Experience You Can Count On.

ATRF 2020 Annual Report

ATRF Alberta Teachers' Retirement Fund Board

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Alberta *Teachers' Retirement Fund*

Established in 1939, the Alberta Teachers' Retirement Fund (ATRF) is an independent corporation governed by *Alberta's Teachers' Pension Plans Act*. From our office in Edmonton, Alberta, we are the trustee, administrator and custodian of the pension assets of the Teachers' Pension Plan for all Alberta teachers in school jurisdictions and charter schools and the Private School Teachers' Pension Plan for Alberta teachers in participating private schools.

Registered under the *Income Tax Act*, the plans are sponsored by the Government of Alberta (GOA) and the Alberta Teachers' Association (ATA) who are jointly responsible for plan design, benefits and funding arrangements.

MISSION

Working in partnership to secure your pension income.

MANDATE

ATRF's mandate is to deliver the benefits established by the plan sponsors for current and future plan members. This requires a plan that is sustainable over the long term at a cost and risk level acceptable to the plan sponsors.

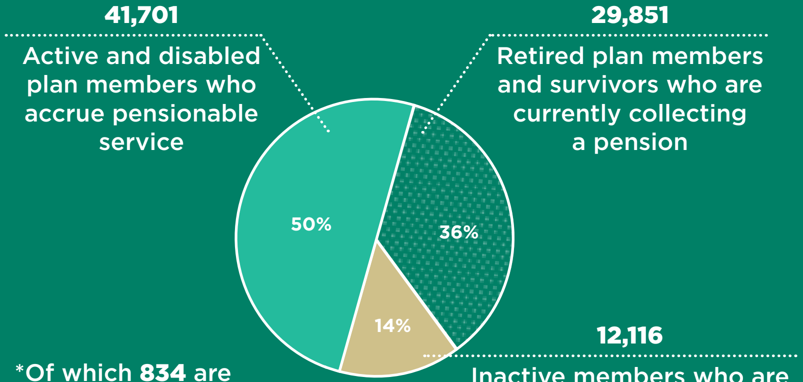
CUSTOMER SERVICE STATEMENT

ATRF provides what you need the first time.

- We listen to understand your needs.
- We provide accurate and timely information and benefit payments.
- We deliver value-added investment performance.

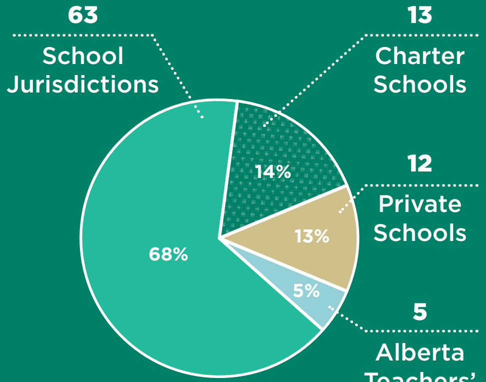
2019-20 *Highlights*

83,668 Plan Members*



*Of which **834** are members of the Private School Teachers' Pension Plan

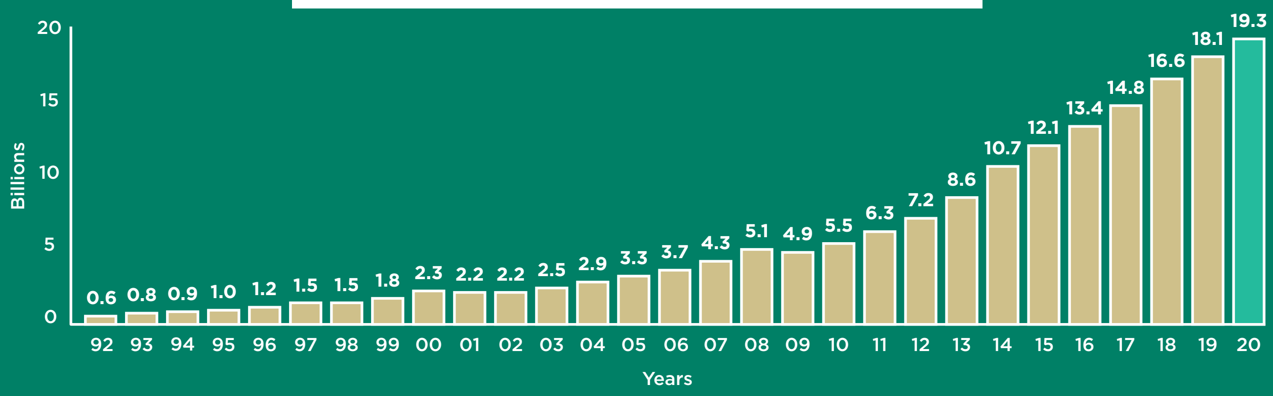
93 Employers



Plan Member Statistics

as at August 31	2020	2010	2000
Active and disabled member average age	42.3	41.7	42.7
Active and disabled member average years of pensionable service	11.7	11.1	12.0
Retired member average age	72.1	68.0	68.0
New retired member average age	60.0	59.0	57.8
Average pensionable service of new retired members	25.5	26.2	26.6

Net Assets As at August 31 (Canadian $)



Policy Asset Mix

as at August 31, 2020	
TOTAL	**100.0%**
Return Enhancing	**46.0%**
Global Equity	36.0%
Private Equity	10.0%
Fixed Income	**21.0%**
Universe Bonds	10.0%
Long-term Bonds	9.0%
Money Market	2.0%
Inflation Sensitive	**23.0%**
Real Estate	15.0%
Infrastructure	8.0%
Absolute Return	**10.0%**

In 2019-20:

Total Contributions: **$829 Million**

Total Benefits Paid: **$658 Million***

*An additional **$489** million was received from the Government of Alberta for benefits paid by ATRF relating to the pre-1992 period. Annual benefit payments combined total over **$1.147** Billion.

Providing Excellent Value

Administrative cost of **$118** per member per year compared to **$174** average cost per member per year for a peer group of Canadian public sector pension organizations.

The current contribution rates, which were reduced effective September 1, 2020, remain adequate to fund the benefits and we are pleased to confirm these rates will stay the same for the next school year (2021-22).

Interesting Facts

ATRF is listed **19** on the *Top 100 Canadian Pension Funds* by asset size and **grew by 9.5%** in 2019.

(Benefits Canada 2020 Top 100 Pension Funds Report)

96% funded - Teachers' Pension Plan – up from 82% in 2015.

103% funded - Private School Teachers' Pension Plan – up from 90% in 2015.

$34,189

is the average annual pension payment, an **increase of 2.1%** over last year.

Amongst those receiving a monthly pension, **87%** of recipients reside in **Alberta**. Of those residing outside of Alberta, **9%** reside **outside of Canada.**

The oldest plan member is **110 years old**, and has been receiving a pension for **46 years.**

Board *Chair Message*

SANDRA JOHNSTON

Last year was a memorable one at the Alberta Teachers' Retirement Fund (ATRF), to say the least.

In addition to the tremendous turmoil caused by a pandemic, at ATRF we also spent much of the year preparing for and beginning to manage the most significant change our organization has experienced.

Through it all, the unparalleled experience, expertise, and dedication of our board and staff shone bright, and so I am very pleased and exceptionally proud to report that teachers' retirement benefits, and our organization, remain strong and stable.

Much of the past year was spent ensuring members continued to be provided with excellent service while beginning to transition the investment management of the plans' assets. In the 2019 provincial budget the Government of Alberta, as one of our two plan sponsors, announced ATRF would be required to transfer management of all investments to the Alberta Investment Management Corporation (AIMCo). While this was unexpected for us, we nonetheless shifted our priorities and are working tirelessly to effect this change in a way that ensures the best interests of our plans are protected as much as possible.

Bill 22, the *Reform of Agencies, Boards and Commissions and Government Enterprises Act*, was passed into law in November of 2019 and confirmed the ATRF Board's continued responsibility for providing the strategic direction that will guide the way the plans' assets are invested. Our mandate at ATRF is to deliver the benefits established by the plan sponsors for current and future plan members, and that is what we will continue to do.

We take that responsibility very seriously, and have spent countless hours working to ensure our relationship with AIMCo is established in a way that enables ATRF to continue to protect our plans' best interests as our members have come to expect over our decades of building trust with Alberta teachers. Effective governance is always important for pension plans, where providing prudent strategic direction and reinforcing a focus on long-term objectives has a particularly significant impact. This past year, strong governance was especially important in ensuring ATRF is able to continue providing an appropriate framework to manage investments on behalf of our members.

Our new relationship with AIMCo is built around the principle that the ATRF Board will continue to provide strategic direction to guide the way investments are managed, and AIMCo will implement that direction. That means we will retain strategic control over our asset management and will continue to set the policy asset mix in order to ensure proper funding of the plan, and, importantly, the amount and type of risk we are willing to accept with our investments. We are also making sure appropriate reporting mechanisms will be in place so we can continuously monitor the execution of the direction we provide. Our duty to ensure excellence in the management of our plans' assets is one we do not take lightly.

While that work was progressing, we also started the process of setting the direction for new ways our organization can effectively serve our members and other stakeholders in the short term and once the transfer of asset management is complete. We are developing and looking forward to launching a new strategic plan that will ensure Alberta teachers, our plan sponsors, and all our stakeholders continue to receive excellent value from the services provided by our organization for years to come.

Looking ahead, I am also pleased to announce that we will be able to keep contribution rates the same for the 2021-22 school year as they were in 2020-21. That means after several years of reducing contribution rates, our sound management and strong investment returns leave our plans well funded, even after going through last year's dramatic financial market turmoil.

On behalf of the ATRF Board I would like to acknowledge the hard work and dedication of ATRF employees. Their tireless efforts through challenging times showed remarkable dedication to our members, and speaks volumes about this organization and the way it truly lives its values.

I would also like to recognize the efforts of our plan sponsors, the Alberta Teachers' Association and the Government of Alberta. Both work diligently to serve teachers and Albertans, and we appreciate the effort that went into supporting our organization as we work to transition the management of our plans' assets.

On a personal note I wish to welcome three new board members who joined our team this year: Brad Langdale, Rafi Tahmazian and Tim Wiles. I look forward to collaborating with them.

Finally, I know I speak for the ATRF Board and all our staff when I say how much we appreciate the support of our members. Serving teachers with respect and care for the past eight decades has built a strong bond between ATRF and our members, and that relationship means a great deal to me and our entire team.

SANDRA JOHNSTON
Board Chair

ATRF Board

SANDRA JOHNSTON Board Chair

Sandra joined the ATRF Board in 2012 and became Board Chair in July 2019. Sandra taught in the Peace River School Division before joining the Teacher Welfare executive staff of the Alberta Teachers' Association (ATA) in 2001, where she held the position of Coordinator from 2013 to 2020.

As well as coordinating central and local collective bargaining and acting as the representative of the bargaining agent, Sandra was the ATA's pension expert. She has written and presented extensively on pensions and retirement issues for Alberta teachers.

KAREN ELGERT

Karen is a District Principal in Wetaskiwin, Alberta, and has worked for the Wetaskiwin Regional Public School Division for more than 30 years. She currently oversees the Wetaskiwin Outreach High School and School at Home Learning and is responsible for Summer School. She has been active throughout her career with the local ATA, serving on EPC and NSC committees. Karen holds a B.F.A. and B.Ed. from the University of Calgary and a M.Ed. from the University of Alberta. Karen joined ATRF in August of 2009.

GREG FRANCIS

Greg served as General Counsel and Superintendent of Human Resources for the Calgary Board of Education from 2012 to 2018. He has since returned to providing arbitration and mediation services in the labour relations context. Greg is also a member of the Board of Directors of the Old Trout Puppet Workshop. He was appointed Queen's Counsel in 2016. Greg joined the ATRF Board in March 2019.

PAUL HAGGIS

Paul is a graduate of Western University and a Chartered Director (C. Dir) of the Directors College through DeGroote Business School at McMaster University. He began his financial career in the banking sector. Following nine years in corporate banking, Paul joined Metropolitan Life, finishing as COO of Canadian operations. He also served as CEO of the Ontario Municipal Employees Retirement System (OMERS), was a founding director and interim CEO of the Public Sector Pension Investment Board (PSPIB) and CEO of the Alberta Treasury Branches (ATB Financial).

He recently retired as the Chair of the Alberta Enterprise Corporation. Paul was commissioned into the Royal Canadian Air Force Reserve in 1971 and retired as an Honorary Colonel in 1997. He is a Life Honorary Trustee of the Royal Ontario Museum and a recipient of the Queen's Golden Jubilee Medal. Paul joined the ATRF Board in August 2019.

ATRF Board

MARIA HOLOWINSKY

Maria recently retired as Director of Research for CWB Wealth Management. Previously, she was CEO of Adroit Investment Management, Edmonton's largest independent investment counselling firm, until it was acquired by Canadian Western Bank. She recently served on the Edmonton Economic Development Corporation Board as Director and Governance Chair, and previously served as Chair of the Edmonton Boxing Commission. She is very proud of her role in helping to develop the PRIME Program (a student-run investment program that manages a fund worth over C$1,700,000) at the University of Alberta, where she was a founding board member, past Chair, and mentor for two decades. She has served as a Curriculum Committee member and Exam Grader for the CFA Institute, and lecturer for the Institute of Chartered Accountants' continuing education program.

She currently serves on the Investment Committees of NAIT and Athabasca University, and is Vice Chair of the University of Alberta Board Investment Committee. Maria is a Chartered Financial Analyst, a graduate of the Institute of Corporate Directors ICD Rotman Directors Education Program, and holds a Bachelor of Economics from the University of Alberta. She joined the ATRF Board in May 2017.

BRAD LANGDALE

Brad is a high school teacher with Parkland School Division in Spruce Grove, Alberta. Brad has been active in his professional association, working for and representing his professional colleagues by serving on various committees. Brad holds a B. Ed from the University of Alberta and teaches Physics and general sciences. Brad joined the ATRF board in December of 2019.

RAFI G. TAHMAZIAN

Rafi G. Tahmazian has more than 29 years of oil & gas, energy banking and investment management experience. He is currently a Director and Senior Portfolio Manager with Canoe Financial. Prior to Canoe, Rafi spent 13 years at First Energy Capital, a leading investment dealer that focuses on the energy industry. He left the firm in 2008 as Vice Chairman and Managing Director. He is currently on the Board of Directors for Canoe Financial LP, the Alberta Teachers' Retirement Fund, Artis Exploration Ltd, Aureus Energy Services Inc, Chance Oil and Gas Ltd, Topaz Energy Corp and Well Ventures Corp.

Rafi graduated from the University of Calgary with a Bachelor of Arts in Economics.

Rafi manages the Canoe Energy Class, Canoe Energy Income Class, and the Canoe Energy Alpha Fund. He joined the ATRF Board in January 2020.

TIM WILES

Until he recently retired, Tim was the President & Chief Executive Officer of the Credit Union Deposit Guarantee Corporation since March 2013. Prior to that, Tim spent almost 25 years with the Government of Alberta with the last seven years as a Deputy Minister. His time in government was mostly spent in the Finance Ministry in a variety of roles including Deputy Minister, Controller and acting Chief Internal Auditor. He also served as the Deputy Minister for Education and for Seniors and Community Supports Ministries.

Tim has served on several boards including the Public Service Pension Board, Alberta Capital Financing Authority, AIMCo, Credit Union Deposit Guarantee Corporation, and the Public Sector Accounting Board of the Association of Professional Accountants. Tim holds a chartered professional accountant designation (fellow) and Bachelor of Commerce degree, from the University of Alberta. He joined the ATRF Board in March 2020.

***CEO** Message*

ROD MATHESON

Last year our organization faced a remarkable range of challenges. I'm very pleased to say the experience of more than 80 years of serving Alberta teachers prepared us well to weather these storms, and we have emerged as an organization on solid footing, well-positioned to continue serving members and plan sponsors for years to come.

As the world transitioned to working remotely, ATRF staff showed exceptional dedication and creativity in coming together to ensure members continued to receive our vital services even as the COVID-19 pandemic changed the way all of us work. In a remarkably short time, our team was able to transition to a new way of working, and I could not be prouder to report that member services and investment management continued virtually uninterrupted throughout the pandemic.

Our entire workforce transitioned to remote working within just a few days, and we found new ways to serve members when our offices were closed to the public. We started offering virtual, online seminars for members, for instance, when it became impossible to hold the in-person seminars we normally offer each year to help explain the benefits of our pension plans. We continue examining our service model to find new and innovative ways to efficiently serve members – now, and for the longer term when the pandemic has passed as well.

On the investment side, in light of the extremely volatile market environment, I am pleased with the investment results we were able to achieve. Last year's financial markets will long be remembered for some of the most unpredictable volatility in history, including the largest single week decline in global markets in over a decade in March 2020. Our primary focus during this market turmoil was on managing risk during the worst of the crisis and preserving the value of the plans, and we were successful in both areas.

Last year we exceeded our investment benchmarks in several asset classes, but did not meet our targets for public equity or absolute return assets. Our total plan return of 5.5% was quite strong considering market conditions, although it fell short of our 7.3% benchmark for the year.

Our portfolio is well-diversified and seeks to balance risk in order to stabilize returns over the long term. As a result, we were able to achieve total plan returns over the past four years of 7.6% and 9.2% over the past 10 years, exceeding our targets of 7.3% and 8.5% respectively.

These strong long-term results are possible as a direct result of the unique and extensive experience our team has in managing our investments with the specific intention of funding pensions. We take a long-term investment approach, strategically crafted to manage risk in such a way that we are able to fund our plan benefits appropriately, while controlling our exposure to risks that might disrupt that continual source of funding.

I am very pleased to report that ATRF pension plans remain on a very stable foundation. This year the Teachers' Pension Plan is 96% funded, up from 82% in 2015. The Private School Teachers' Pension Plan is 103% funded, up from 90% in 2015. This means teachers and stakeholders can be confident in the stability of their pensions today, and for many years to come.

As we move forward, we will closely monitor the results of our new investment management relationship with AIMCo, and we continue carefully building structures and processes to do exactly that. We will remain focused on this new relationship and work collaboratively with our new asset managers at AIMCo on behalf of our members to ensure ATRF assets are managed in a way that serves our plans' best interests.

I would like to echo the sentiments of our Board Chair in expressing my gratitude on behalf of our Executive Leadership Team for the hard work and dedication of our staff, and for the ongoing support of our board. I would also like to thank ATRF's long-time Vice President of Information and Technology Services, Albert Copeland, who retired after more than 36 years of dedicated service.

On behalf of all of us at ATRF, I want to thank our members for their support, and let them know that we will continue working tirelessly to earn that support in the years to come.

ROD MATHESON
Chief Executive Officer

ATRF EXECUTIVE LEADERSHIP TEAM **As at August 31, 2020**

Rod Matheson
Chief Executive Officer

Derek Brodersen
Chief Investment Officer

Tina Antony
Vice President, General Counsel and Corporate Secretary

Albert Copeland
Vice President, Information & Technology Services

Marcie Chisholm
Vice President, People & Culture

Julie Joyal
Vice President, Pension Services

Myles Norton
Vice President, Finance

Gary Smith
Vice President, Fund Risk & Strategy

ATRF Governance

ATRF provides services to Alberta teachers and employers on behalf of our plan sponsors (the Government of Alberta and the Alberta Teachers' Association). Effective corporate governance helps to ensure ATRF remains focused on successfully fulfilling its mandate while also enhancing long-term value.

Kananaskis, Alberta

BOARD COMMITTEES

Audit and Finance Committee

Responsible for the corporation's financial reporting, accounting systems and internal controls. The committee oversees and is responsible for ATRF's external audit, and recommends the approval of financial statements to the board. It also reviews ATRF's business plan, operating, and capital budgets.

Governance Committee

Helps the board fulfill its governance responsibility by developing effective corporate governance principles, policies, standards, and practices. The committee facilitates appropriate and efficient board operations and acts as a resource for the board chair and committee chair renewals, governance oversight and competency and effectiveness evaluation.

Human Resources and Compensation Committee

Responsible for performing duties that enable the board to fulfill its oversight responsibilities in relation to ATRF's human resources and compensation matters including compensation design, risk and reward alignment and succession planning.

