	7,954,694	**100.0**	**7,293,357**	**100.0**

7. Other liabilities

Other liabilities consist of the following:

	2020	2019
Accrued pension benefits	14,418	13,542
Fees payable to custodian, investment consultants and other advisers	7,543	5,666
Other accounts payable*	2,595	2,432
	24,556	**21,640**

**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. As a result, a transfer of the future obligation between the TTC and the Plan occurred effective January 1, 2019, and is included in the Statement of Changes in Net Assets Available for Benefits in 2019. 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, 2020. The most recent actuarial valuation of the post-retirement benefits was performed as at October 1, 2020. Information about the TTCPP's post-employment benefit plans is as follows:

	Post-retirement benefits	
	2020	**2019**
Benefit obligation, beginning of year	575	—
Other post-retirement benefit transfer from the TTC	—	420
Current service cost	66	41
Interest cost	18	16
Benefits paid	—	—
Actuarial loss	31	98
Benefit obligation, end of year	690	575

9. Pension benefit obligation

An estimate of the Plan's obligation for pension benefits has been made as at December 31, 2020, for inclusion in the Plan's financial statements by Mercer (Canada) Limited. The estimate is an extrapolation of the January 1, 2020, 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, prorated on service. The pension formula in effect in the Plan's Bylaws, including the current base period (average of the four calendar years before 2019 with the highest average pensionable earnings) for credited service before 2019, 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, 2020:

- a one-year update of the base period to December 31, 2019;
- a one-year update of the survivor benefit date to January 1, 2020; and
- a one-time ad hoc pensioner increase of 1.96% (2019 – 2.16%) as at January 1, 2020.

As at December 31, 2020, the financial impact of these changes is $104,145 (2019 – $94,109).

Assets were valued at fair value as at December 31, 2020.

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:

(B) STATUTORY ACTUARIAL VALUATIONS

In accordance with the *Pension Benefits Act* (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, 2020, and filed with regulators on October 16, 2020. The next required funding valuation filing with the regulators will be as at January 1, 2023.

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 jointly sponsored pension plan (JSPP), the Plan is permitted and has elected an exemption from solvency funding requirements. As a result of converting to a JSPP in 2011, only going concern deficits incurred on or after January 1, 2011, are to be funded.

	2020	2019
Discount rate, net of expenses	5.25%	5.50%
Rate of inflation	2.00%	2.00%
Weighted average rate of salary increase*	3.25%	3.25%

**Assumed salary increases from April 1, 2018, based on collective agreements and TTC announcements to non-union staff, with an additional 0.5% provision for individual factors. On and after April 1, 2022, 3.25% per annum increase.*

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 2, administrative expenses. Investment 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 13 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:

	2020		2019	
	Fair value	Cost	Fair value	Cost
PFS Exchange Inc.*	187,508	77,100	196,990	77,100
PFS GTA Industrial Inc.*	176,057	96,325	149,906	96,325
PFS Retail Two Inc.	55,575	51,500	71,299	51,500
PFS Office One Inc.*	205,718	204,700	210,509	204,700
PFS Retail One Inc.	38,160	15,980	38,382	15,980
5160 Orbitor Drive Ltd.	—	—	240	—
PFS Faubourg Inc.	44,796	60,075	60,866	58,265
PFS The Hudson	1,774	—	39,400	30,000
Debt on real estate properties	—	—	(15,000)	(15,000)
Net investment in real estate	709,589	505,680	752,592	518,870
1793177 Ontario Inc.*	300,149	218,505	243,412	184,693
TTC PFS Secondaries Inc	14,870	—	28,340	—
TTC PFS Private Equities Inc.*	204,663	127,225	160,829	93,842
TTC PFS Private Debt Inc.*	165,773	182,915	181,291	165,875
TTC PFS Taurus Inc.*	164,268	114,710	158,633	124,287
	849,723	643,355	772,505	568,697
Net related party alternative investments	**1,559,312**	**1,149,035**	**1,525,097**	**1,087,567**

**Exceeds 1% of the fair value or cost of the Plan in either 2020 or 2019.*

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, 2020	Earned income	Realized gain (loss)	Unrealized gain (loss)	Total
Fixed income:				
Invested cash	673	–	–	673
Short-term money market securities	737	552	219	1,508
Canadian bonds	65,536	53,872	89,178	208,586
Non-Canadian bonds	8,044	8,205	8,029	24,278
Fund of hedge funds	–	2,588	(2,201)	387
Derivatives	–	17,411	2,262	19,673
Equities:				
Canadian	13,316	36,013	(34,527)	14,802
Non-Canadian	91,560	154,582	153,013	399,155
Alternative investments:				
Real estate	25,530	12,846	(29,404)	8,972
Infrastructure	48,160	–	41,726	89,886
Hedge funds secondaries	5,713	–	(13,470)	(7,757)
Hedge funds	–	5,669	3,461	9,130
Private debt	28,521	–	(22,428)	6,093
Private equity	10,824	–	10,451	21,275
	298,614	**291,738**	**206,309**	**796,661**

