Building a bright future

2021 Annual Report

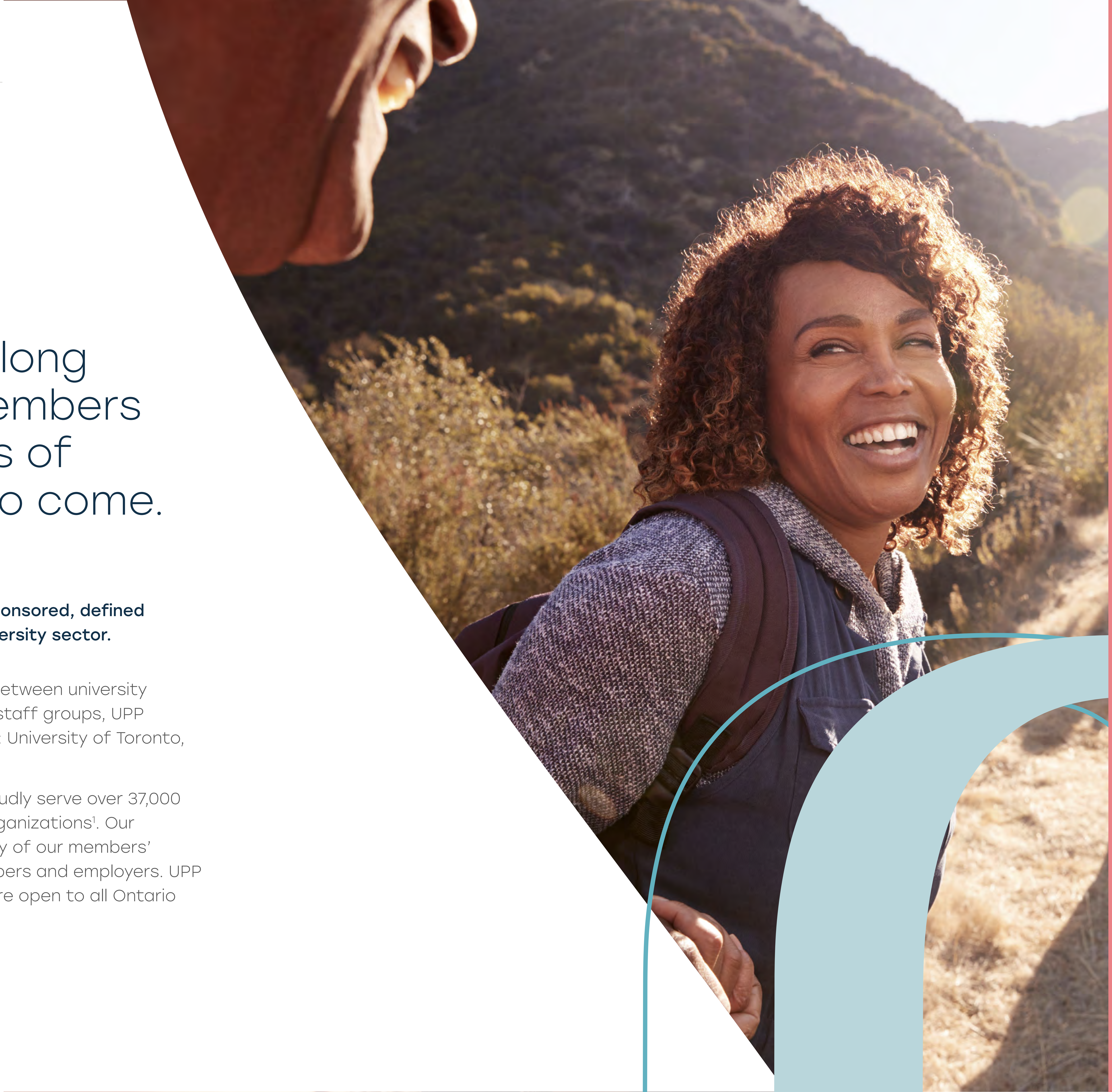
UPP UNIVERSITY PENSION PLAN ONTARIO

Delivering valuable, lifelong pension security to members today and generations of university employees to come.

We are University Pension Plan (UPP), the first jointly sponsored, defined benefit pension plan designed by and for Ontario's university sector.

After more than a decade of collaboration and effort between university unions, faculty associations, administrators, and other staff groups, UPP launched on July 1, 2021, with three founding universities: University of Toronto, Queen's University, and University of Guelph.

Today, we manage $11.8 billion in pension assets and proudly serve over 37,000 working and retired members across 16 participating organizations[1]. Our commitment is to protect the security and sustainability of our members' pensions while delivering service excellence to our members and employers. UPP is a sector-wide plan designed for growth - our doors are open to all Ontario universities.