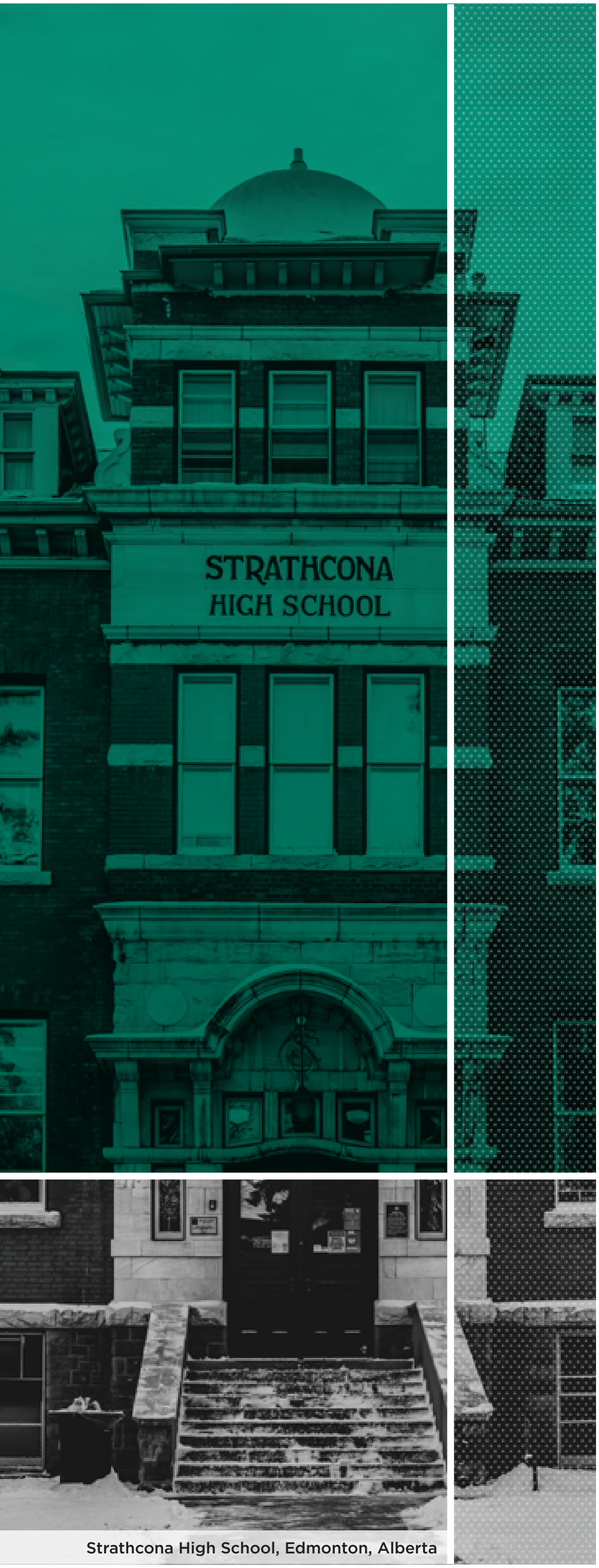
Investment Committee

Approves investment policy, and is responsible for monitoring, analyzing and determining strategic investment matters. The committee verifies that investment strategies are implemented, and that they comply with legislative and ATRF requirements. The committee also monitors and evaluates the performance and cost-effectiveness of investment policies and strategies.

Review Committee

Hears plan members' cases to review administrative decisions made by ATRF staff. The committee consists of the entire board.

Caernarvon Elementary School, Edmonton, Alberta



Strathcona High School, Edmonton, Alberta

BOARD ATTENDANCE AND REMUNERATION

ATRF compensates all board members for their experience, expertise, and the time they commit to their work on behalf of our members and our sponsors.

Board members are also compensated for the extra work involved in chairing committees, and for their attendance at these important committees.

The *Teachers' Pension Plans Act* provides that cash renumeration cannot be paid to board members who work for an employer covered by the plans, the GOA, or the ATA. Employers are reimbursed for time spent by certain board members.

To ensure compensation is fair and appropriate, ATRF engages an external consultant periodically to review remuneration for board members and assist in establishing levels of remuneration. The review is based on a survey of the compensation being paid by other similar Canadian public sector pension investment and administration organizations.

In the past year, board remuneration was paid according to the following schedule:

	2019-20 ($)
Board Chair Retainer	25,000
Board Member Retainer	15,000
Committee Chair Retainer	4,000
Fee per Board or Committee Meeting (in excess of 4 hours)	1,200
Fee per Board or Committee Meeting (less than 4 hours)	800

Board members are also reimbursed for reasonable expenses for travel, meals and accommodation, as required to perform their duties.

ATRF Board Meeting Attendance/Remuneration

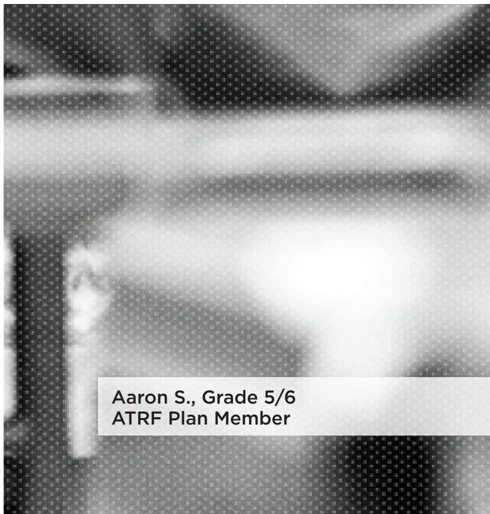
Board Member	Board Meetings	Committee Meetings[12]	Special Committee Meetings	Other (Orientation, education, other meetings)	2019-20 Total Remuneration ($)
Sandra Johnston[1, 11]	12/12	13/13	5/5	6/6	16,733.33
Catherine Connolly[2]	7/7	10/10	—	2/2	25,133.33
Karen Elgert[3, 11]	11/12	17/18	—	2/2	n/a
Greg Francis[4]	11/12	22/22	—	3/3	50,400.00
Paul Haggis[5]	11/12	12/15	—	3/4	42,400.00
Maria Holowinsky[6]	12/12	17/17	5/5	7/7	55,800.00
Brad Langdale[7, 11, 13]	6/6	5/5	4/4	3/3	n/a
Kareen Stangherlin[8]	7/7	11/11	—	1/1	24,733.33
Rafi G. Tahmazian[9]	4/5	5/6	—	2/2	19,600.00
Tim Wiles[10]	3/3	6/6	—	2/2	16,250.00
Total	**—**	**—**	**—**	**—**	**251,049.99**

1 Board Chair
2 Former Chair, Investment Committee; ceased to act December 31, 2019.
3 Chair, Human Resources and Compensation Committee.
4 Chair, Governance Committee December 12, 2019.
5 Chair, Audit and Finance Committee December 12, 2019.
6 Chair, Governance Committee until December 12, 2019; Chair, Investment Committee December 12, 2019; Unofficial Chair, Bill 22 Special Committee.
7 Appointed December 3, 2019.
8 Former Chair, Audit and Finance Committee; ceased to act December 31, 2019.
9 Appointed effective January 1, 2020.
10 Appointed March 25, 2020.
11 In accordance with legislation, no cash remuneration is paid to these board members as they work for an employer or employer contributor. Employers are reimbursed for time spent by these board members. In 2019-20, the amount reimbursed was $52,717.86 in total. Sandra Johnston became eligible for cash remuneration on May 1, 2020. Prior thereto the ATA was reimbursed for time spent of $22,473.44.
12 Totals exclude ex-officio and guest attendance.
13 Appointed to Bill 22 Special Committee on January 22, 2020.

WHISTLEBLOWER DISCLOSURES

In compliance with Whistleblower legislation, ATRF has an established policy and program which provides all employees with the ability to confidentially report any failure to comply with our Code of Conduct. In 2019-20, there were no disclosures received.

Member Service



Aaron S., Grade 5/6
ATRF Plan Member

EXPERIENCE + DEDICATION = QUALITY SERVICE

We've been supporting Alberta teachers on behalf of our plan sponsors for more than 80 years, and we've developed unique expertise over those years to help members with their retirement income.

We understand that no two plan members are the same, and I am proud of ATRF's personalized and caring approach. Our commitment is to listen and understand the needs of our plan members, and deliver accurate and timely information and benefit payments. Our plan members are at the heart of what we do, and we are continually improving our connections with them – whenever and however they access our services.

Whether a member has a one-on-one conversation with an ATRF representative, is looking for information on our website, or is accessing the My*Pension* portal, our goal remains the same – to provide an exceptional experience and make a meaningful difference for the members we serve.

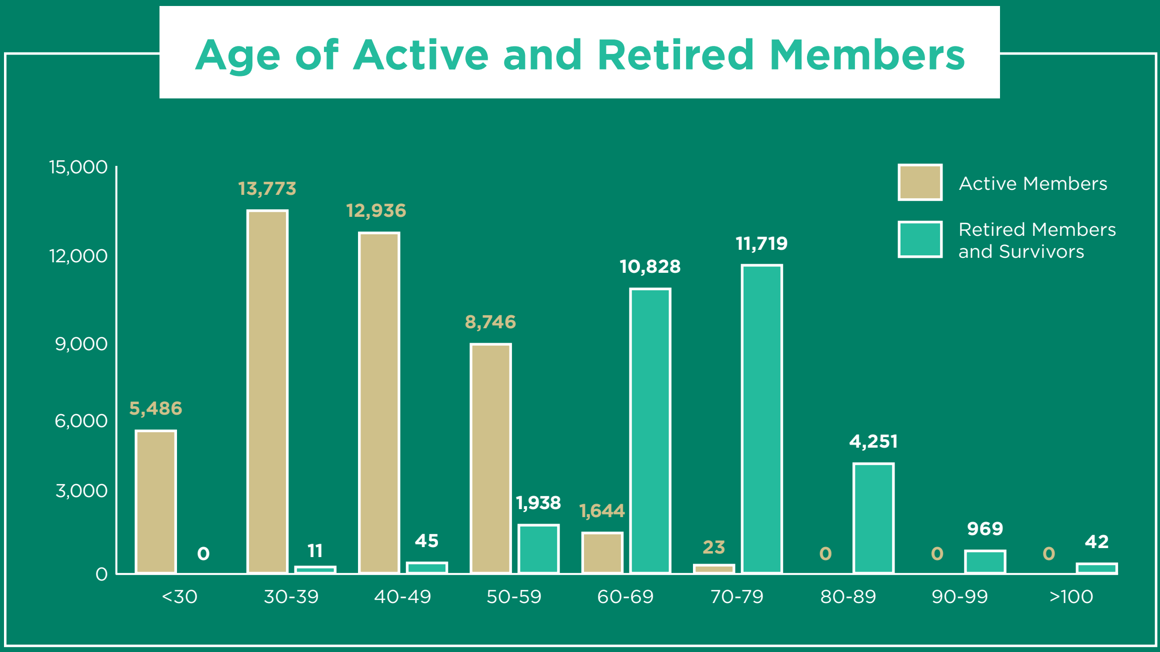
Our approach to member service is one of continual improvement, where we constantly look at the way we do things to serve members even better. That's the driving force behind our 'Project Lantern' which members will hear more about next year as the benefits of that work start to roll out. We have made significant changes recently to respond to the COVID-19 pandemic which required us to move quickly and efficiently to ensure we were able to continue serving members. I am pleased to report some of those improvements will be here to stay.

JULIE JOYAL
Vice President, Pension Services

A DIGITAL YEAR-AT-A-GLANCE

- A **19% increase** in pension estimates completed on My*Pension* over last year.
- A **49% increase** in documents posted to plan members' accounts in My*Pension*.
- A **103% increase** in pension applications completed on My*Pension*.
- Over **230 benefit estimates** were completed on average per day on My*Pension*, an increase of nearly 23% over last year.
- **Helped 1,147** members start their pensions.
- We introduced **online seminars** which reach teachers in various locations around the province.

Demographic Profile



Service Levels

In the face of significant challenges posed by the COVID-19 pandemic, ATRF shifted rapidly to ensure members were supported without interruption while continuing to meet service level benchmarks that are among the best in the industry.

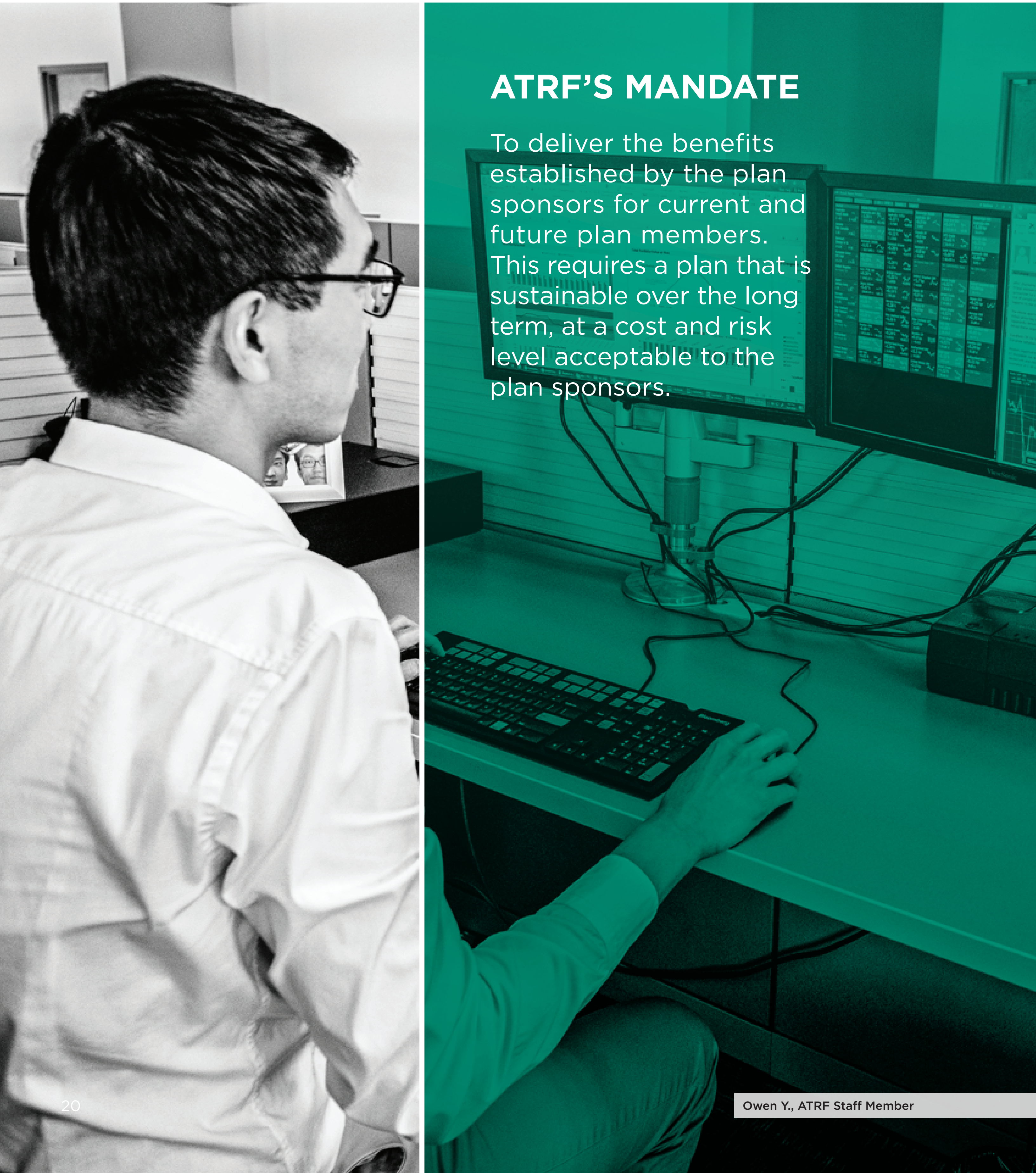
Service Provided	Benchmarks for 2019-20	Average Elapsed Time in 2019-20	% That Met or Exceeded Benchmark
Ongoing pension payments	On the third last business day of the month	All payments made on time	100%
Pension options package	Within 5 days of application	6 days	61%
Pension payment processed for new retired members	Within 5 days	6 days	61%
Pension estimate	Within 5 days	2 days	91%
Termination benefit package	Within 7 days	6 days	74%
Purchase of service estimate	Within 7 days	2 days	94%
Written inquiries	Within 3 days	1 day	96%
Telephone inquiries	Within 1 day	1 day	100%

Key Results from New Retired Member Survey

Each of the 1,147 plan members who retired during the 2019-20 fiscal year received a new retired member survey. We thank all of the respondents for your feedback! The insights we glean from this survey are critically important and we will use the comments and suggestions to continue to improve the level of service provided to our retiring plan members. You can see the key satisfaction results from this survey in the chart to the right.

	2019-20	2018-19
Overall satisfaction with retirement process	94%	92%
Overall customer service satisfaction	97%	95%

Plan Funding



ATRF'S MANDATE

To deliver the benefits established by the plan sponsors for current and future plan members. This requires a plan that is sustainable over the long term, at a cost and risk level acceptable to the plan sponsors.

Owen Y., ATRF Staff Member

PLAN STRUCTURE AND FUNDING

The Teachers' Pension Plan and the Private School Teachers' Pension Plan have three unique funding arrangements and liability structures:

- **Teachers' Pension Plan pre-1992 fund:** A 2007 agreement between the Government of Alberta (GOA) and the ATA assigns government responsibility for liabilities associated with pensions for the period of service before September 1992.
- **Teachers' Pension Plan post-1992 fund:** The cost of pension benefits earned for service after August 1992 is shared equally between active plan members and the GOA. Funding deficiencies under the plan are amortized by additional contributions from active members and the Government of Alberta over a maximum 15-year period.
- **Private School Teachers' Pension Plan:** In 1995, legislation established a separate plan for private school teachers. The funding of this plan mirrors the post-1992 portion of the Teachers' Pension Plan, except the cost is shared between teachers and employers (private schools) instead of the Government of Alberta.

FUNDING OBJECTIVES

The ATRF Board has established a funding policy focused on sustainability to ensure the plans will be able to pay pensions to members and their beneficiaries, both today and over the long term.

The primary funding objective is the **security of member benefits**, which is a crucial element of a plan's sustainability. This is achieved by doing regular funding assessments, with the goal of ensuring the plans are fully funded over the long term – meaning there will be enough money to pay current and expected pensions for all plan members.

The plans may not be fully funded every year depending on the economic and demographic environments. The funding assessments take this into account and target, with a high probability, for the funded ratio to remain above a sufficient level every year to deliver the benefits while also ensuring contributions do not increase to unaffordable levels.

The second funding objective is **keeping contribution rates stable**. The goal is to ensure contributions remain relatively stable from year-to-year, avoiding large up and down adjustments in pension deductions on teachers' pay.

The cost of the plans must also be sustainable over time, and should reflect the long-term view of the plans' assets and liabilities. This supports the third funding objective of **inter-generational equity**. This means that, to the extent possible, each generation of active members funds the benefits accruing for that generation of active members.

To achieve these funding objectives, various risk management tools are used. For example, the funding valuation uses an actuarially accepted practice of smoothing fund returns over a five-year period to 'even out' the impact from the volatility of market returns on the plans' funded status and contribution rates. This practice, called *asset smoothing,* produces a funding value of assets that can be higher or lower than the market value in any given year.

Funding Status as at August 31, 2020

ATRF regularly conducts actuarial funding studies to assess the value of the plans' liabilities compared to their assets and to ensure adequate funding. An actuarial valuation is a report on the health of the plans.

The funded status of the plans based on the most recent actuarial valuation as at August 31, 2020 is:

Teachers' Pension Plan Post-1992 Period

($ Billions)	
Funding Value of Assets	18.802
Funding Liabilities	19.513
Funding Deficiency	0.711
Funded Ratio	96%

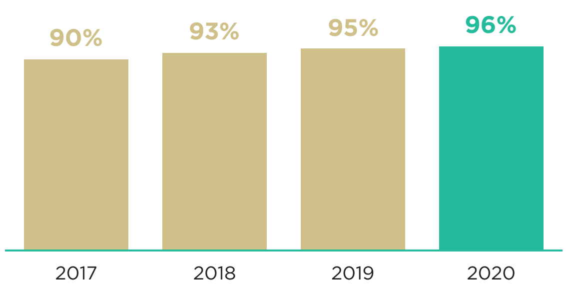
Private School Teachers' Pension Plan

($ Millions)	
Funding Value of Assets	96.389
Funding Liabilities	93.909
Funding Surplus	2.480
Funded Ratio	103%

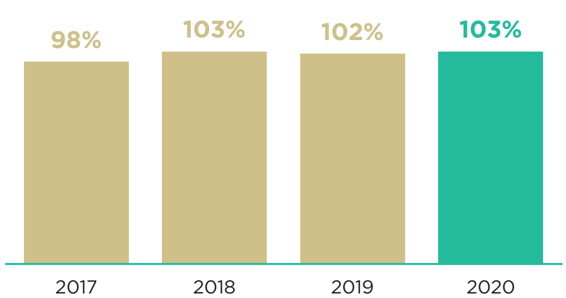
Based on these valuations, the funded status of the Teachers' Pension Plan (TPP) continues to prudently build towards being fully funded. The Private School Teachers' Pension Plan (PSTPP) is fully funded once again this year.

The plans' funding is calculated using actuarial assumptions and methods. The funding assumptions include margins (or cushions) to buffer against unfavourable results in the rate of returns or other factors affecting the plans. The margin is one of the tools to help achieve our funding objectives of contribution stability and benefits being fully funded. Both plans have healthy margins built in at this time.

Teachers' Pension Plan Funded Ratio



Private School Teachers' Pension Plan Funded Ratio



Contribution Rates

The ATRF Board carefully reviews a number of factors when determining the plans' contribution rates.