December 31, 2020	Earned income	Realized gain (loss)	Unrealized gain (loss)	Total
Fixed income:				
Invested cash	631	–	(1)	630
Short-term money market securities	1,917	269	(226)	1,960
Canadian bonds	62,098	33,028	90,234	185,360
Non-Canadian bonds	6,773	3,637	360	10,770
Fund of hedge funds	–	66,554	(58,073)	8,481
Derivatives	–	(25,696)	75,846	50,150
Equities:				
Canadian	16,593	123,821	(38,435)	101,979
Non-Canadian	60,846	108,635	241,982	411,463
Alternative investments:				
Real estate	31,732	–	49,984	81,716
Infrastructure	21,534	–	2,926	24,460
Hedge funds secondaries	8,622	–	(12,971)	(4,349)
Hedge funds	–	(271)	(3,392)	(3,663)
Private debt	9,671	–	9,974	19,645
Private equity	15,400	–	(10,247)	5,153
	235,817	**309,977**	**347,961**	**893,755**

12. Investment and Plan administration expenses

Beginning in 2019, the Plan began to pay most TTCPP administrative expenses, in exchange for an annual Sponsor contribution (NOTE 1). The following summarizes the expenses paid by the Plan:

	2020	2019
Investment managers' fees	17,534	13,275
Other Plan administration expenses	5,335	4,696
Custodial fees	608	669
Actuarial fees	533	480
Legal fees	324	85
Benefit obligation, end of year	115	135
	24,449	**19,340**

13. Significant investments and statutory disclosure

(A) SIGNIFICANT INDIVIDUAL SECURITIES**

As at December 31, 2020, 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 NOTE 13c:

	2020		2019	
	Fair value	Cost	Fair value	Cost
PFS Exchange Inc.	187,508	77,100	196,990	77,100
Northleaf Star Investor Corp.	174,994	138,101	170,060	137,788
PFS GTA Industrial Inc.	176,057	96,325	149,906	96,325
Prima Mortgage Investment Trust	142,688	150,019	149,187	136,027
PFS Office One Inc. – Tahoe	128,382	109,700	125,238	109,700
Brookfield Americas Infrastructure Fund	98,348	32,734	114,779	59,117
Northleaf Private Credit	93,101	80,344	103,304	95,274
PFS Office One Inc. Twin Atria*	77,336	95,000	85,271	95,000

**In 2019, asset represented 1% of the fair value or cost of the Plan.*

(B) SIGNIFICANT ISSUERS**

The Plan has invested in the following issuers of fixed-income and equity securities an amount that exceeds 1% of the fair value or cost of the Plan's net assets:

	2020		2019	
	Fair value	Cost	Fair value	Cost
Province of Ontario	252,244	229,406	243,544	233,068
Government of Canada	210,788	200,407	246,360	241,623
Province of Quebec	142,382	131,534	131,158	126,968

(C) POOLED FUND INVESTMENTS

The Plan owns the following pooled fund investments as at December 31, 2020. The fair value of these pooled fund investments is included in the statement of financial position under the investment type to which they relate.

	2020		2019	
	Fair value	Cost	Fair value	Cost
Short-term money market securities:				
PHN Institution short-term investment fund	29,552	29,552	17,944	17,944
PHN Municipal Plus Bond Series O	14,622	13,987	13,165	12,937
PHN 9028 RBC O Fund	3,794	3,425	—	—
TDAM TD Emerald Canada Treasury	3,003	3,003	2,374	2,374
	50,971	49,967	33,483	33,255
Fixed income:				
Canso Corp. & Infrastructure Debt	32,119	29,564	28,504	27,845
Canso Private Loan Fund	15,248	15,971	15,960	16,301
Black Rock Universe Bond Fund*	229,703	216,835	176,162	170,955
PHN Long Bond Pension Trust*	384,985	359,175	341,623	326,365
PHN Investment Grade Corp Bond Trust*	128,022	124,624	101,667	101,699
PHN Mortgage Pension Trust Fund	11,425	11,018	12,863	12,676
RBC High Yield Bond Fund	—	—	36	34
Mesirow Absolute Return Fund (institutional)	10,567	7,334	16,547	11,114
PHN High Yield Bond Fund, Series O	7,161	6,532	68	67
	819,230	771,053	693,430	667,056
Non-Canadian equities:				
Arrowstreet Global All Country Fund I PVAC*	670,364	599,329	395,040	375,030
SPDR S&P 500 Exchange Traded Fund	—	—	9,191	8,206
Harding Loevner Emerging Market Equity*	279,871	161,215	250,964	161,215
Oaktree Capital Emerging Market Equity*	155,611	103,558	139,599	103,558
	1,105,846	864,102	794,794	648,009
Real estate:				
Blackstone U.S. Real Estate Fund*	96,556	95,189	97,339	90,492
CBRE V8 U.S. Real Estate Fund	59,180	53,268	61,517	56,944
	155,736	148,457	158,856	147,436
	2,131,783	**1,833,579**	**1,680,563**	**1,495,756**

**Exceeds 1% of the fair value or cost of the Plan in either 2020 or 2019.*
***Excludes currency (NOTE 4b), derivatives (NOTE 6b), pooled fund investments (NOTE 13c) 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, hedge fund secondaries, 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 U.S. $119,574 (2019 – U.S. $143,574) in existing infrastructure investments, up to an additional U.S. $0 (2019 – U.S. $11,500) in hedge fund secondaries, U.S. $26,678 in private debt (2019 – U.S. $14,154), U.S. $131,513 in private equities (2019 – U.S. $99,852) and an additional U.S. $4,347 in U.S. real estate (2019 – U.S. $6,348).

15. Comparative Information

Certain comparative figures have been reclassified to be consistent with the current year presentation.

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TPP007_2020-Annual-Report_PA (06/21)