Contribution rates were reduced, effective September 1, 2020, by a total of 1% of teachers' pay for the Teachers' Pension Plan, and 0.54% for the Private School Teachers' Pension Plan.

These current rates, as shown in the following tables, remain adequate to fund the benefits and we are pleased to confirm the contribution rates will stay the same for the next school year (2021-22).

Teachers' Pension Plan Contribution Rates

(% of pensionable salary)	Current Rates
up to YMPE[1]	9.76
above YMPE	13.94
Total Teachers' Contribution	11.34
Total Government Contribution	**10.87**

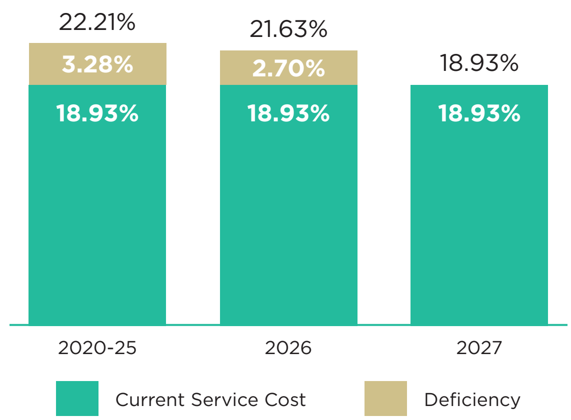
[1] YMPE: Yearly Maximum Pensionable Earnings used by the Canada Pension Plan ($61,600 in 2021)

The total contribution rate for the TPP is 22.21% of teacher salaries, consisting of a current service cost of 18.93% of salaries and total deficiency contributions of 3.28% of salaries. The deficiency contributions are planned to decrease according to the bar graph in the next column.

Of course, these projections assume that all assumptions remain unchanged and will be realized as expected. Actual experience will vary and the actual results recognized in future actuarial valuations can be better or worse than these projections. Therefore, the rates illustrated below may vary.

Contribution Rates

Effective September 1



Private School Teachers' Pension Plan Contribution Rates

(% of pensionable salary)	Current Rates
up to YMPE[1]	8.50
above YMPE	12.15
Total Teachers' Contribution	9.95
Total Employer Contribution	**9.51**

[1] YMPE: Yearly Maximum Pensionable Earnings used by the Canada Pension Plan ($61,600 in 2021)

The total contribution rate for the PSTPP is 19.46% of teacher salaries, representing the current service cost (i.e. the cost of benefits being accrued in a year). There are no deficiency contributions required under the PSTPP since this plan no longer has a deficit.

PLAN SUSTAINABILITY

The board has two main levers to achieve long-term sustainability: funding policy (contributions from teachers and government/employers); and investment policy (how the assets are invested).

Use of a third lever, the level and type of benefits offered, rests on decisions made by the plan sponsors.

Experience Study

An experience study was completed with ATRF's actuary this year to update assumptions used in the funding valuation of our plans. The study looked at past results in relation to terminations, retirements, deaths, and other economic factors. The results of this study show that on average:

- Members, regardless of gender, are living longer.
- Members are retiring earlier.
- Inactive members are returning to active membership more often.

Although these results may not be that surprising, ATRF and the plan actuary can't predict what the future may hold as experience can change over time. For example, in the context of members living longer, we must weigh future medical advances and better eating habits versus escalating health costs and further pandemics. Performing these experience studies from time to time is one method that ATRF uses to secure pension income through adequate funding.

As outlined in the Funding Status section, the funding assumptions include margins to buffer against unfavourable results in the rate of returns or other factors affecting the plans. While spending some of the margin was needed to offset the increase in liabilities from the experience study, the level of margin is still healthy.

The study also reinforced that like many other retirement systems, ATRF's plans continue to face funding challenges due to long-term low interest rates, plan maturity, volatility, and the increasing longevity of plan members.

Alberta Teachers' Life Expectancy at Age 65 in 2020

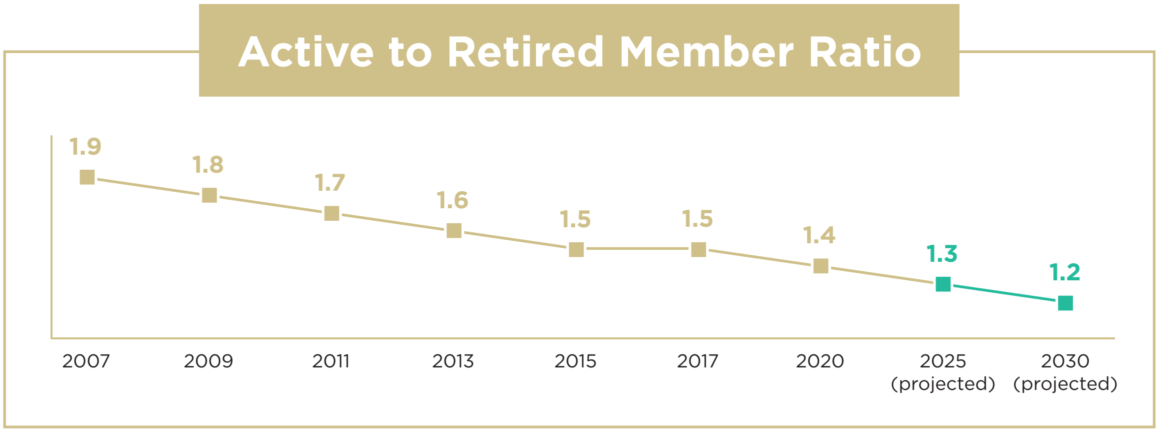
	Based on the previous Alberta teachers' mortality table	Based on the updated Alberta teachers' mortality table following the most recent experience study
Male	22.0 years (i.e. expected to live to 87.0 years old)	23.9 years (i.e. expected to live to 88.9 years old)
Female	25.7 years (i.e. expected to live to 90.7 years old)	26.2 years (i.e. expected to live to 91.2 years old)

Sir Winston Churchill High School, Calgary, Alberta

Plan Maturity

Pension plan maturity can be defined different ways, but in very general terms a mature plan is one where there is a lower ratio of active members compared to retired members. Another measure of maturity is the proportion of retirees' liabilities to the total liabilities in the plan, with an increasing percentage of retirees' liabilities indicating a plan's increasing maturity.

Plan maturity presents a funding challenge because a funding shock (such as investment losses, increased plan member longevity or lower expected returns) will be absorbed by a proportionately smaller number of members paying contributions.



Kassandra S., Grade 2
ATRF Plan Member

Volatility

A key assumption in funding pension plans is that the fund will earn an average net investment return each year at least equal to the discount rate used to determine future funding requirements. Actual year-to-year investment returns can be quite volatile, and absent any adjustment could lead to frequent and significant contribution rate changes.

That's why at ATRF we've developed a strategy that carefully evaluates a number of factors to determine the investment risk levels that are appropriate to fund our plans.

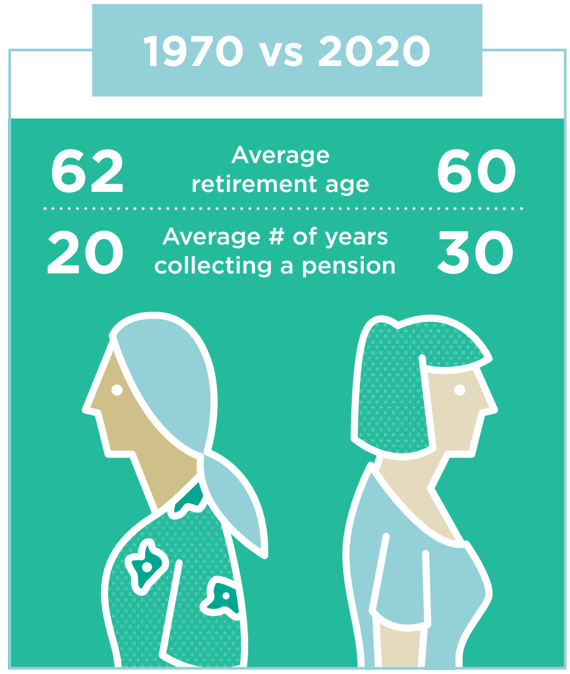
It starts with an actuarial funding valuation that looks at investment results over five years rather than shorter term results. This is the asset smoothing practice referred to previously, and it is used to reduce the impact of volatile market returns and other factors on the plans' funded status and contribution requirements.

While asset smoothing is effective in stabilizing contribution rates during short periods of market volatility, failure to achieve the assumed funding discount rate over the long term would still result in contribution rate increases.

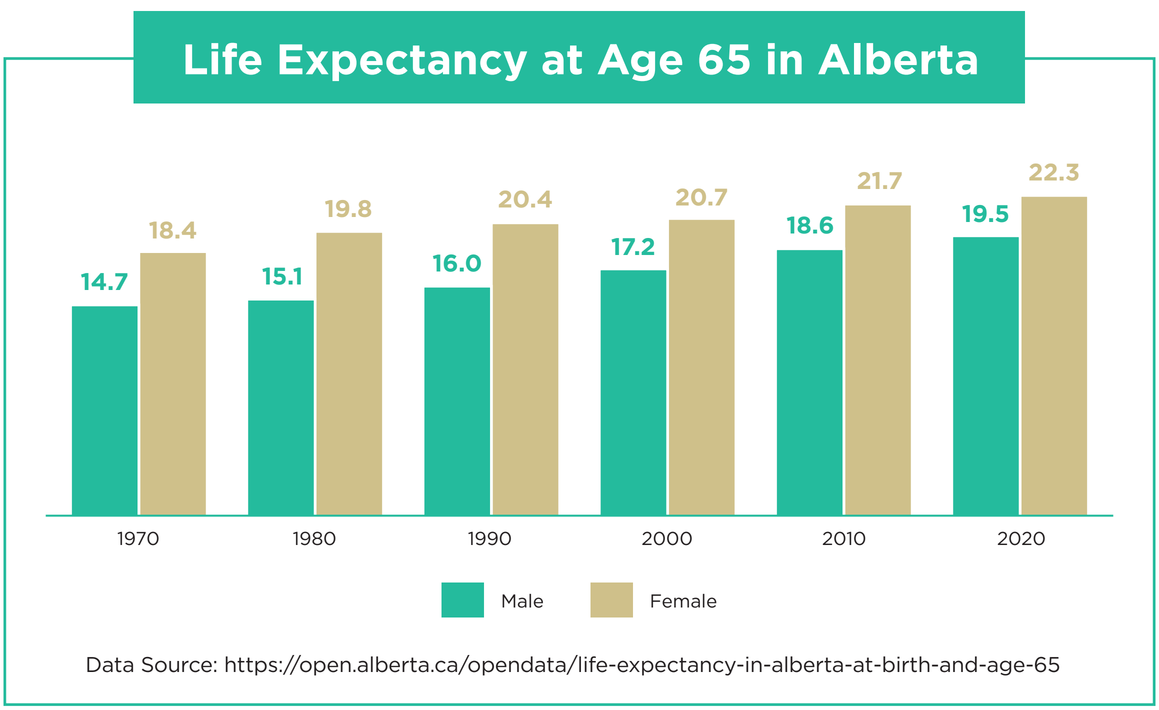
That's why so much work has gone into the ATRF investment strategy. We began looking in detail at this formula in 2018, with a focus on determining the best way to generate the returns needed to sustainably fund the plan, but to do so with less volatility over time. We continue refining this work into an investment strategy that will be more funding-focused, where the investment portfolio is constructed to optimize the achievement of ATRF's specific funding policy objectives of security and stability.

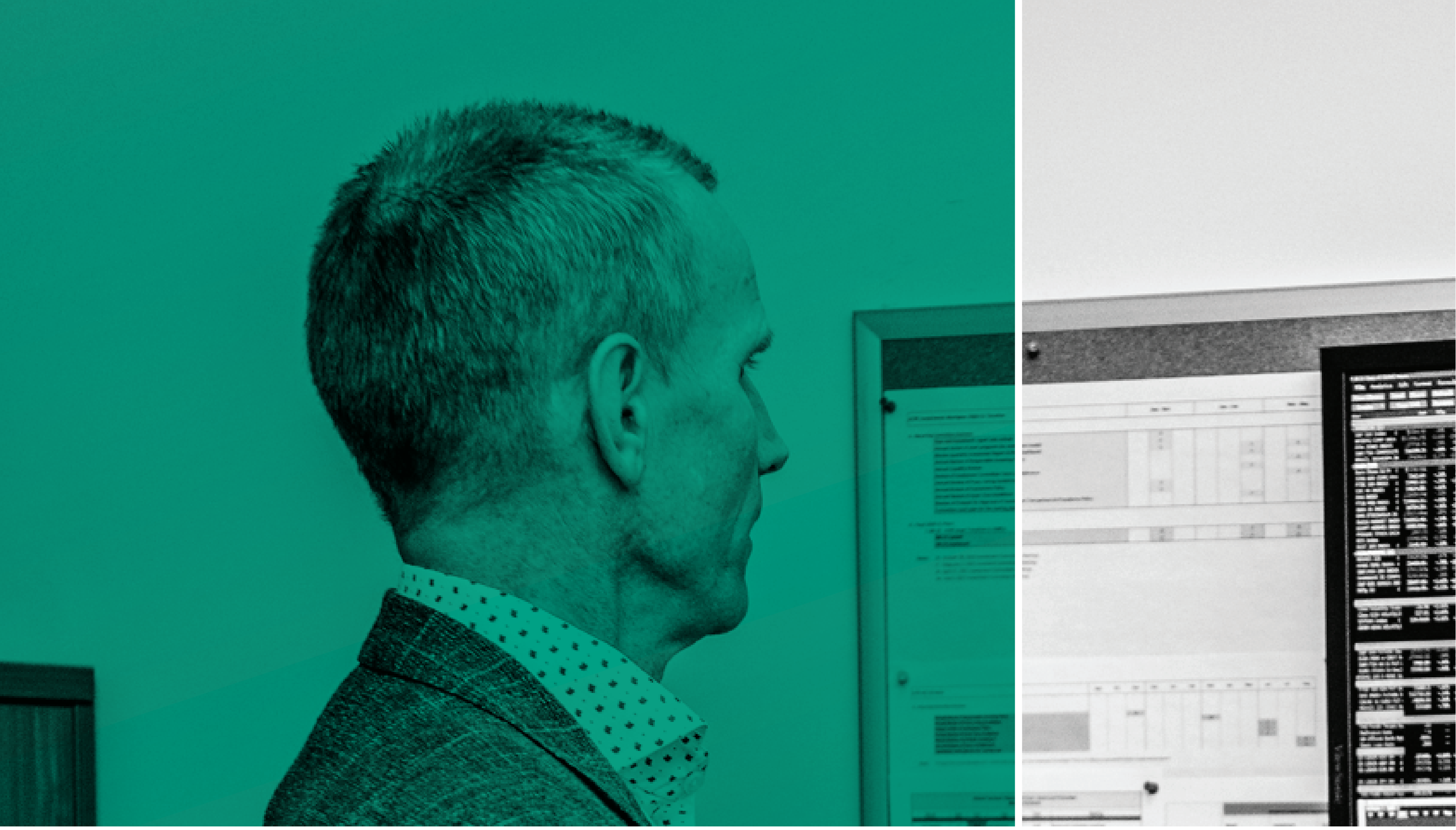
Plan Members' Increasing Longevity

Increased life expectancy presents a funding challenge for pension plans. It means pensions are paid for a longer period of time after retirement—and yet they still need to be funded with employer and employee contributions over a similar number of years in an average career. The last several decades have seen significant changes in retirement experiences. Teachers are living longer and retiring earlier. In the 1970s, the average teacher retired at age 62. They could expect to live and collect their lifetime pension for another 20 years on average. Now, the average teacher retires at age 60. They can expect to live and collect their lifetime pension for around 30 years on average.



A **one-year increase** in life expectancy **increases pension liabilities** by 3-4% on average.





***Investment** Management*

MESSAGE FROM THE CIO

In the investment world, every year is different from the last, but 2019-20 was one that could never be predicted.

The most significant financial market turmoil we have seen in decades was compounded by a rapid shift to working remotely in order to keep our staff and partners safe during the COVID-19 pandemic. At the same time, our team was called on to support the organization's transition of the asset management function to AIMCo.

Which is why I am especially pleased this year to be able to say that the long-term approach we take to investing at ATRF was instrumental in protecting the assets of our plans from the worst of the turbulence.

DEREK
BRODERSEN

Asset Management Transition

The ATRF Investment team and staff across the organization have been working tirelessly to ensure compliance with the legislated requirement for ATRF to transfer management of our assets to AIMCo. We have been working collaboratively with AIMCo to plan for the transition, always keeping the interests of our plans as our top priority.

The transition process is very complex and involves careful consideration of tax and legal implications of a large number of assets within several different investment classes, as well as significant administrative work to ensure the transfer is seamless. This means the work will take some time, though we remain on track to meet the legislated deadline of December 31, 2021 for this work to be completed.

I am pleased to report that as our assets are transferred to AIMCo, the majority of ATRF's investment staff will move to AIMCo as well. This means much of our unique experience and expertise in managing pension assets will be gained by AIMCo, benefitting all their clients.

The transfer will progress in stages over the coming months, and we expect that the transition will be completed in 2021.

Going forward, while ATRF will continue to set the key elements of its investment policy and strategy, including defining its level of risk tolerance, AIMCo will be responsible for the day-to-day management of the assets. In other words, ATRF will continue to determine the investment strategy and AIMCo will implement that strategy on ATRF's behalf.

We will be communicating frequently with AIMCo and monitoring their work carefully to ensure that, despite this management change, the best interests of our plans are always front and center.

Market Volatility

From a financial perspective, the COVID-19 pandemic was one of those rare market events that we all know will happen eventually, but that cannot be predicted.

The impact on financial markets and our daily lives were both rapid and dramatic. From a fund perspective, we hold a diversified portfolio specifically designed to moderate the downside risk in extreme situations such as this. That said, our portfolio still holds a significant amount of equity risk and is not immune to market forces like those we saw last year.

Late February to late March saw one of the largest and fastest equity corrections in decades, with many markets falling between 30% and 40% in just four weeks. Governments and central banks reacted very quickly and aggressively, allocating hundreds of billions of dollars to support business and individuals and lowering interest rates to historically low levels.

These measures were successful in improving the confidence of investors and helped set off one of the most rapid market recoveries ever. By the end of the fiscal year, most equity markets had fully recovered the losses, however not all companies have fared as well. While technology companies were setting new highs, other, more traditional businesses such as banks and many industrial companies remained well off of their pre-pandemic values.

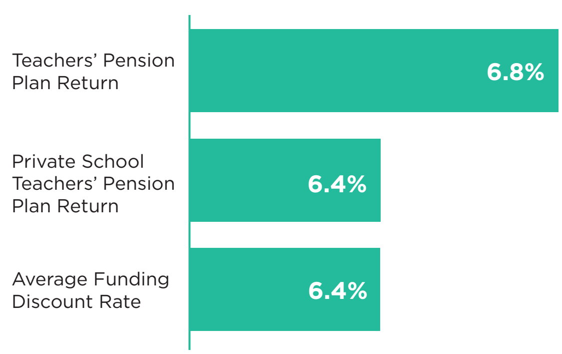
Risk Management

ATRF's highly diversified investment portfolio is designed to manage the risk to our assets during periods of market turbulence. A global pandemic was something the world had not seen in over a hundred years, so its impact on the financial markets could not be known. As a result, ATRF took a very conservative approach toward the market turmoil, focusing on preserving value for the plans rather than outperforming benchmarks. When governments and central banks intervened to support financial markets on a scale never seen before, our portfolio was not positioned aggressively during the rapid recovery. As a result, we did underperform our benchmark this past year, but succeeded in preserving value and ultimately delivering a strong positive return of 5.5%.

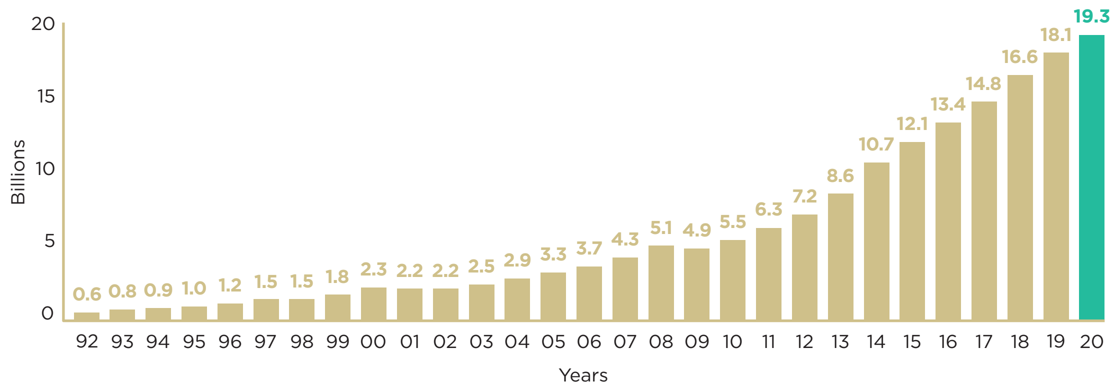
As a defined benefit pension plan, it is important to remember we are long-term investors and one year does not tell the story. Over the past four years the fund has returned 7.6%, and over 10 years 9.2%. Over these longer time periods our returns continue to exceed the returns of our benchmark.

In order to remain well-funded and keep contribution rates affordable over the long term, our investment returns must at least equal the funding discount rate used in the funding valuation of the plans. We look at this measure over 15-year time periods, in part so we can minimize changes to contribution rates based on shorter term investment results. Over the past 15 years the funding discount rate has been gradually reduced for both plans, but has averaged 6.4%. During this same 15-year period the return of the Teachers' Pension Plan has been 6.8%, while the return on the Private School Teachers' Pension Plan has been 6.4%.

15-Year Return vs Long-Term Funding Objective



Net Assets as at August 31 (Canadian $)



Investment Performance

Rates of Return* As at August 31, 2020

	1 Year (%)		4 Years (%)		10 Years (%)	
Asset Class	**ATRF**	**Benchmark**	**ATRF**	**Benchmark**	**ATRF**	**Benchmark**
Fixed Income	**6.3**	**6.0**	**4.4**	**4.2**	**4.9**	**5.0**
Universe Bonds	6.0	5.8	4.0	3.7	4.5	4.4
Long-Term Bonds	6.8	7.0	5.2	5.2	6.5	6.8
Money Market	1.2	1.1	1.3	1.1	0.9	0.9
Return Enhancing	**6.7**	**10.2**	**9.0**	**9.9**	**11.3**	**11.2**
Global Equity	6.5	11.0	7.0	9.2	10.1	11.1
Private Equity	6.3	2.8	16.2	11.0	16.4	13.3
Inflation Sensitive	**6.0**	**3.0**	**11.4**	**5.6**	**10.0**	**5.4**
Real Estate	4.1	2.0	9.0	5.2	9.1	5.7
Infrastructure	9.2	4.9	16.6	6.4	12.5	5.8
Absolute Return	**3.1**	**5.4**	**2.5**	**5.1**	**–**	**–**
TOTAL PLAN	**5.5**	**7.3**	**7.6**	**7.3**	**9.2**	**8.5**

In order to evaluate the success of our investment strategies, we use a set of board-approved benchmarks as a comparison tool. The total fund benchmark return (7.3% for 2020) is calculated by aggregating the benchmark returns of each individual asset class and weighting them according to the fund's policy benchmark.

**Returns are net of fees.*

Investment Performance Benchmarks

Asset Class	Benchmark
Money Market	FTSE TMX Canada 30 Day T-Bill Index
Universe Bonds	FTSE TMX Canada Universe Overall Bond Index
Long-term Bonds	FTSE TMX Canada Long Term Government Bond Index
Global Equity	Hybrid of 3 Indices: MSCI World (50%), S&P/TSX Composite (30%), MSCI Emerging Markets (20%)
Private Equity	MSCI World Index plus 2.0%
Real Estate	Customized IPD Global Property Fund Index
Infrastructure	Canadian CPI plus 4.75%
Absolute Return	FTSE TMX Canada 91 Day T-Bill Index plus 4.0%

Policy Asset Mix

	Policy at August 31, 2020	Long-term Target
TOTAL PLAN	**100.0%**	**100.0%**
Return Enhancing	**46.0%**	**45.0%**
Global Equity	36.0%	35.0%
Private Equity	10.0%	10.0%
Fixed Income	**21.0%**	**20.0%**
Universe Bonds	10.0%	9.0%
Long-term Bonds	9.0%	9.0%
Money Market	2.0%	2.0%
Inflation Sensitive	**23.0%**	**25.0%**
Real Estate	15.0%	15.0%
Infrastructure	8.0%	10.0%
Absolute Return	**10.0%**	**10.0%**

Fixed Income Assets

Fixed income assets are typically among the lowest risk assets in the fund, and are expected to provide lower, but more stable returns than other asset categories over the long term. ATRF's fixed income assets are diversified across short, medium and long-term maturity dates, and include both government and corporate issuers.

The majority of our fixed income assets are managed by our internal investment team; however, a small proportion of these assets are outsourced to external managers who are focused on particular segments of the market.

Return Enhancing Assets

Return enhancing assets are generally expected to provide the highest return over the long term, but reflect a higher risk profile than other assets in the plan. Return enhancing assets are the largest investment category in the fund, and include our public and private equity portfolios.

We diversify our public market equity portfolios by investment style, company size, and geography in order to mitigate risk. Some of these assets are managed by ATRF's internal investment team, while the majority is managed by external investment partners who have specific expertise in certain markets or investment types. Our private equity assets consist of a diversified combination of limited partnerships and direct investments.

Inflation Sensitive Assets

Inflation sensitive assets are included in the fund to provide returns that are at least partially correlated to inflation over the very long term. This characteristic provides a degree of long-term funding protection as pension benefits under the plans are 70% indexed to inflation. This asset category includes our real estate and infrastructure investments.

Our global real estate and infrastructure portfolios are managed using a combination of internal and external investment managers. Our internal teams have established an extensive global network of partners and fund managers with whom we work closely to identify and manage investments. As noted earlier, the transfer of management of our infrastructure assets to AIMCo is already complete, with other asset classes to follow in 2021.

Absolute Return Assets

Absolute return assets play an important role in diversifying risk by generating investment returns that are relatively stable and largely uncorrelated with more traditional assets such as equities. These assets are highly diversified, reflect a wide range of risk-return profiles, and include managed futures, hedge funds and other multi-asset strategies. All of these strategies are managed by external investment partners.

Member *Service and Investment Management Costs*

ATRF is a true pension manager, meaning that we take a unique and specialized approach that we have designed over eight decades serving members and plan sponsors.

Lisa V., Grade 4
ATRF Plan Member

PROVIDING EXCEPTIONAL VALUE FOR MEMBERS AND SPONSORS

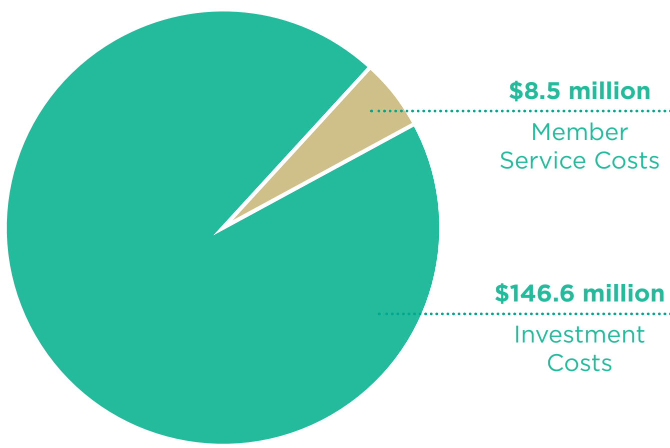
At ATRF, we start with a focus on our mandate to ensure benefits are delivered as established by the sponsors. In order to ensure we are able to deliver these benefits, ATRF carries out foundational strategic initiatives, while providing governance oversight as well as executing efficient and effective operational activities. In keeping with our long-term commitments and to maintain the sustainability of the plans, we are mindful of carrying out our actions in a cost-efficient and risk-controlled manner.

ATRF's member service operating expenses are consistently lower than our peer group average, and yet still reflect our commitment to deliver accurate and timely pension payments, as well as high quality and valuable services.

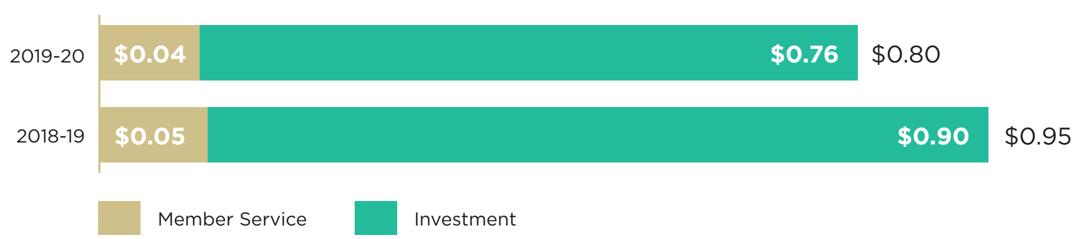
To ensure we meet our investment objectives, we prudently balance risks, returns, and costs. We carefully monitor the costs of our investment delivery models, and continually strive to improve on our already cost-effective approach.

Total Plan Expenses

$155.1 million Total Plan Expenses



Cost per $100 of Assets



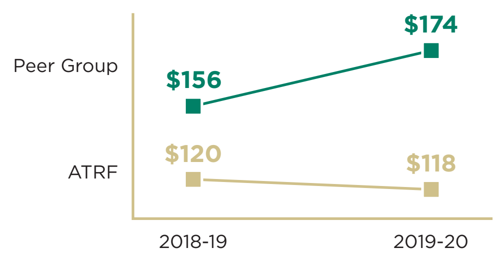
MEMBER SERVICE COSTS

2020: $8.5 million; *2019: $8.6 million*

ATRF strives to provide exceptional service in a cost-effective manner. This is evidenced by our exemplary service levels and our consistently lower cost per member than our peer group average.

Costs incurred reflect our commitment to deliver accurate and timely pension payments, as well as ensuring security of confidential information for our members.

Cost per Member



Cost per member is calculated using active and retired membership.

Our cost per member at $118 continues to be lower than our budget and remains one of the lowest in the peer group of Canadian public sector pension organizations which averages at $174.

INVESTMENT COSTS

2020: $146.6 million; *2019: $163.3 million*

ATRF is an active pension manager that adopts a customized approach to meet the unique needs of our plans. Some of our cost drivers include governance of strategic investment matters, such as setting investment policy and risk tolerance, our active management approach, scale of our investment opportunities, and types of assets. ATRF's scale provides a competitive advantage to capitalize on smaller opportunities, yielding higher net returns (net of all costs) than our peers and targets.

Investment Operating Expenses

2020: $31.1 million; *2019: $32.6 million*
Cost per $100 of Assets - 2020: $0.16; *2019: $0.18*

These costs include oversight and governance of our investment operations and costs related to directly held investments.

External Investment Management Expenses

2020: $90.7 million; *2019: $90.7 million*
Cost per $100 of Assets - 2020: $0.47; *2019: $0.50*

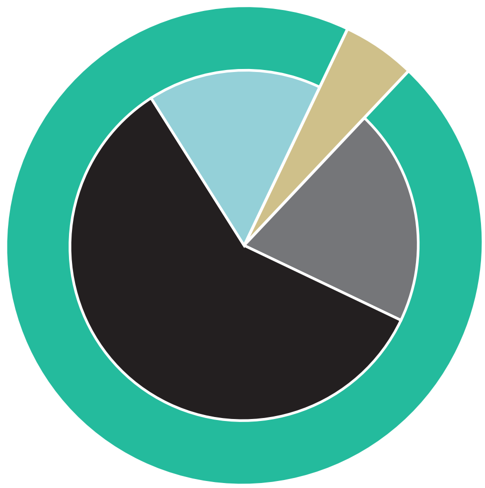
These expenses are incurred to access external managers' expertise and exceptional performance.

External Investment Performance Fees

2020: $24.8 million; *2019: $39.9 million*
Cost per $100 of Assets - 2020: $0.13; *2019: $0.22*

These fees are incurred to align interests between ATRF and external managers for superior returns exceeding pre-determined thresholds, through a contractual profit-sharing arrangement.

Total Plan Expenses Breakdown

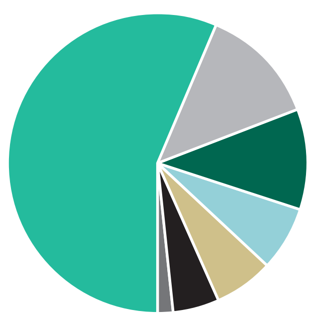


$8.5 million
Member Service Costs

$146.6 million
Investment Costs

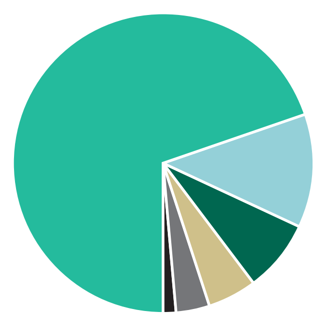
- **$31.1 million** Investment Operating Expenses
- **$90.7 million** External Investment Management Expenses
- **$24.8 million** External Investment Performance Fees

Investment Operating Expenses ($ Thousands)



- **$17,620** - Salaries and Benefits
- **$3,999** - Transaction Costs
- **$3,338** - Professional Services
- **$2,111** - Premises and Operations
- **$2,018** - Communications, Research, and Travel
- **$1,562** - Custodial and Banking
- **$484** - Board and Committees

Member Service Costs ($ Thousands)



- **$5,963** - Salaries and Benefits
- **$1,041** - Premises and Operations
- **$664** - Professional Services
- **$427** - Communications, Research, and Travel
- **$326** - Board and Committees
- **$38** - Banking

To ensure prudent management of costs, ATRF has a system of controls in place. Investment management and plan administration expenses budgets are submitted to the ATRF Board for approval on an annual basis.

Compensation *Discussion and Analysis*

St. Edmund Catholic School, Edmonton, Alberta

EXECUTIVE COMPENSATION PROGRAM

The Compensation Discussion & Analysis explains ATRF's approach to compensation, the various elements of our pay programs and the remuneration paid to our executives.

Implications of 2019-20

2019-20 has proven to be a unique year for ATRF, including unexpected news about Bill 22 in October 2019, which subsequently became law. Bill 22 mandates that all ATRF assets are to be transitioned to AIMCo for investment management. On July 8, 2020, ATRF became subject to the *Reform of Agencies, Boards and Commissions Compensation Act* Regulation (the "RABCCA Regulation"). While navigating the planning for transition of investment management to AIMCo, like every other organization, ATRF has also been managing operations through the ongoing COVID-19 pandemic. These events have created additional challenges for the Human Resources and Compensation Committee ("HRCC" or the "Committee") and Management regarding go-forward Human Capital needs and related implications to pay programs that were outside the usual compensation review process.

During 2019–20, the Human Resources and Compensation Committee moved decisively to try to mitigate the HR and compensation-related impacts of these three events on ATRF and its members. The Committee and management met with representatives of the Government of Alberta and with AIMCo to consider and begin addressing the human capital and talent management implications. The Committee itself met ten times, and in the course of these meetings and with support from management, developed and executed an action plan in efforts to address these implications.

As ATRF looks to modify go-forward pay programs to comply with the RABCCA Regulation, the Committee will be responsible for developing a compensation package that will enable it to attract and retain a CEO and investment strategy and risk professionals under the revised corporate strategy. Management's focus will be on transitioning the investment management of ATRF assets to AIMCo, and establishing an ongoing investment strategy and risk team at ATRF to ensure that the board is properly supported in delivering on its fiduciary responsibilities to the plans.

Future Focus

ATRF will need to focus on the following HR and compensation-related items as the organization develops its revised corporate strategy:

- The evolution of the existing pay philosophy and incentive plan programs in compliance with the RABCCA Regulation;
- The treatment of Short-Term Incentive Plan ("STIP") and Long-Term Incentive Plan ("LTIP") during the transition period to RABCCA Regulation for eligible employees (ending July 7, 2022);
- Placement of the incumbent CEO into the RABCCA Regulation compensation framework by the end of the transition period (ending July 7, 2022);
- Succession planning and talent management of critical staff, including those required to manage the investment strategy and risk function remaining at ATRF; and
- Supporting the HR and compensation-related institutionalization of a working relationship with AIMCo, including how the investment strategy and risk team at ATRF may add value (e.g., managing risk and strategic asset allocation), and a new, fit-for-purpose organizational structure.

2019-2020 Performance Results and Related Pay Decisions

As the world managed with navigating the COVID-19 pandemic, we saw historic periods of market volatility, including the single largest weekly decline in global markets in over a decade. ATRF underperformed relative to benchmark this past year, but was successful in preserving value and ultimately delivering a strong positive return of 5.5%. This result is reflected in the 2019-2020 incentive payments approved by the board for executives.

2021 – 2022 Compensation Related Decision Making

As ATRF manages implications related to Bill 22, the RABCCA Regulation, and the on-going COVID-19 pandemic, the Committee recognizes that it may have to adjust incentive plan payouts during fiscal 2021 and 2022. For example, ATRF expects to abolish investment management positions due to the legislated transition of investment management to AIMCo. This will impact incentive plan payouts during the next fiscal year.

HUMAN RESOURCES AND COMPENSATION COMMITTEE

The Human Resources and Compensation Committee assists the board in fulfilling its oversight responsibilities in relation to our human resources and compensation matters.

The HRCC is made up of four board members and the Committee met ten times during the 2019-20 fiscal year. In-camera sessions are held at the beginning and end of each meeting, without management present.

In 2019-20 the HRCC's key responsibilities included:

- Evaluating and designing the compensation structure and succession planning for the Chief Executive Officer;
- Recommending compensation of the Chief Executive Officer and Chief Investment Officer and their direct reports to the board for approval;
- Approving the compensation philosophy recommended by the Chief Executive Officer for other executives and all staff;
- Ensuring appropriate succession planning by the Chief Executive Officer for key executive positions;
- Reviewing human resource and compensation aspects of the corporation's business plan;
- Ensuring that the enterprise risk management framework appropriately considers human resource and compensation risks;
- Reviewing and approving incentive and supplementary pension plans;
- Refining the disclosure in the annual report related to compensation philosophy, incentive design and the alignment to corporate performance and risk management; and
- Navigating the HR and compensation-related Bill 22 implications, the inclusion of ATRF in the RABCCA Regulation, and the COVID-19 pandemic.

PRINCIPLES OF ATRF'S COMPENSATION PHILOSOPHY

Fair and competitive executive compensation is critical to the success of ATRF and our ability to attract and retain high-performance professionals. Our overall compensation philosophy is rooted in our commitment to deliver pension benefits, to ensure the highest level of service, and to maximize returns on the plan assets in a sound, sustainable, and secure manner. We believe that longer-term investment success through prudent risk-taking is more important than volatile short-term gains.

ATRF's executive compensation program objectives are to:

- Reward executives in a competitive market context so as to attract and retain high-quality professionals.
- Focus the Executive Team on achieving critical business and investment goals in the strategic plan.
- Align interests of the Executive Team with the best interests of the plans by encouraging and rewarding long-term performance. This shall be supported by promoting a pay for performance culture that seeks to preserve and protect beneficiaries' benefits.
- Reward the Executive Team for superior performance based on investment results as well as plan administration and member service results.
- Total compensation will reflect the shared efforts of the Executive Team by rewarding for a culture of teamwork and collegiality throughout the organization. These efforts are reflected through the individual performance assessments conducted by the board as well as the CEO and CIO of their direct reports on an annual basis.

CN Trestle Bridge, St. Albert, Alberta

COMPENSATION PHILOSOPHY AND GOOD GOVERNANCE

A number of attributes in our compensation program are intended to ensure good governance:

- **Compensation at risk –** A significant percentage of Total Direct Compensation is in the form of short and long-term incentives ranging from targets of 39% for certain executives to 54% for the CEO and CIO.
- **Long-term time horizon –** A significant portion of executive compensation is linked to longer-term, value-added and absolute performance. We use a 4-year horizon in our STIP and LTIP.
- **Pay for performance –** A large portion of variable executive compensation is linked to achieving "above median performance" against performance hurdles. "Above median performance" and performance hurdles are determined using a holistic approach that considers relevant external data sources, historical performance and risk of ATRF's fund, and the current investment strategy and portfolio asset mix.
- **Maximum payout caps –** STIP and LTIP payouts are capped at 200% and 300% of target respectively to ensure affordability and reasonableness.
- **Challenging, but reasonable investment return targets –** Performance benchmarks and value-add hurdle rates are reviewed regularly by the board and are set to reflect a median return expectation in the marketplace. Value-add hurdle rates are also set with reference to the competitive market, but also ATRF's risk appetite and investment strategy.
- **Threshold performance levels –** Our investment returns must meet or exceed our benchmark indexes before short or long-term incentives are paid.
- **Oversight of peer group, compensation levels and design –** With regular oversight, the HRCC ensures continued alignment with our peer group, compensation levels, our business strategy and competitive market practices.
- **Benefits and perquisites –** Benefits and perquisites are set at competitive levels, but are not intended to make up a significant portion of compensation.
- **Review of compensation risk –** The HRCC monitors risk inherent within our compensation program to discourage excessive risk-taking and align compensation with ATRF's business and investment strategies.
- **Competitive but cost-effective –** ATRF's compensation program is designed to pay competitively while supporting ATRF's objectives of securing the pensions of plan members through the cost-effective and efficient use of resources.

MANAGING RISK

We consider the implications of the risks associated with our compensation policies and practices, to ensure our compensation program does not incent management behaviours outside ATRF's risk appetite. Compensation risk is managed by:

- Ensuring HRCC's independence from management, and retaining an external compensation advisor;
- Working within an enterprise-wide risk management framework, a robust code of conduct and ensuring that appropriate risk limits and controls are articulated in the Investment Policy;
- Establishing appropriate performance measures that align to the business strategy;
- Setting individual and team accountabilities for achieving objectives;
- Setting threshold levels of performance for all incentive plans and paying incentives only when threshold performance is achieved;
- Using appropriate payout curves and capping incentive pay;
- Including long-term performance measures (i.e. four-year rates of return) in the STIP and LTIP to align compensation with the time horizon of the fund; and
- Including non-investment performance measures in the incentive plan.

COMPARATOR GROUPS USED TO SET COMPETITIVE PAY

Our overall objective is to provide competitive compensation compared to organizations we compete with for the skills and expertise of investment-related and management professionals. For the roles where compensation is disclosed, compensation is benchmarked against other Canadian in-house pension funds and institutional investment organizations of similar size and complexity to ATRF.

Where available, this peer group is Canadian captive funds with assets under management in the range of $5B to $60B. Within these comparator groups, we review compensation levels of comparable jobs, assess performance against benchmarks, as well as the relative size and investment-structure complexity of those peers.

COMPENSATION PROCESS AND COMPENSATION CONSULTANTS

ATRF's compensation strategy and structure are regularly reviewed. Each year, the HRCC reviews and approves the comparator groups, overall base salary, and the annual performance measures, targets and weightings for the incentive plans, based on market conditions. Market data is provided to the HRCC by external sources. The HRCC uses the following decision-making process when setting executive compensation:

1. Establish compensation philosophy, principles, and objectives
2. Design compensation to align with compensation philosophy and competitive market
3. Establish and calibrate performance objectives
4. Assess impact of compensation through scenario analysis and forward and back testing
5. Determine performance-based incentive awards

COMPENSATION ELEMENTS

The compensation structure for executives balances fixed and variable pay that is linked to long-term performance. The elements of the executive compensation plan are provided below. The following table summarizes the type, nature and purpose of each element of our compensation program.

Element	Intent	Plan Design	Variable with Performance
Base salary	Compensates for the day-to-day responsibilities of the role.	Set annually based on review of competitive market data.	Fixed (not variable)
Short-Term Incentive	Annual plan that rewards for superior investment and non-investment performance.	Payouts are capped at 200% of target, based upon Corporate, Team, or value-add investment performance over a four-year period, weighted to Total Fund and/or Asset Class (where applicable), and Individual performance.	High variability
Long-Term Incentive	Four-year plan intended to reward for superior and sustained investment performance aligned to the investment strategy and to help in retaining high performers.	Payouts are capped at 300% of target, based upon Total Fund value-add performance and absolute return performance over a four-year period.	High variability
Pension Benefits	Intended to attract and retain key employees and reward for their continued service.	Defined benefit pension based on 1.4% of salary up to Canada Pension Plan limit and 2% of salary for any excess up to *Income Tax Act* limit. For eligible roles, a supplemental benefit pension plan is provided in excess of capped pensionable salary and matches the formula in the defined benefit plan.	Low variability (will increase as salary level increases)
Benefits	Intended to attract and retain key employees.	Standard health and dental-care benefits, life insurance, illness, and long-term disability coverage.	Low variability
Perquisites	Intended to attract and retain select key employees.	Paid professional membership fees and car allowances.	Low variability

Rideau Park School, Edmonton, Alberta

BASE SALARY

Base salaries are intended to be competitive with the market and are reviewed by the HRCC annually at the end of each fiscal year. Salaries are set based on an individual's primary duties and responsibilities, with consideration given to ATRF's market comparators.

SHORT-TERM INCENTIVE PLAN (STIP)

The STIP is designed to attract, retain, and motivate high-quality people, and to provide competitive, performance-based opportunities based on market practices and ATRF's business strategy. Performance measures, targets, and weightings are approved annually by the HRCC. Corporate, Team, fund, and portfolio benchmarks, as well as individual objectives, are established at the beginning of the year, and actual performance is evaluated at the end of the year.

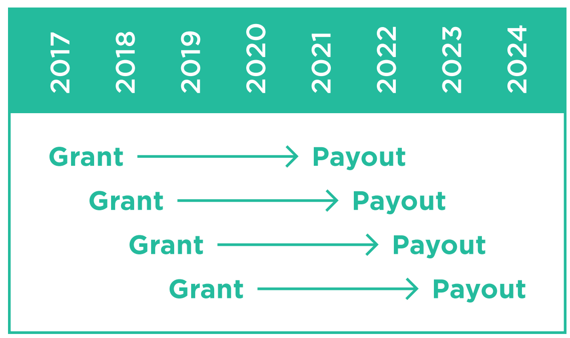
Each participant's target incentive payment is calculated based on a percentage of salary. Based on actual performance against pre-approved objectives, payouts can range from zero to two times the target incentive amount.

Investment incentive payments include the achievement of total fund and/or portfolio performance above established benchmarks. Consistent with ATRF's compensation objectives, payments are calculated based on long-term performance results over a four-year rolling average period. The STIP rewards participants for delivering target benchmark performance or better. Based on total fund and/or portfolio performance, actual payments can range from zero to two times the target incentive amount. The annual incentive plan has a threshold level of performance. If the threshold is not met, incentive payments are not made. The threshold, target, and maximum value-add hurdles are calibrated to account for ATRF's investment strategy and portfolio mix, which inherently accounts for ATRF's risk profile.

LONG-TERM INCENTIVE PLAN (LTIP)

The LTIP is designed to encourage and reward long-term performance, critical to ATRF's success; attract, retain, and motivate participants by providing additional compensation if investment performance goals are achieved; and, to align participant interests with pension plan interests. The LTIP has a four-year vesting period before a first payment is awarded to a plan participant. This is based on relative value-added performance above the benchmark portfolio, net of investment operating costs and is further modified by absolute fund performance. The threshold, target, and maximum value-add hurdles are calibrated to account for ATRF's investment strategy and portfolio mix, which inherently accounts for ATRF's risk profile.

All roles disclosed participate in ATRF's Long-Term Incentive Plan. Participants receive a notional grant (reflected as a percentage of salary), at the beginning of a four-year performance period. The grant is equal to the target award opportunity, and could increase or decrease based on final investment performance results relative to the benchmark portfolio, net of investment operating costs. At the end of the performance period, the four-year rolling average performance of the total fund is calculated. A multiplier is applied to the target plan award, based on the investment performance of the total fund after taking into account fees paid to external managers and internal investment costs as compared to specific benchmarks approved by the HRCC. The multiplier is capped at three times the value of the target award. Except for certain situations, an eligible employee must be actively employed as of the payment date in order to receive a payout.



PENSION AND BENEFITS

ATRF provides a competitive benefits program that includes pension benefits, health and dental-care benefits, life insurance, illness and long-term disability coverage, and professional memberships.

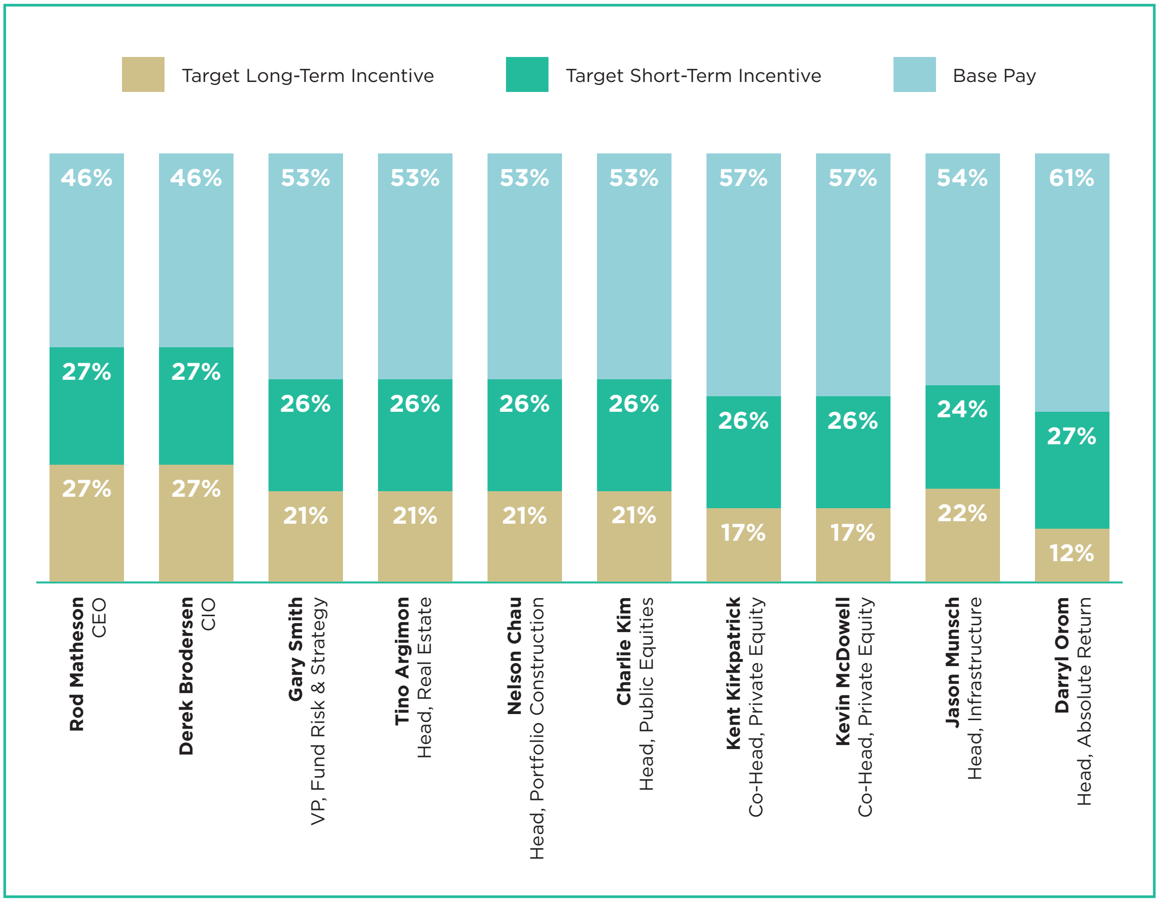
All ATRF staff participate in the Local Authorities Pension Plan (LAPP). This is a defined benefit pension plan, and provides for a pension of 1.4% for each year of pensionable service based on the average salary of the highest five consecutive years up to the Year's Maximum Pensionable Earnings under the Canada Pension Plan and 2.0% on the excess. Benefits under this plan are capped by pensionable salary reached at the maximum pension benefit limit allowed under the federal *Income Tax Act.*

Where earnings are in excess of this capped pensionable salary, a non-registered, unfunded Supplementary Employee Pension Plan (SEPP) provides for a pension equal to the pension formula under the LAPP, with no cap applied to pensionable salary, less the initial pension provided under the LAPP. Participation in the SEPP is limited to the CEO, CIO, Vice Presidents, and Asset Class Heads. For pensionable service before September 1, 2012, pensionable salary under the SEPP includes 50% of the actual annual incentive target-level amount paid under the annual incentive plan. For pensionable service after August 31, 2012, pensionable salary is limited to base salary paid.

TARGET TOTAL DIRECT COMPENSATION MIX

Provided below is an illustration of the Target Total Direct Compensation mix for disclosed executives at ATRF.

Total Direct Compensation is made up of Base Salary, Short-Term Incentive, and Long-Term Incentive.




Glenora School, Edmonton, Alberta

2019-20 PERFORMANCE AND ITS IMPACT ON COMPENSATION LEVELS

For the 2019-20 year, incentive plan compensation was paid in relation to meeting and exceeding pre-set corporate and team objectives; individual portfolio benchmarks; and the above-benchmark performance of the overall fund in the past four fiscal years.

The overall ATRF Scorecard results were 149% or 1.49x target.

ATRF's Scorecard included corporate objectives for 2019-20 and reflected strategic directions for the organization. The objectives included:

- Achieving and maintaining full funding over the long term, while balancing cost and intergenerational equity amongst current and future members.

  The funded status of the Teachers' Pension Plan continues to prudently build towards being fully funded, and as of August 31, 2020 had a funded ratio of 96%, compared to a funded ratio of 90% in 2017. The Private School Teachers' Pension Plan is fully funded, with a funded ratio of 103% as of August 31, 2020, up from 98% in 2017.

- Providing exceptional service and accurate, timely, and cost-effective benefits to plan members.

  ATRF shifted rapidly to ensure members were continually supported through the ongoing COVID-19 pandemic, achieving service level benchmarks that are among the best in the industry.

- Delivering outstanding investment management of the plans' assets.

  Over the four-year period ended August 31, 2020, the fund earned a net rate of return of 7.6%. This compares to the fund's 7.3% benchmark return resulting in a 0.3% or $147 million of value add to the assets of the plan.

- Managing a high-performance organization that is well governed and well managed.

  2019-20 required ATRF to be flexible, resilient, and adaptive while dealing with the impacts of Bill 22 and the COVID-19 pandemic. Despite these events, remarkably, the organization delivered on many critical initiatives while successful re-scoping or winding down others to accommodate a changing state.

Doug B.,
ATRF Staff Member

COMPENSATION OF THE CHIEF EXECUTIVE OFFICER

ATRF's HRCC worked with its independent advisor, Hugessen, and the CEO to create a set of individual objectives that reflected the key milestones for the CEO during the 2019-20 fiscal year. The ATRF Board measured the CEO's performance against those key milestones, and assessed his performance as exceeding expectations.

ATRF's CEO had the following payout related to his performance:

($ dollars, audited)	2019-20		2018-19	
Performance Measure	**Weight**	**Payout**	**Weight**	**Payout**
Total Fund Value Add Return	35%	$ 65,640	45%	$ 185,700
ATRF Scorecard Corporate Objectives (new category for 2019-2020)	40%	124,858	n/a	n/a
Individual Objectives	25%	105,000	55%	152,400
TOTAL PAYOUT		**$ 295,498**		**$ 338,100**

COMPENSATION

($ dollars, audited)		
Compensation Element	**2019-20 Compensation**	**2018-19 Compensation**
Base Salary	$ 350,000	$ 350,000
Short-term Incentive	295,498	338,100
Long-term Incentive*	324,234	563,300
TOTAL DIRECT COMPENSATION	**$ 969,732**	**$ 1,251,400**

*Earned long-term incentives are paid upon vesting after a four-year period. For estimated future payouts, refer to the "Estimated Long-Term Incentive Awards" table on page 52-53.

TOTAL COMPENSATION SUMMARY

The table on the next page represents disclosure of salary, incentive payments, value of SEPP benefits, and all other compensation earned for years ended August 31, 2020, 2019, and 2018 by ATRF's Chief Executive Officer, Chief Investment Officer, Vice President, Fund Risk & Strategy, and the Asset Class Heads - the most highly compensated senior investment professionals.

Total Compensation Summary

($ dollars, audited)

Name and Position	Fiscal Year	Salary[1]	Short-Term Incentive Plan (STIP)	Long-Term Incentive Plan (LTIP)[2]	SEPP[3]	All Other Compensation[4]	Total Compensation
Rod Matheson Chief Executive Officer	2020	$ 350,000	$ 295,498	$ 324,234	$ 62,418	$ 50,827	$ 1,082,977
	2019	350,000	338,100	563,300	54,200	48,500	1,354,100
	2018	350,000	402,700	614,800	41,400	49,700	1,458,600
Derek Brodersen Chief Investment Officer	2020	322,875	233,911	299,106	59,270	48,343	963,505
	2019	322,900	352,000	519,600	52,100	47,300	1,293,900
	2018	322,900	362,100	553,300	38,600	48,600	1,325,500
Gary Smith[5] Vice President, Fund Risk & Strategy	2020	270,000	188,463	145,133	33,037	37,820	674,453
	2019	270,000	216,400	-	19,300	36,400	542,100
	2018	235,000	200,900	-	14,300	37,600	487,800
Tino Argimon[6] Head, Real Estate	2020	260,000	167,581	-	25,149	32,730	485,460
	2019	-	-	-	-	-	-
	2018	-	-	-	-	-	-
Nelson Chau[6] Head, Portfolio Construction	2020	240,000	77,470	-	16,640	32,527	366,637
	2019	-	-	-	-	-	-
	2018	-	-	-	-	-	-
Charlie Kim Head, Public Equities	2020	260,000	89,256	160,573	34,723	38,114	582,666
	2019	260,000	109,400	257,500	29,200	36,600	692,700
	2018	260,000	149,600	278,800	15,100	38,100	741,600
Kent Kirkpatrick[7] Co-Head, Private Equity	2020	220,000	171,922	58,780	16,361	38,216	505,279
	2019	220,000	174,800	102,100	10,500	36,600	544,000
	2018	-	-	-	-	-	-
Kevin McDowell[7] Co-Head, Private Equity	2020	220,000	171,922	57,528	16,353	37,305	503,108
	2019	220,000	174,100	99,900	10,400	35,700	540,100
	2018	-	-	-	-	-	-
Jason Munsch[7] Head, Infrastructure	2020	205,000	164,813	50,025	10,938	37,010	467,786
	2019	205,000	166,800	82,400	6,400	35,200	495,800
	2018	-	-	-	-	-	-
Darryl Orom Head, Absolute Return Investments	2020	180,000	59,664	55,583	3,187	44,286	342,720
	2019	180,000	68,100	89,000	4,000	35,000	376,100
	2018	180,000	72,900	-	3,000	36,300	292,200

[1] Salary is annual base pay as of the end of the fiscal year. Salaries in 2019-20 remained static to comply with the external directive for salary restraint issued by the GOA for provincial agencies. As of fiscal 2019-20, compensation figures are reported as actuals, transitioning from rounded numbers reported in prior years.

[2] Amounts shown represent LTIP awards incorporating business performance for the fiscal year. Incentive compensation is remunerated at the end of the four-year vesting period, and is paid in the following year it is earned. For further information on LTIP targets and awards, refer to "Estimated Long-Term Incentive Awards" table.

[3] Amounts shown represent SEPP current service accruals in the plan. Pension benefits for SEPP are paid as the benefits come due. Accordingly, no pre-funding occurs with no assets set aside or placed into trust to meet future liabilities. SEPP financing costs are included in the pension expense as the present value of the accrued benefits of the SEPP. For further information on the present value of accrued benefits, refer to "SEPP Present Value of Accrued Benefits" table.

[4] All other compensation consists of vacation payouts, lump sum payments and ATRF's share of all employee benefits, contributions or payments made on behalf of employees, health plan coverage, and statutory contributions.

[5] Employment commenced September 2016. Mr. Smith was promoted to VP role May 2019.

[6] Employment commenced November 2019 for Mr. Argimon and Mr. Chau.

[7] Employment commenced March 2011 for Mr. Kirkpatrick, June 2014 for Mr. McDowell, and November 2010 for Mr. Munsch. All were promoted to Asset Class Head roles November 2018.

ESTIMATED LONG-TERM INCENTIVE AWARDS

ATRF became subject to the RABCCA Regulation on July 8, 2020. Variable pay is prohibited under the RABCCA Regulation save a two-year transition period for existing staff. The Long-Term Incentive Plan will end at the conclusion of the transition period on July 7, 2022 and any outstanding grants will immediately vest and be paid as directed by the ATRF Board in 2022.

Due to the legislated transfer of investment management to AIMCo, Investment Management positions will be abolished at ATRF during the 2020-21 fiscal year. Outstanding LTIP grants of those employees will vest as at their termination date and be paid as directed by the board in 2021.

LTIP awards are typically granted at the start of a fiscal year and paid out at the end of the four-year vesting period. The following table shows the LTIP and estimated future payouts for the listed positions. The future value of the awards granted but not yet vested are estimated as at August 31, 2020, based on:

- Actual performance multipliers for fiscal years 2017-18, 2018-19, and 2019-20 and for future years, proxy returns based on rolling four-year averages;
- Actual fund rates of return for fiscal years 2017-18, 2018-19, and 2019-20 and for future years, proxy returns based on rolling four-year averages; and
- After investment management has moved to AIMCo until the end of the RABCCA Regulation transition period, estimated March 1, 2021 until July 7, 2022, the board has approved a change in performance measure from Total Fund to the ATRF Scorecard. Future values for the ATRF Scorecard are estimated at target.

($ dollars, audited)

Name and Position	Fiscal Year of Grant	Award (Target Value)[1]	Maximum Value[2]	Estimated Future Values 2021	Estimated Future Values 2022[3]
Rod Matheson Chief Executive Officer	2020	$ 210,000	$ 630,000	$ -	$ 196,130
	2019	210,000	630,000	-	280,939
	2018	210,000	630,000	327,539	-
Derek Brodersen Chief Investment Officer	2020	193,725	581,175	-	180,930
	2019	193,725	581,175	-	259,166
	2018	193,725	581,175	302,155	-
Gary Smith[4] Vice President, Fund Risk & Strategy	2020	108,000	324,000	-	100,867
	2019	94,000	282,000	-	125,754
	2018	94,000	282,000	146,613	-
Tino Argimon[5] Head, Real Estate	2020	104,000	312,000	58,994[6]	-
	2019	-	-	-	-
	2018	-	-	-	-

(Table continued on next page)

($ dollars, audited)					
Name and Position	**Fiscal Year of Grant**	**Award (Target Value)[1]**	**Maximum Value[2]**	**Estimated Future Values 2021**	**Estimated Future Values 2022[3]**
Nelson Chau[5] Head, Portfolio Construction	2020	96,000	288,000	64,066[6]	-
	2019	-	-	-	-
	2018	-	-	-	-
Charlie Kim Head, Public Equities	2020	104,000	312,000	337,149[6]	-
	2019	104,000	312,000	-	-
	2018	104,000	312,000	-	-
Kent Kirkpatrick[7] Co-Head, Private Equity	2020	66,000	198,000	154,844[6]	-
	2019	66,000	198,000	-	-
	2018	38,100	114,200	-	-
Kevin McDowell[7] Co-Head, Private Equity	2020	66,000	198,000	153,708[6]	-
	2019	66,000	198,000	-	-
	2018	37,300	111,800	-	-
Jason Munsch[7] Head, Infrastructure	2020	82,000	246,000	158,336[6]	-
	2019	82,000	246,000	-	-
	2018	32,400	97,200	-	-
Darryl Orom Head, Absolute Return Investments	2020	36,000	108,000	116,705[6]	-
	2019	36,000	108,000	-	-
	2018	36,000	108,000	-	-

[1] Represents the target value at the time of grant, assuming that the LTIP program is administered as designed. As ATRF is subject to the RABCCA Regulation, the plan will be administered with an end date of July 7, 2022. No award is payable if performance is below a threshold value-add hurdle.

[2] Represents the maximum value payable at the end of the four-year vesting period, assuming that the LTIP program is administered as designed. As ATRF is subject to the RABCCA Regulation, the plan will be administered with an end date of July 7, 2022.

[3] Estimated lump sum future value due to end of transition period of RABCCA Regulation on July 7, 2022. Estimated future values do not reflect the full four-year cycle and are pro-rated to July 7, 2022.

[4] Eligibility commenced in the 2016-17 fiscal year. Promoted to VP role May 2019. Estimated awards for 2021 and 2022 are partially based on previous position.

[5] Employment commenced November 2019 for Mr. Argimon and Mr. Chau.

[6] Estimated lump sum future value due to transition of Investment Management to AIMCo. Estimated future values do not reflect the full four-year cycle and are pro-rated to anticipated termination dates.

[7] Promoted to Asset Class Head in the 2018-19 fiscal year. Estimated awards for 2021 and 2022 are partially based on previous position.

SEPP PRESENT VALUE OF ACCRUED BENEFITS

The actuarial liabilities have been determined using the projected accrued benefit actuarial cost method pro-rated on service. This methodology measures the actuarial present value of future benefits based on projected average salary at the time of benefit commencement and which are directly related to service performed prior to the valuation date.

The current service cost is also determined using the projected accrued benefit actuarial cost method, prorated on service.

The following table represents changes in the present value of accrued benefits in the year:

($ dollars, audited)

Name and Position	Present Value of Accrued Benefits at August 31, 2019[1]	Current Service Accrual in Plan	Interest Cost, Experience, and Assumption Changes	Present Value of Accrued Benefits at August 31, 2020
Rod Matheson Chief Executive Officer	$ 299,608	$ 62,418	$ 31,603	$ 393,629
Derek Brodersen Chief Investment Officer	1,185,404	59,270	62,277	1,306,951
Gary Smith Vice President, Fund Risk & Strategy	99,112	33,037	3,198	135,347
Tino Argimon Head, Real Estate	-	25,149	2,688	27,837
Nelson Chau Head, Portfolio Construction	-	16,640	1,922	18,562
Charlie Kim Head, Public Equities	381,948	34,723	2,149	418,820
Kent Kirkpatrick Co-Head, Private Equity	13,089	16,361	(560)	28,890
Kevin McDowell Co-Head, Private Equity	13,083	16,353	(641)	28,795
Jason Munsch Head, Infrastructure	8,751	10,938	2,581	22,270
Darryl Orom Head, Absolute Return Investments	9,561	3,187	(5,151)	7,597

[1] As of fiscal 2019-20, figures are reported as actuals, transitioning from rounded numbers reported in prior years.

SUCCESSION PLANNING

ATRF has short-term contingency plans and longer-term succession plans in place for the Chief Executive Officer and senior management. In identifying potential successors, the board and Chief Executive Officer consider ATRF's future business strategy, the core skills and experiences required to carry out this strategy, and the leadership abilities of individuals.

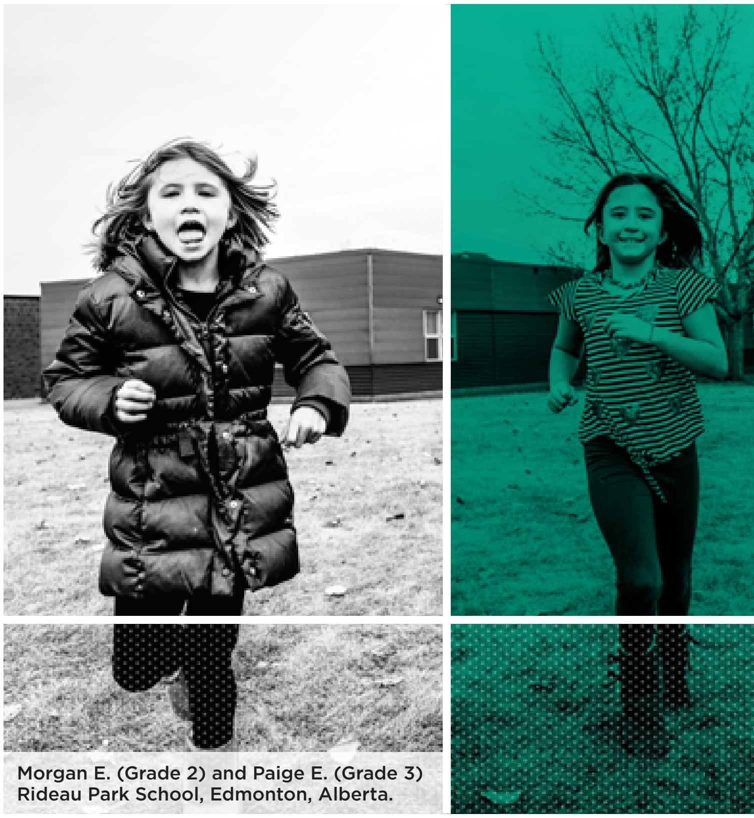
Where there are gaps in experience or skills of potential successors, the Chief Executive Officer discusses developmental opportunities with the individual and with the board. The board also ensures that the board members get to know the potential successors identified, through board presentations and events. Evaluating a diverse set of candidates based on gender, race, religion and/or other factors allows ATRF to consider a broad range of backgrounds and experiences in building its leadership team.

The HRCC reviews the succession plan on an annual basis.

Now that ATRF is subject to the RABCCA Regulation, the Committee is evaluating potential alternatives that would ensure compliance with the RABCCA Regulation compensation framework, while understanding the competitiveness of compensation from that framework and considering alternatives to enable the competitive compensation packages, where possible, to attract and retain the executives required for the go-forward corporate strategy.

COMMITMENT TO DIVERSITY

ATRF has not set defined quotas or targets for the representation of women within its executive or investment leadership teams, but will continue to focus on hiring the right person for each role. That being said, ATRF will continue to work towards increasing the level of diversity at all levels of the organization across a number of different factors, including gender and race, and cultivate an inclusive workplace.



Morgan E. (Grade 2) and Paige E. (Grade 3)
Rideau Park School, Edmonton, Alberta.

EXTERNAL CONSULTANTS

The HRCC is supported by independent, external human resources and compensation consultants that are retained by, and report directly to, the HRCC.

During the 2019-20 fiscal year, Hugessen Consulting was the HRCC's independent advisor. During that time, Hugessen assisted the HRCC in:

- Developing guidelines for using discretion in incentive programs and the treatment of LTIP for new hires;
- Benchmarking of executive pay levels relative to the approved compensation peer group;
- Reviewing the CEO's 2019-20 performance goals;
- Supporting in the compensation philosophy review;
- Items related to Bill 22 and the RABCCA Regulation, including:
  - Determining the treatment of LTIP during the RABCCA Regulation transition period;
  - Supported the Committee in developing the information package for the Government of Alberta to inform their placement of the ATRF CEO in the RABCCA Regulation compensation framework; and
- Review of the 2019-20 ATRF Scorecard corporate objectives.

The HRCC reviews all fees, and the terms of consulting services provided by Hugessen; and, when making decisions, takes an independent view of all factors taking into consideration more than the information and recommendations provided by its compensation consultant or management.

The following table outlines the fees paid to Hugessen for the periods noted:

($ dollars, audited)	Executive Compensation-Related Fees		All Other Fees	
Advisor	**2020**	**2019**	**2020**	**2019**
Hugessen Consulting	$ 252,642	$ 316,000	$ -	$ 700

2020 *Financial Statements*

Christina Y., Grade 3
ATRF Plan Member

MANAGEMENT RESPONSIBILITY

The financial statements of the Alberta Teachers' Retirement Fund Board and all information in the Annual Report are the responsibility of management, and have been approved by the board. The financial statements have been prepared in accordance with Canadian accounting standards for pension plans. Where necessary, management has made informed judgments and estimates of the outcome of events and transactions, with due consideration to materiality.

Financial and operating data elsewhere in the Annual Report is consistent with the information contained in the financial statements.

For the integrity of financial information included in this Annual Report, management relies on the organization's system of internal controls and supporting procedures. This system has been established to ensure within reasonable limits that assets are safeguarded, transactions are properly executed in accordance with management's authorization, and that the accounting records provide a solid foundation from which to prepare the financial statements. Controls include high-quality standards for hiring and training employees, an organizational structure that provides a well-defined division of responsibilities and accountability for performance, and the communication of policies and guidelines throughout the organization.

Ultimate responsibility for the financial statements rests with the board, which is assisted in its responsibilities by the staff and the Audit and Finance Committee. The Alberta Teachers' Retirement Fund Board's external auditor, the Auditor General, has conducted an independent examination of the financial statements in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as he considers necessary to express the opinion in his report. The Audit and Finance Committee of the board reviews the Auditor's Report and the financial statements, and recommends them for approval by the board. The Auditor General has full, unrestricted access to discuss the audit and related findings regarding the integrity of financial reporting, and the adequacy of internal control systems.

[Original signed by Rod Matheson]

ROD MATHESON
Chief Executive Officer

[Original signed by Myles Norton]

MYLES NORTON
Vice President, Finance

Nelson C., ATRF Staff Member

INTERNAL CONTROLS OVER FINANCIAL REPORTING

The CEO and the Vice President, Finance are responsible for the design and maintenance of internal controls over financial reporting, to provide reasonable assurance that it is reliable and that the preparation of the Financial Statements conforms with Canadian accounting standards for pension plans. They are also responsible for the design and maintenance of disclosure controls and procedures to provide reasonable assurance that all material information is gathered and reported to management on a timely basis. ATRF continues to strengthen and enhance the internal controls over financial reporting with sustained positive results. The 2019-20 fiscal year evaluation found that internal controls over financial reporting and disclosure controls and procedures are properly designed and operated effectively throughout the year. No changes were made to internal controls over financial reporting during the year ended August 31, 2020, that materially affected, or are reasonably likely to materially affect, internal controls over financial reporting.

Auditor General OF ALBERTA

Independent Auditor's Report

To the Alberta Teachers' Retirement Fund Board

Report on the Financial Statements

Opinion

I have audited the financial statements of Alberta Teachers' Retirement Fund Board (the Fund), which comprise the statement of financial position as at August 31, 2020, and the statements of changes in net assets available for benefits and changes in pension obligations for the year then ended, and notes to the financial statements, including a summary of significant accounting policies.

In my opinion, the accompanying financial statements present fairly, in all material respects, the financial position of the Fund as at August 31, 2020, and the changes in net assets available for benefits and changes in its pension obligations for the year then ended in accordance with Canadian accounting standards for pension plans.

Basis for opinion

I conducted my audit in accordance with Canadian generally accepted auditing standards. My responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Financial Statements* section of my report. I am independent of the Fund in accordance with the ethical requirements that are relevant to my audit of the financial statements in Canada, and I have fulfilled my other ethical responsibilities in accordance with these requirements. I believe that the audit evidence I have obtained is sufficient and appropriate to provide a basis for my opinion.

Other information

Management is responsible for the other information. The other information comprises the information included in the *ATRF 2020 Annual Report*, but does not include the financial statements and my auditor's report thereon. The *ATRF 2020 Annual Report* is expected to be made available to me after the date of this auditor's report.

My opinion on the financial statements does not cover the other information and I do not express any form of assurance conclusion thereon.

In connection with my audit of the financial statements, my responsibility is to read the other information identified above and, in doing so, consider whether the other information is materially inconsistent with the financial statements or my knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work I will perform on this other information, I conclude that there is a material misstatement of this other information, I am required to communicate the matter to those charged with governance.

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 the 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 Fund'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 an intention exists to liquidate or to cease operations, or there is no realistic alternative but to do so.

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

Auditor's responsibilities for the audit of the financial statements

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

As part of an audit in accordance with Canadian generally accepted auditing standards, I exercise professional judgment and maintain professional skepticism throughout the audit. I 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 my opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Fund'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 Fund's ability to continue as a going concern. If I conclude that a material uncertainty exists, I am required to draw attention in my auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify my opinion. My conclusions are based on the audit evidence obtained up to the date of my auditor's report. However, future events or conditions may cause the Fund 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.

I 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 I identify during my audit.

[Original signed by W. Doug Wylie FCPA, FCMA, ICD.D]
Auditor General

November 17, 2020
Edmonton, Alberta

ACTUARIES' OPINION

Aon has been engaged by the Alberta Teachers' Retirement Fund Board ("ATRF") to prepare actuarial valuations for the Teachers' Pension Plan and the Private School Teachers' Pension Plan (the "Plans") as at August 31, 2020. The purpose of these valuations is to determine the necessary actuarial information for financial statement reporting for the Plans in accordance with Section 4600 of the CPA Canada Handbook ("Section 4600").

Our valuations have been prepared based on:

- membership data provided by ATRF as at the most recent reported date by the respective employers, projected to August 31, 2020 and adjusted to reflect anticipated new hires as at September 1, 2020;
- asset data provided by ATRF as at August 31, 2020;
- assumptions that we understand have been adopted as ATRF management's best estimates; and
- actuarial cost methods and asset valuation methods that are in accordance Section 4600.

Based on the work we have performed, including conducting reasonability tests on the membership and asset data, we have concluded that, in our opinion:

- the data is sufficient and reliable for the purpose of the valuations;
- the assumptions adopted as best estimate by ATRF's management are appropriate for the purpose of the valuations;
- the actuarial cost methods and the asset valuation methods employed are appropriate for the purpose of the valuations; and
- the valuations conform with the requirements of Section 4600.

While the actuarial assumptions used to estimate the Plans' liabilities represent ATRF management's best estimate of future events and market conditions at August 31, 2020, the Plans' future experience will differ from the actuarial assumptions. Emerging experience differing from the assumptions will result in gains or losses that will be revealed in future valuations and will affect the financial position of the Plans.

Our opinions have been given, and our valuations have been performed, in accordance with accepted actuarial practice in Canada.

[Original signed by Brenda Prysko]

BRENDA PRYSKO
Fellow, Canadian Institute of Actuaries
Fellow, Society of Actuaries

[Original signed by Nathan Conway]

NATHAN CONWAY
Fellow, Canadian Institute of Actuaries
Fellow, Society of Actuaries

November 18, 2020

Statement of Financial Position

As at August 31 ($ Thousands)	**2020**	2019
ASSETS		
Investments (Note 3)	$ 20,041,210	$ 18,720,338
Contributions receivable	17,319	25,954
Other assets	14,205	7,609
	20,072,734	18,753,901
LIABILITIES		
Investment-related liabilities (Note 3)	729,949	576,170
Accounts payable and accrued liabilities (Note 4)	41,362	41,709
Other liabilities	3,191	-
	774,502	617,879
NET ASSETS AVAILABLE FOR BENEFITS (Note 5)	19,298,232	18,136,022
ACCRUED PENSION OBLIGATIONS (Note 5)	16,216,064	14,687,924
ACCOUNTING SURPLUS (Note 5)	**$ 3,082,168**	**$ 3,448,098**

The accompanying notes are part of these financial statements.

Approved by the Board

[Original signed by Sandra Johnston]

Sandra Johnston
Chair

[Original signed by Paul Haggis]

Paul Haggis
Chair, Audit & Finance Committee

Statement of Changes in Net Assets Available for Benefits

For the Year Ended August 31 ($ Thousands)	2020	2019
Net assets available for benefits, beginning of year	**$ 18,136,022**	**$ 16,551,518**
Investment operations		
Change in fair value of investments (Note 6)	763,293	957,474
Investment income (Note 6)	383,362	513,286
Investment expenses (Note 7)	(146,572)	(163,252)
Net investment operations	1,000,083	1,307,508
Member service operations		
Contributions (Note 8)		
Teachers	422,379	426,027
The Province	397,937	400,161
Private School Boards	2,755	2,673
Transfers from other plans	5,753	15,147
	828,824	844,008
Benefits paid (Note 9)	(658,238)	(558,448)
Member service expenses (Note 7)	(8,459)	(8,564)
Net member service operations	162,127	276,996
Increase in net assets available for benefits	1,162,210	1,584,504
Net assets available for benefits, end of year	**$ 19,298,232**	**$ 18,136,022**

Statement of Changes in Pension Obligations

For the Year Ended August 31 ($ Thousands)	**2020**	2019
Accrued pension obligations, beginning of year	**$ 14,687,924**	**$ 13,854,246**
Increase (decrease) in accrued pension obligations		
Interest on accrued benefits (Note 5)	950,374	899,815
Benefits accrued (Note 5)	524,689	536,584
Experience gains (Note 5)	(108,249)	(73,994)
Changes in actuarial assumptions (Note 5)	819,564	29,721
Benefits paid (Notes 5 and 9)	(658,238)	(558,448)
	1,528,140	833,678
Accrued pension obligations, end of year (Note 5)	**$ 16,216,064**	**$ 14,687,924**

The accompanying notes are part of these financial statements.

NOTES TO THE FINANCIAL STATEMENTS

NOTE 1 DESCRIPTION OF PLANS

The following description of the Teachers' Pension Plan and the Private School Teachers' Pension Plan (the "Plans") is a summary only.

a) General

The Alberta Teachers' Retirement Fund Board ("ATRF"), established in 1939, a corporation under the authority of the *Teachers' Pension Plans Act,* Chapter T-1, RSA 2000, is the trustee and administrator of the Plans. The Plans are contributory defined benefit pension plans for the teachers of Alberta.

b) Obligations relating to the period before September 1992

The Teachers' Pension Plan's assets and obligations related to pensionable service after August 31, 1992 (the "post-1992 period") have been accounted for separately from the assets and obligations related to pensionable service prior to September 1, 1992 (the "pre-1992 period") and, accordingly, these financial statements and notes include only post-1992 period transactions of the Teachers' Pension Plan and transactions of the Private School Teachers' Pension Plan.

Effective September 1, 2009, the Province of Alberta (the "Province") assumed full responsibility for obligations related to the Teachers' Pension Plan pre-1992 period pensionable service and provides the required amounts to ATRF to pay the obligations on a monthly basis (Note 9).

c) Contributions

The determination of the value of the benefits and the required contributions for the Plans is made on the basis of periodic actuarial valuations.

All teachers under contract with school jurisdictions and charter schools in Alberta are required to contribute to the Teachers' Pension Plan. Current service costs and related deficiencies are funded by equal contributions from the Province and the teachers. A component of the pre-1992 contributions includes a cost-of-living adjustment, equating to 60% of the increase to the Alberta Consumer Price Index ("ACPI"). Post-1992, the cost-of-living adjustment is calculated at 70% of the increase in the ACPI. This additional 10% is fully funded by the teachers.

NOTE 1 DESCRIPTION OF PLANS (CONTINUED)

Certain other designated organizations in Alberta also participate in the Teachers' Pension Plan under the same funding arrangements, except these organizations make the employer contributions rather than the Province.

Certain private schools participate in the Private School Teachers' Pension Plan. The structure for plan costs and related deficiencies are funded in equal contributions from the employers and the teachers. Similar to the Teachers' Pension Plan above, the additional 10% cost-of-living adjustment for service earned after 1992 is funded entirely by the teachers.

The contribution rates for fiscal years ending August 31 are as follows:

	Teachers' Pension Plan		Private School Teachers' Pension Plan	
	2020	2019	**2020**	2019
Up to YMPE[1]	10.17%	10.17%	8.76%	8.76%
Above YMPE	14.52%	14.52%	12.52%	12.52%
Total Teachers' Contribution	11.92%	11.92%	10.27%	10.27%
Total Government/ Employer Contribution	11.29%	11.29%	9.73%	9.73%

[1] YMPE: Yearly Maximum Pensionable Earnings used by the Canada Pension Plan (2020: $58,700; 2019: $57,400)

d) Retirement pensions

Retirement pensions are based on the number of years of pensionable service and the average salary of the highest five consecutive years. Pensions are payable to teachers who retire after completion of at least five years of pensionable service, with certain restrictions, and who have attained age 65. Unreduced pensions are also payable to teachers who have reached at least age 55 and the sum of their age and service equals at least 85. With certain restrictions, reduced pensions are payable to teachers who retire at or after age 55 with a minimum of five years of pensionable service.

NOTE 1 DESCRIPTION OF PLANS (CONTINUED)

e) Disability benefits

Teachers who are disabled after August 31, 1992 are credited with pensionable service while disabled. Teachers do not contribute to the Plans while disabled.

f) Termination benefits

Refunds or commuted value transfers are available when a teacher ceases employment, subject to certain restrictions. Inactive members with a minimum of five years of pensionable service, subject to certain restrictions, have the option to defer their entitlement in the Plans and receive a pension when they retire.

g) Death benefits

Death benefits are available upon the death of a teacher and may be available upon the death of a pensioner, depending on the pension option selected by the pensioner at the time of retirement. The benefit may take the form of a lump sum payment or a survivor pension.

h) Other provisions

i) SERVICE PURCHASES

Purchase of past service, such as substitute teaching service, employer-approved leaves, and reinstatement of refunded service is allowed on a basis that is cost neutral to the Plans.

ii) RECIPROCAL TRANSFER AGREEMENTS

The Plans have Reciprocal Transfer Agreements with all other provincial teachers' pension plans, the Alberta public sector pension plans, and the Government of Canada Public Service Pension Plan. These agreements authorize the transfer of pensionable service in accordance with the terms of the reciprocal transfer agreement between the participating organizations.

i) Cost-of-living adjustments ("COLA")

Deferred pensions and pensions payable are increased each year by an amount equal to 60% of the increase in the ACPI. For the portion of pension earned after 1992, COLA is calculated at 70% of the increase in the ACPI.

j) Income tax

The Plans are registered pension plans as defined in the *Income Tax Act* (registration number 0359125) and are not subject to income taxes in Canada. The Plans may be subject to taxes in other jurisdictions where full tax exemptions are not available.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

a) Basis of presentation

The statements present the aggregate financial position of the Plans. These financial statements are prepared in accordance with Canadian accounting standards for pension plans. Section 4600 –Pension Plans, of the CPA Canada Handbook, prescribes accounting policies specific to investments and pension obligations. For accounting policies which do not relate to either investments or pension obligations, International Financial Reporting Standards ("IFRS") are applied. To the extent that IFRS are inconsistent with Section 4600, Section 4600 takes precedence.

All of the entities that ATRF has an ownership interest in, regardless of whether ATRF can control or exercise significant influence, are considered to be investment assets and are presented on a non-consolidated basis.

b) Application of new IFRS accounting standards

Effective September 1, 2019, ATRF adopted IFRS 16 Leases using the cumulative catch-up approach and has not restated prior periods. The impact is not material to the overall financial statements. The asset value of the right-of-use asset for office premises, previously treated as operating leases is included in "Other assets" and the related lease liability is included in "Other liabilities".

c) Investment

Investments, investment-related receivables and investment-related liabilities are recognized on a trade date basis and are stated at fair value.

i) VALUATION OF INVESTMENTS

Fair value

Fair value is the price at which an investment asset would be sold or investment liability transferred through an orderly transaction between market participants at the measurement date under current market conditions.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fair values are determined as follows:

CATEGORY	BASIS OF VALUATION
Money-market securities	Cost plus accrued interest approximates fair value due to the short-term nature of these securities.
Bonds and debentures	Closing quoted market price. Where quoted prices are not available, estimated values are calculated using discounted cash flows based on current market yields for comparable securities.
Public equity	Closing quoted market price. Where a market price is not available, market value is determined using appropriate valuation methods.
Private equity/ Infrastructure	Private equity/Infrastructure investments are held through limited partnerships, investment funds and/or other appropriate legal structures alongside our investment managers. Fair value is determined based on carrying values and other relevant information reported by the investment managers using accepted valuation methods and adjusted for any transactions during the interim period up to the reporting date of these financial statements.
Absolute return	Absolute return funds are recorded at fair value, as reported by the investment managers.
Real estate	Real estate investments are held directly, through limited partnerships, investment funds and/or other appropriate legal structures alongside our investment managers. Fair value for direct investments is determined using independent appraisals, which are independently appraised every year. Investments held through fund investments are valued using carrying values reported by the investment managers using similar accepted industry valuation methods.
Bond repurchase agreement	Bonds sold under repurchase agreement are recorded at cost plus accrued interest, which approximates fair value.
Derivatives	Market prices are used for exchange-traded derivatives. Where quoted market prices are not readily available, in the case of over-the-counter ("OTC") derivatives, appropriate valuation techniques are used to determine fair value.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

Fair value hierarchy

All financial instruments measured at fair value are categorized into one of the following three hierarchy levels. Each level reflects the availability of observable inputs which are used to determine fair values, based on financial information significant to the valuation measurement:

Level 1 – Fair value is based on unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2 – Fair value is based on market data other than quoted prices included in Level 1 that are observable either directly or indirectly;

Level 3 – Fair value is based on inputs other than observable market data.

ii) INCOME RECOGNITION

Income is recognized as follows:

CATEGORY	BASIS OF RECOGNITION
Interest income	Accrual basis
Dividend income	Accrual basis on the ex-dividend date
Income from real estate, private equity, and infrastructure	Income includes distributions recognized as interest income, dividend income or other income, as appropriate
Realized gains and losses on investments	Difference between proceeds on disposal and the average cost
Unrealized gains and losses on investments	Change in the difference between estimated fair value and the average cost

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

iii) EXTERNAL INVESTMENT MANAGEMENT EXPENSES

Base management expenses for external investment managers are accrued and expensed in the fiscal period.

iv) EXTERNAL INVESTMENT PERFORMANCE FEES

External investment performance fees are profit-sharing arrangements contractually earned by external investment managers for superior returns exceeding pre-determined thresholds. Fees earned by external managers in the fiscal period are expensed.

v) TRANSACTION COSTS

Transaction costs are incremental costs attributable to the acquisition and disposition of investment assets or liabilities. Transaction costs are expensed as incurred.

d) Foreign currency translation

Assets and liabilities denominated in foreign currencies are translated into Canadian dollars at the exchange rates prevailing on the year-end date. Income and expenses are translated into Canadian dollars at the exchange rates prevailing on the dates of the transactions. The realized gains and losses arising from the transactions and the unrealized gains and losses from these translations are included within the change in fair value of investments in investment earnings.

e) Contributions

Contributions from the teachers, the Province and the employers are recorded on an accrual basis. Cash received from teachers for credited service and cash transfers from other pension plans are recorded when received.

f) Benefits

Pension benefits, termination benefits and transfers to other plans are recorded in the period in which they are paid. Any benefit payment accruals not paid are reflected in accrued pension benefits.

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

g) Accrued pension obligations

The value of accrued pension obligations and changes therein during the year are based on an actuarial valuation prepared by an independent firm of actuaries annually as at August 31. The valuation uses the projected benefit method, pro-rated on service, and includes management's best estimate of various future events, as at the valuation date (Note 5).

h) Capital assets

Capital assets are recorded at cost and amortized over their estimated useful lives. Costs net of accumulated amortization are included with 'Other assets' on the Statement of Financial Position.

i) Use of estimates

The preparation of financial statements, in conformity with Canadian accounting standards for pension plans, requires management to make estimates and assumptions that affect the amounts reported in the financial statements.

Measurement uncertainty exists in the calculation of the Plans' actuarial value of accrued benefits. Uncertainty arises because the Plans' actual experience may differ significantly from assumptions used in the calculation of the Plans' accrued benefits.

Significant estimates and assumptions are made in measuring the Plans' private investments, which include considerations such as impacts of COVID-19. The values may differ significantly from the values that would have been used had a ready market existed for these investments.

j) Salaries and benefits

Details of executives' compensation included in "salaries and benefits" (Note 7) are presented in the Compensation Discussion and Analysis section of the Annual Report.

ATRF participates in the Local Authorities Pension Plan, a defined benefit public sector pension plan, which meets the accounting requirements for treatment as a defined contribution plan. The employer contributions are recorded as an expense under salaries and benefits (Note 7).

NOTE 2 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (CONTINUED)

ATRF provides a Supplementary Employee Pension Plan (SEPP) to executives and managers whose earnings exceed the pension benefit limit under the *Income Tax Act* regulations. Benefits are paid to these members as the benefits come due. No assets are earmarked, set aside or placed into trust by ATRF for SEPP benefit payments. The pension benefit is recorded as an expense under salaries and benefits (Note 7) and as a liability (Note 4).

k) Accounting surplus

For financial statement reporting purposes, the Plans' surplus or deficiency is based on the difference between the fair value of the Plans' net assets available for benefits and the accrued pension obligation.

NOTE 3 INVESTMENTS

The following schedule summarizes the fair value of the Plans' investments before allocating the market exposure related to derivative financial instruments. Investment assets and liabilities are presented within the fair value hierarchy as defined in note 2c.

($ Thousands)	Fair Value			2020	2019
	Level 1	Level 2	Level 3	Total	Total
Fixed Income					
Cash	$ 128,515	$ -	$ -	$ 128,515	$ 170,682
Money-market securities	-	593,839	-	593,839	629,275
Bonds and debentures	-	3,953,153	114,051	4,067,204	3,901,059
	128,515	4,546,992	114,051	4,789,558	4,701,016
Equity					
Public	6,805,000	-	-	6,805,000	6,357,756
Private	-	-	2,099,945	2,099,945	1,883,361
	6,805,000	-	2,099,945	8,904,945	8,241,117
Absolute return	-	-	1,873,240	1,873,240	1,671,685
Real estate	-	-	2,665,451	2,665,451	2,737,477
Infrastructure	-	-	1,544,835	1,544,835	1,259,482
	-	-	4,210,286	4,210,286	3,996,959
Investment-related assets					
Accrued income	11,589	-	-	11,589	12,709
Due from brokers	58,809	-	-	58,809	34,677
Unrealized gains and amounts receivable on derivative contracts	34,767	158,016	-	192,783	62,175
	105,165	158,016	-	263,181	109,561
INVESTMENT ASSETS	7,038,680	4,705,008	8,297,522	20,041,210	18,720,338
Investment-related liabilities					
Due to brokers	50,175	-	-	50,175	35,058
Bond repurchase agreements	-	644,512	-	644,512	518,891
Unrealized losses and amounts payable on derivative contracts	15,592	19,670	-	35,262	22,221
INVESTMENT LIABILITIES	65,767	664,182	-	729,949	576,170
NET INVESTMENTS	$ 6,972,913	$ 4,040,826	$ 8,297,522	$ 19,311,261	$ 18,144,168

NOTE 3 INVESTMENTS (CONTINUED)

The following table represents a reconciliation of financial instruments included in Level 3 of the fair value hierarchy for the year ended August 31, 2020:

($ Thousands)	Fair Value, August 31, 2019	Purchases	Sales	Realized Gain	Unrealized Gain	**Fair Value, August 31, 2020**
Bonds and debentures	$ 124,059	$ -	$ (10,080)	$ -	$ 72	$ 114,051
Private equity	1,883,361	343,361	(256,087)	115,483	13,827	2,099,945
Absolute return	1,671,685	228,727	(70,878)	4,197	39,509	1,873,240
Real estate	2,737,477	158,414	(298,771)	63,903	4,428	2,665,451
Infrastructure	1,259,482	331,221	(132,553)	27,891	58,794	1,544,835
	$7,676,064	$1,061,723	$(768,369)	$211,474	$116,630	$8,297,522

NOTE 4 ACCOUNTS PAYABLE AND ACCRUED LIABILITIES

($ Thousands)	**2020**	2019
Tax withholdings	$ 13,271	$ 12,733
Accounts payable	11,905	11,757
Incentive plans payable	6,268	5,837
Supplementary Employee Pension Plan	6,056	5,528
Long-Term Incentive Plan	1,523	4,149
Other	2,339	1,705
	$ 41,362	$ 41,709

NOTE 5 ACCRUED PENSION OBLIGATIONS

Pension obligations represent the value of accrued pension benefits payable in the future to members and are based on an actuarial valuation prepared annually by an independent firm of actuaries. For accounting purposes, actuarial valuations of the Plans were performed as at August 31, 2020. Valuations for the Plans were also prepared as at August 31, 2019. The present value of the accrued pension obligations of $16,216 million (2019: $14,688 million) was determined using the projected accrued benefit actuarial cost method prorated on service.

a) Best-estimate valuations and assumptions

The assumptions used in the valuations are based on past experience, as analyzed by the Plans' actuary, and management's best estimate of future events and involve rates of demographic change, such as rates of mortality, termination of membership and retirement, as well as economic parameters, such as rates of inflation, discount rates and salary escalation rates.

The discount rate is equivalent to the long-term expected rate of return on invested assets.

The major long-term economic assumptions used in the best-estimate valuations are:

	2020	2019
Rate of return on invested assets (discount rate)	6.35%	6.50%
Rate of inflation	2.00%	2.00%
Real wage increases	0.75%	1.00%

NOTE 5 ACCRUED PENSION OBLIGATIONS (CONTINUED)

b) Sensitivity of changes in major assumptions on best-estimate valuations

For illustrative purposes, the table below shows the impact of changes in major assumptions, holding all other assumptions constant:

	Teachers' Pension Plan		Private School Teachers' Pension Plan	
	0.5% decrease in rate of return on invested assets	0.5% increase in rate of inflation	0.5% decrease in rate of return on invested assets	0.5% increase in rate of inflation
Increase in current service costs (% of total teacher salaries)	2.0%	1.5%	2.1%	1.6%
Increase in accrued pension obligations	$1,351 million	$973 million	$7 million	$5 million

For accounting purposes, and using best-estimate financial statement valuation assumptions, as at August 31, 2020, the current service cost (excluding 0.2% for administrative expenses) as a percent of total teacher salaries for the Teachers' Pension Plan is 15.7% and for the Private School Teachers' Pension Plan is 16.1%. The financial statement valuation's current service cost may differ from the current service cost calculated using the funding valuation assumptions for funding purposes.

NOTE 5 ACCRUED PENSION OBLIGATIONS (CONTINUED)

c) Results based on valuations

For accounting purposes, the excess of net assets available for benefits against pension obligations results in the Plans being in an accounting surplus of $3,059 million for the post-1992 period of the Teachers' Pension Plan and an accounting surplus of $23 million for the Private School Teachers' Pension Plan as at August 31, 2020.

($ Thousands)	2020			2019		
	Teachers' Pension Plan	**Private Teachers' Plan**	**Total**	Teachers' Pension Plan	Private Teachers' Plan	Total
Net assets at beginning of year	$18,045,104	$ 90,918	$18,136,022	$16,469,636	$ 81,882	$16,551,518
Contributions	823,347	5,477	828,824	838,640	5,368	844,008
Benefits	(655,135)	(3,103)	(658,238)	(555,689)	(2,759)	(558,448)
Investment earnings	1,140,907	5,748	1,146,655	1,463,483	7,277	1,470,760
Investment and member service expenses	(154,254)	(777)	(155,031)	(170,966)	(850)	(171,816)
Net assets at end of year	19,199,969	98,263	19,298,232	18,045,104	90,918	18,136,022
Accrued pension obligations at beginning of year	14,619,963	67,961	14,687,924	13,791,099	63,147	13,854,246
Interest on accrued benefits	945,921	4,453	950,374	895,669	4,146	899,815
Benefits accrued	520,480	4,209	524,689	532,540	4,044	536,584
Experience gains	(106,691)	(1,558)	(108,249)	(73,221)	(773)	(73,994)
Changes in actuarial assumptions	816,399	3,165	819,564	29,565	156	29,721
Benefits paid	(655,135)	(3,103)	(658,238)	(555,689)	(2,759)	(558,448)
Actuarial value of accrued pension obligations	16,140,937	75,127	16,216,064	14,619,963	67,961	14,687,924
Accounting surplus	$ 3,059,032	$ 23,136	$ 3,082,168	$ 3,425,141	$ 22,957	$ 3,448,098

The change in pension obligations is comprised of five components:

i) INTEREST ON ACCRUED BENEFITS

Pension obligations increase with interest as the present value of the valuation is evaluated one year later. The interest on accrued benefits is calculated using the rate of return on invested assets.

NOTE 5 ACCRUED PENSION OBLIGATIONS (CONTINUED)

ii) BENEFITS ACCRUED

Pension obligations increase with new service credited and additional benefits accumulated by plan members during the fiscal year.

iii) EXPERIENCE GAINS

Experience gains of $108.249 million (2019: Experience gains of $73.994 million) on accrued benefits are the result of actual experience from one valuation to the next being different than implied by the assumptions from the previous valuation. As the experience is more favorable than anticipated in the assumptions, this results in an experience gain. Experience gains decrease the pension obligations. The following table provides details on the net gains on accrued benefits.

($ Thousands)		TPP		PSTPP		Total
Short-term salary increase	$	(218,210)	$	(1,219)	$	(219,429)
COLA		(16,381)		(69)		(16,450)
Demographic		105,234		(346)		104,888
Other plan experience		22,666		76		22,742
Experience gains	$	(106,691)	$	(1,558)	$	(108,249)

iv) CHANGES IN ACTUARIAL ASSUMPTIONS

Pension obligations can increase or decrease if there are changes in actuarial assumptions used to evaluate the present value of benefits.

The assumption changes from August 31, 2019 to August 31, 2020 include changes to demographic assumptions and changes to economic assumptions. The impact of the assumption changes on the accrued benefits is shown in the following table.

($ Thousands)		TPP		PSTPP		Total
Demographic	$	361,721	$	753	$	362,474
Economic		454,678		2,412		457,090
Total assumption changes	$	816,399	$	3,165	$	819,564

NOTE 5 ACCRUED PENSION OBLIGATIONS (CONTINUED)

v) BENEFITS PAID

The pension obligations decrease with benefits paid from the Plans during the fiscal year, as the funds are no longer required to be set aside to pay for those benefits.

d) Valuation methodologies

ATRF conducts two different actuarial valuations of the Plans. One is for accounting purposes which is included in the financial statements, as per the prescribed accounting standards, and the results are shown within this section of the Notes to the Financial Statements. The second is for funding purposes, as discussed in the funding section of the Annual Report.

The Plans' accounting surplus or deficiency, defined as capital, includes the determination of assets on a fair value basis. However, for actuarial funding valuation purposes, asset values are adjusted for fluctuations in fair values to moderate the effect of market volatility on the Plans' funded status. The funding valuation is calculated in accordance with actuarial standards on a going concern basis and is used to determine changes to contribution rates for future service in order to manage the Plans' funding status. Both types of valuations have prescribed uses and are based on the same underlying plan member data, but the funding valuation differs in smoothing market returns over a five-year period and incorporating a margin for adverse deviation in the discount rate.

In accordance with the *Teachers' Pension Plans Act*, an actuarial funding valuation is required to be performed, at a minimum, every three years. The objective is to ensure that the Plans are fully funded over the long term through the management of investments and contribution rates. Investments are based on an asset mix that is designed to enable the Plans to meet their long-term funding requirement within an acceptable level of risk, consistent with the Plans' investment and funding policies, which are approved by the Board. The actuarial deficiencies as determined by actuarial funding valuations are expected to be funded by August 31, 2027. For further information, refer to funding section of the Annual Report.

NOTE 6 INVESTMENT EARNINGS

The following is a summary of investment earnings by asset class:

($ Thousands)	2020			2019		
	Investment Income	Change in Fair Value[1]	Total	Investment Income	Change in Fair Value[2]	Total
Fixed income						
Cash and money-market securities	$ 11,236	$ (72)	$ 11,164	$ 13,085	$ (516)	$ 12,569
Bonds and debentures	70,814	156,235	227,049	101,981	308,120	410,101
Equity						
Public	158,266	281,705	439,971	204,587	(215,525)	(10,938)
Private	23,234	129,310	152,544	36,716	366,371	403,087
Absolute return	57	43,706	43,763	-	87,146	87,146
Real estate	61,818	68,331	130,149	95,839	227,785	323,624
Infrastructure	57,937	86,685	144,622	61,078	199,960	261,038
Derivatives	-	(2,607)	(2,607)	-	(15,867)	(15,867)
	$ 383,362	$ 763,293	$ 1,146,655	$ 513,286	$ 957,474	$ 1,470,760

[1] Change in fair value includes a realized net gain of $462,258 and an unrealized net gain of $301,035.

[2] Change in fair value includes a realized net gain of $274,287 and an unrealized net gain of $683,187.

NOTE 7 INVESTMENT AND MEMBER SERVICE EXPENSES

($ Thousands)	2020			2019		
	Investment	Member Service	Total	Investment	Member Service	Total
Salaries and benefits	$ 17,620	$ 5,963	$ 23,583	$ 20,062	$ 5,605	$ 25,667
Professional services	3,338	664	4,002	4,126	845	4,971
Transaction costs	3,999	-	3,999	1,508	-	1,508
Premises and operations	2,111	1,041	3,152	2,209	1,064	3,273
Communications, research, and travel	2,018	427	2,445	2,034	400	2,434
Custodial and banking	1,562	38	1,600	1,988	50	2,038
Board and committees	484	326	810	712	600	1,312
Operating expenses	31,132	8,459	39,591	32,639	8,564	41,203
External investment management fees	90,666	-	90,666	90,694	-	90,694
External investment performance fees	24,774	-	24,774	39,919	-	39,919
	$ 146,572	$ 8,459	$ 155,031	$ 163,252	$ 8,564	$ 171,816

NOTE 8 CONTRIBUTIONS

($ Thousands)	2020	2019
Teachers		
Current service	$ 320,022	$ 305,829
Current service: additional COLA	17,547	16,566
Past service	4,773	6,726
Deficiency	80,037	96,906
	422,379	426,027
The Province		
Current service	319,810	305,367
Past service	2,032	2,973
Deficiency	76,095	91,821
	397,937	400,161
Private School Boards		
Current service	2,739	2,552
Deficiency	16	121
	2,755	2,673
Transfers from other plans	5,753	15,147
	$ 828,824	$ 844,008

NOTE 9 BENEFITS PAID

($ Thousands)	2020	2019
Pension benefits	$ 518,912	$ 471,738
Termination benefits	130,008	76,394
Transfers to other plans	9,318	10,316
	$ 658,238	$ 558,448

During the year $489 million (2019: $483 million) was received from the Province and was distributed as benefits paid relating to the pre-1992 period.

NOTE 10 RISK MANAGEMENT

The Plans are exposed to certain financial risks as a result of investment activities. These risks include market risk, credit risk and liquidity risk. ATRF manages financial risk through the Investment Policy which is approved by the Board and reviewed at least once every fiscal year. This policy contains risk limits and risk management provisions that govern investment decisions and has been designed to achieve the mandate of ATRF which is to invest assets to achieve maximum, risk-controlled, cost-effective, long-term investment returns.

a) Market risk

Market risk is the risk that the fair value or future cash flows of an investment asset or investment liability will fluctuate because of changes in market factors such as foreign exchange rates, interest rates, equity and commodity prices. ATRF mitigates market risk through diversification of investments across asset types, geography and time horizons. Market risk is comprised of the following:

i) CURRENCY RISK

Currency risk is the risk that the value of foreign investments will be affected by changes in foreign currency exchange rates for Canadian dollars. The Plans are exposed to currency risk through holdings of investment assets or liabilities in foreign currencies. The relative Canadian value or future cash flows of investments denominated in foreign currencies will change with a change in the price of Canadian dollar against other currencies.

Foreign investments in absolute return, real estate and infrastructure are hedged with the aim of minimizing foreign currency exposure. ATRF permits portfolio managers to hedge foreign currency holdings to limit the Plans' foreign currency exposure.

NOTE 10 RISK MANAGEMENT (CONTINUED)

The Plans' foreign currency exposure is as follows:

($ Thousands)	2020				2019			
Currency	**Foreign Currency Exposure**	**Currency Derivatives**	**Net Foreign Currency Exposure**	**% of Total**	Foreign Currency Exposure	Currency Derivatives	Net Foreign Currency Exposure	% of Total
United States dollar	$ 5,956,131	$(3,470,043)	$ 2,486,088	46%	$ 5,656,083	$(3,676,935)	$ 1,979,148	42%
Euro	1,296,616	(689,550)	607,066	11	1,142,905	(433,464)	709,441	15
Hong Kong dollar	459,937	(57,536)	402,401	7	371,658	-	371,658	8
British pound sterling	759,556	(430,916)	328,640	6	638,100	(304,307)	333,793	7
Indian rupee	192,664	-	192,664	4	207,057	39	207,096	4
Taiwan dollar	173,418	-	173,418	3	134,295	-	134,295	3
Other	864,908	386,569	1,251,477	23	874,280	101,933	976,213	21
	$ 9,703,230	$(4,261,476)	$ 5,441,754	100%	$ 9,024,378	$(4,312,734)	$ 4,711,644	100%

The net foreign currency exposure of its underlying investments represents 28% (2019: 26%) of the Plans' total investments.

After considering the effect of currency hedges, a 5% increase/decrease in the value of the Canadian dollar against all currencies, with all other variables held constant, would result in an approximate decrease/increase in the value of net foreign investments of $272 million as at August 31, 2020 (2019: $236 million).

ii) INTEREST RATE RISK

Interest rate risk is the risk that the fair value or future cash flows of an investment will fluctuate as a result of changes in market interest rates. The Plans are exposed to interest rate risk through fixed-rate and floating-rate securities. There are also certain alternative investments which may have interest rate components exposing them to interest rate risk. Changes in interest rates affect fair values of fixed-rate securities and the cash flows of floating-rate securities. Increases in interest rates will generally decrease the fair value of fixed-rate securities and increase cash flow from floating-rate notes.

ATRF manages interest rate risk for investments by establishing a target asset mix that provides an appropriate mix between interest-sensitive investments and those subject to other risks. A portion of the interest-sensitive portfolio is actively managed, allowing managers to anticipate interest rate movements to mitigate or take advantage of interest rate changes.

NOTE 10 RISK MANAGEMENT (CONTINUED)

Interest rate risk sensitivity

The following table presents the approximate increase/decrease in market value for the Plans' interest rate sensitive investments, assuming a parallel 1% decrease/increase in interest rates, with all other variables held constant:

($ Thousands)	2020			2019		
Term to Maturity	Market Value	Change in Market Value	Market Value % of Total	Market Value	Change in Market Value	Market Value % of Total
Less than 1 year	$ 761,443	$ 1,758	16%	$ 701,485	$ 2,206	15%
1-3 years	212,612	3,845	5	304,020	5,562	7
3-5 years	321,129	11,673	7	328,169	11,983	7
5-10 years	876,348	54,741	19	757,000	47,017	17
Greater than 10 years	2,375,460	382,126	51	2,240,211	355,282	50
Other[1]	114,051	-	2	199,449	-	4
	$4,661,043	$ 454,143	100%	$4,530,334	$ 422,050	100%

[1] Includes externally managed private debt investments and holdings for which term to maturity information is not available or modified duration could not be calculated.

The interest rate sensitive assets represent 24% (2019: 25%) of the Plans' total investments.

iii) EQUITY PRICE RISK

Equity price risk is the risk that the fair value of an investment will fluctuate as a result of changes in equity market prices (other than those arising from interest-rate risk or currency risk), whether those changes are caused by factors specific to the individual investment or factors affecting all securities traded in the market.

The Plans use geographic, sector and entity specific analyses, and strategies such as diversification and derivative instruments to mitigate the overall impact of price risk.

A 10% increase/decrease in the value of the overall public equity market, with all other variables held constant, would result in an approximate increase/decrease in the value of public-market exposure of $694 million (2019: $636 million).

NOTE 10 RISK MANAGEMENT (CONTINUED)

b) Credit risk

Credit risk is the potential of loss should a counterparty fail to meet its contractual obligations, or a reduction in the value of assets due to deteriorated credit quality of the counterparty, guarantor or the collateral supporting the credit exposure. The Plans are exposed to credit risk through investment in fixed income investments, securities lending, and balances receivable from sponsors and counterparties.

To mitigate this risk, investment restrictions within the Plans have been set to limit the credit exposure to security issuers. Short-term investments require a rating of "R-1" or equivalent. Bonds or debentures require minimum ratings of "CCC" or equivalent in the externally managed portfolios and "BBB" for the portfolios managed internally. Unrated private debt investments are required to meet the rating criteria comparable to a "BBB" rating. Credit exposure to any single counterparty is limited to maximum amounts and minimum ratings as specified in the investment policies and guidelines.

As at August 31, 2020, fixed-income investments exposed to credit risk, by credit rating, are as follows:

($ Thousands)	**2020**		2019	
	Market Value	**% of Total**	Market Value	% of Total
Investment grade (AAA to BBB-)	$ 4,526,674	97%	$ 4,324,784	95%
Speculative grade (BB+ or lower)	11,804	0	49,663	1
Unrated	122,565	3	155,887	4
	$ 4,661,043	100%	$ 4,530,334	100%

As at August 31, 2020, the Plans have significant concentration of credit risk within fixed income investments with the following issuers:

($ Thousands)	**2020**		2019	
	Market Value	**% of Total**	Market Value	% of Total
Province of Ontario	$ 764,522	16%	$ 636,717	14%
Government of Canada	607,170	13	742,421	16
Province of Quebec	521,023	11	462,532	10

NOTE 10 RISK MANAGEMENT (CONTINUED)

The Plans are also exposed to risk through over-the-counter ("OTC") derivative transactions, arising from a default or insolvency of a counterparty.

The Plans mitigate counterparty credit risk by using an internal credit-limit monitoring process, International Swaps and Derivatives Master Agreements ("ISDAs") and/or Credit Support Annexes ("CSAs") with our counterparties. An ISDA allows for close-out netting privileges in the event of default, while a CSA enables the Plans to realize upon any collateral placed with it in the case of default of the counterparty. As at August 31, 2020, the Plans hold $11 million (2019: $11 million) of collateral to mitigate its credit risk exposure for forwards. The net credit exposure for forwards is $142 million (2019: $38 million).

The Plans have exposure to OTC derivatives as follows:

($ Thousands)	2020	2019
Forwards	$ 152,576	$ 48,744
Options	5,440	3,603
Swaps	-	1,250
	$ 158,016	$ 53,597

c) Liquidity risk

Liquidity risk is the risk of the Plans being unable to generate sufficient cash in a timely and cost-effective manner to meet commitments and expenses as they become due. Consideration is given to the Plans' financial liabilities, which include investment-related liabilities (Note 3), accrued pension obligations (Note 5), and contracts that give rise to commitments for future payments (Note 11).

The investment-related liabilities are as follows:

($ Thousands)	2020				2019			
	Within 1 year	1 to 5 years	Over 5 years	Total	Within 1 year	1 to 5 years	Over 5 years	Total
Due to brokers	$ 50,175	$ -	$ -	$ 50,175	$ 35,058	$ -	$ -	$ 35,058
Derivative instruments	35,262	-	-	35,262	20,871	79	1,271	22,221
Bonds repurchase agreements	644,512	-	-	644,512	518,891	-	-	518,891
	$ 729,949	$ -	$ -	$729,949	$ 574,820	$ 79	$1,271	$ 576,170

NOTE 10 RISK MANAGEMENT (CONTINUED)

Liquidity requirements of the Plans are met through income generated from investments, employee and employer contributions which substantially exceed benefits payable, and by holding publicly traded liquid assets in active markets that are easily sold and converted to cash.

The following table presents the liquid assets at the year ended August 31:

($ Thousands)	2020	2019 (Restated)
Cash	$ 128,515	$ 170,682
Money-market securities	593,839	629,275
Bonds and debentures	3,953,153	3,777,000
Public equities	6,805,000	6,357,756
	$ 11,480,507	$ 10,934,713

ATRF aims to ensure sufficient liquidity to meet the Plans' obligations while maintaining the agility for suitable investment opportunities and/or rebalancing the investment portfolios to target levels.

NOTE 11 COMMITMENTS

The Plans have committed to fund certain private investments over the next several years. These commitments are generally payable on demand based on the funding needs of the investment subject to the terms and conditions of each commitment. As at August 31, 2020, the sum of these commitments equalled $1,672 million (2019: $1,800 million).

NOTE 12 NET INVESTMENT RETURNS AND RELATED BENCHMARK RETURNS

Net investment returns and related benchmark returns for the Plans for the years ended August 31 are as follows:

	2020	2019
Net Investment Return	5.5%	7.8%
Benchmark Return	7.3%	6.4%

Investment return has been calculated using a time-weighted rate of return methodology in accordance with industry standard methods. Net investment return is net of investment costs and excludes plan member service costs $8.5 million or 0.04% (2019: $8.6 million or 0.05%).

The Plans' benchmark return is a composite benchmark produced by aggregating returns from each policy asset class benchmark, using the Plans' asset mix policy weights.

NOTE 13 RECLASSIFICATION

Certain prior year figures have been reclassified for current year's presentation.

NOTE 14 APPROVAL OF FINANCIAL STATEMENTS

These financial statements were approved by the ATRF Board on November 17, 2020.

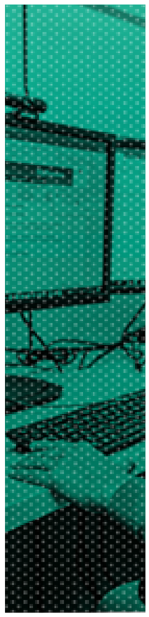
10-YEAR FINANCIAL AND STATISTICAL REVIEW (UNAUDITED)

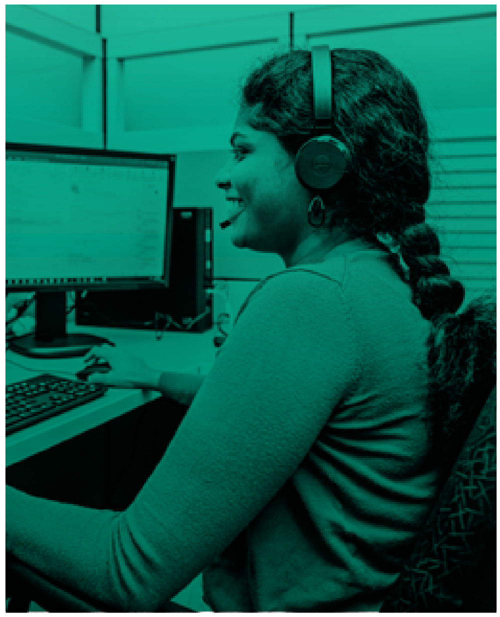
Financial position as at August 31 *($ millions)*	**2020**	2019	2018	2017	2016	2015	2014	2013	2012	2011
Investments										
Equities										
Public	6,805.0	6,357.8	6,140.2	5,609.2	5,350.5	4,872.7	4,860.2	4,626.7	3,821.8	3,545.3
Private	2,099.9	1,883.4	1,538.5	1,397.7	1,195.7	1,145.9	855.4	591.7	358.6	277.5
Absolute return	1,873.2	1,671.6	1,510.8	1,339.7	1,280.1	1,297.9	864.8	-	-	-
Infrastructure	1,544.8	1,259.5	1,075.7	952.0	946.9	543.5	404.6	278.2	186.9	123.9
Real estate	2,665.5	2,737.5	2,389.1	1,940.0	1,518.1	1,090.1	725.9	446.0	334.9	60.6
Other investment assets/(liabilities)	(466.7)	(466.6)	(368.2)	(114.0)	29.8	(118.6)	30.4	15.0	24.2	7.8
Fixed Income	4,789.6	4,701.0	4,276.6	3,640.0	3,040.3	3,249.2	2,980.6	2,629.6	2,464.4	2,328.2
Net investments	**19,311.3**	**18,144.2**	**16,562.7**	**14,764.6**	**13,361.4**	**12,080.7**	**10,721.9**	**8,587.2**	**7,190.8**	**6,343.3**
Contributions receivable	17.3	25.9	20.3	26.0	25.5	19.7	21.4	19.4	17.2	12.0
Other assets and liabilities	(30.4)	(34.1)	(31.5)	(23.1)	(30.0)	(31.0)	(26.5)	(25.6)	(14.0)	(20.2)
Net assets available for benefits	**19,298.2**	**18,136.0**	**16,551.5**	**14,767.5**	**13,356.9**	**12,069.4**	**10,716.8**	**8,581.0**	**7,194.0**	**6,335.1**
Actuarial value of accrued										
Pension obligations	16,216.0	14,687.9	13,854.2	12,862.5	12,118.2	11,281.1	10,190.6	9,406.3	9,108.7	8,294.4
Surplus / (Deficiency)	**3,082.2**	**3,448.1**	**2,697.3**	**1,905.0**	**1,238.7**	**788.3**	**526.2**	**(825.3)**	**(1,914.7)**	**(1,959.3)**
Activity during year ended August 31										
($ millions)										
Benefit and investment operations										
Investment earnings	1,146.7	1,470.8	1,568.7	1,154.6	921.5	969.6	1,717.2	1,024.6	512.0	440.4
Net contributions	828.8	844.0	870.9	849.0	881.6	842.6	823.8	692.2	596.3	577.5
Benefits paid	(658.2)	(558.4)	(508.8)	(459.1)	(421.4)	(378.2)	(337.0)	(291.2)	(220.9)	(194.5)
Investment & member service expenses	(155.1)	(171.8)	(146.8)	(133.9)	(94.2)	(81.4)	(68.2)	(38.6)	(28.4)	(25.3)
Increase in net assets	**1,162.2**	**1,584.5**	**1,784.0**	**1,410.6**	**1,287.5**	**1,352.6**	**2,135.8**	**1,387.0**	**859.0**	**798.1**
Increase in accrued pension obligations	1,528.1	833.7	991.7	744.3	837.1	1,090.5	784.3	297.6	814.4	826.7
Increase (Decrease) in surplus	**(365.9)**	**750.8**	**792.3**	**666.3**	**450.4**	**262.1**	**1,351.5**	**1,089.4**	**44.6**	**(28.6)**
Funding:										
Discount rate										
Post-1992 TPP*	5.15%	5.15%	5.20%	5.40%	6.00%	6.00%	6.25%	6.25%	6.75%	6.75%
Private school TPP*	5.00%	5.10%	5.30%	5.40%	6.00%	6.00%	6.25%	6.25%	6.75%	6.75%
Funding shortfall/(surplus) *($ millions)*										
Post-1992 TPP*	711.0	863.0	1,186.0	1,516.0	1,950.0	2,364.0	2,289.0	2,859.0	2,880.0	1,751.0
Private school TPP*	(2.5)	(2.0)	(2.1)	1.2	3.5	5.6	5.6	9.1	8.4	5.6
	708.5	861.0	1,183.9	1,517.2	1,953.5	2,369.6	2,294.6	2,868.1	2,888.4	1,756.6
Plan members										
Active	41,701	42,278	41,746	40,716	41,015	39,997	39,185	38,346	38,336	38,242
Inactive	12,116	11,847	11,758	11,997	12,102	12,252	12,411	12,364	12,404	12,384
Retired members	29,851	29,108	28,241	27,625	27,015	26,308	25,545	24,667	23,892	22,989
Number of new pensions	1,147	1,180	1,089	1,171	1,074	1,080	1,214	1,131	1,234	986
Member service costs (per member)	**$ 118**	**$ 120**	**$ 111**	**$ 97**	**$ 90**	**$ 87**	**$ 87**	**$ 87**	**$ 82**	**$ 69**
Benchmark	**$ 174**	**$ 156**	**$ 150**	**$ 150**	**$ 149**	**$ 149**	**$ 153**	**$ 148**	**$ 145**	**$ 155**
Investment costs (per $100 of assets) **	$ 0.76	$ 0.90	$ 0.84	$ 0.86	$ 0.66	$ 0.63	$ 0.58	$ 0.39	$ 0.32	$ 0.33
Post 1992 TPP* - year ended August 31										
Net investment returns	5.5%	7.8%	9.6%	7.7%	6.7%	8.3%	18.9%	13.6%	7.5%	7.5%
Benchmark	7.3%	6.4%	8.5%	7.0%	6.6%	6.5%	18.4%	11.5%	6.3%	7.3%

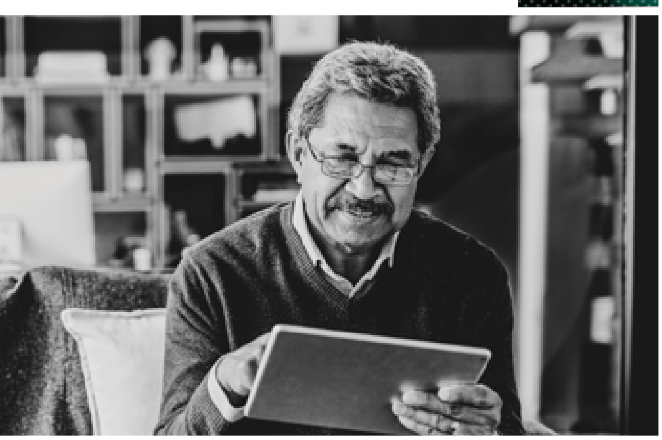
Note: Amounts relate to transactions of post-1992 Teachers' Pension Plan and of the Private School Teachers' Pension Plan.

* Teachers' Pension Plan (TPP)

** Since 2014, investment costs include external management fees for private equity, infrastructure, real estate and absolute return.







ATRF Alberta Teachers' Retirement Fund Board

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