[1] As at July 2022

Our purpose is to bring greater retirement peace of mind to the university sector by investing with integrity and serving members with care.

Our vision is to be the trusted pension plan for the university sector and a partner of choice in shaping a resilient financial, social, and environmental future.

As proud UPP members ourselves, we are deeply connected to our purpose. Each day, **our core** values define who we are and how we work with intention:

Integrity
We understand the gravity of our responsibilities and approach every decision and relationship with accountability, transparency, and respect.

Inclusivity
We will embrace the diversity and dignity of our members, Joint Sponsors, partners, and team in all interactions and relationships.

Ingenuity
We will adapt and evolve in a changing world, embracing new ways to deliver enhanced value and performance excellence.

Impact
We will foster a financially, socially, and environmentally resilient future for members in all we do, aligning with like-minded partners to amplify our impact.

2021 at-a-glance

At December 31, 2021

111%
Fully funded

$1.2B
Funding surplus

$254M
Total pension benefits paid in the last half of 2021

Six-month investment performance
(UPP 2021 operating period: July 1–December 31)

$11.8B Net assets	**5.7%** Six-month net return	**$0.6B** Net income
37,000+ Members	**3** Participating universities	**9** Participating affiliate organizations

Building a resilient future

Committed to achieve a net-zero portfolio by 2040 with ambitious interim targets

Learn more about responsible investing at UPP

A message from the Chair

Gale Rubenstein,
UPP Board Chair
Read bio

> With a strong groundwork laid, we will continually adapt and innovate in service of our members and the promise of a bright new future under UPP. That promise extends to our broader impact on the world, as we take proactive steps to position the Plan for sustainable long-term growth.

It is my great privilege and pleasure to introduce UPP's first annual report, marking another milestone along a remarkable journey.

You will see that this inaugural report, capturing the Plan's first six operating months from July 1 to December 31, 2021, reflects a period of profound transition and foundation building. As our organization and capacity grow and evolve in service of our members present and future, so too will our reporting. This time next year, we will have had a full year of operations and will introduce more information into our annual report with that fuller experience.

We have much to share about how far we have come since the Plan's inception and about our vision for the exciting road ahead.

Foundations for excellence

I am honoured to serve as UPP's inaugural Chair, alongside an exceptional Board of Trustees. This Board recognizes that good governance is a cornerstone of the jointly sponsored pension plan (JSPP) model and upholds its responsibility by providing governance at the highest standard. I am grateful for the dedication, support and wisdom of my fellow Trustees.

Building a new pension plan does not happen overnight, and we have made remarkable strides since our launch, all amidst a global pandemic. Our most important focus for 2021 was delivering a smooth, seamless transition to members while the founding universities transferred knowledge, responsibilities and select operations to UPP behind the scenes. This is a thoughtful and ongoing process involving many partners, and approached with great oversight, precision, and care. As part of that care, the universities have agreed to continue with certain services while UPP advances its core infrastructure and team.

The Board is grateful to Barbara Zvan for her inspiring leadership, dedication to excellence, and vision to establish UPP as a world-class pension plan. The achievements of the past year are a testament to the extraordinary team she has built who - with passion, commitment, and skill - have laid the foundations of a modern, agile and scalable organization, and embody UPP's values of integrity, inclusivity, ingenuity and impact. We are profoundly proud of their achievements and look confidently to the future.

A fit-for-purpose promise

UPP was designed to deliver best-in-class retirement benefits while meeting the needs of university employers and employees. We actively engaged with our founding members, universities and plan Sponsors throughout this first calendar year to ensure that we truly understood their needs and experiences, as well as their hopes and expectations for UPP.

This commitment to engagement will help us fit this Plan to purpose. We are grateful for their time and patience as we learn, listen and grow UPP into a plan they can be ever more proud to call their own. We will hold ourselves accountable as we continue forward, staying engaged and reporting as we go.

With a strong groundwork laid, we will continually adapt and innovate in service of our members and the promise of a bright new future under UPP. That promise extends to our broader impact on the world, as we take proactive steps to position the Plan for sustainable long-term growth. In this report, we introduce the Plan's commitment to achieving net-zero greenhouse gas emissions in our portfolio by 2040 or sooner, supported by a comprehensive multi-year climate action plan. This target is ambitious for a new organization, yet essential to our ability to deliver a sustainable pension promise to generations of members to come.

In closing, I would like to thank all those who played a role in the decade-long journey to bring the UPP to life. With your legacy as our inspiration, we will do great things.

A message from the CEO

Barbara Zvan, President and Chief Executive Officer
Read bio

> Looking back on 2021, I am humbled by the magnitude of what this exceptional UPP team has accomplished. We are deeply grateful for our many partners' dedication, support, and insights throughout this extraordinary journey.

I am thrilled to share this annual report, providing a snapshot of UPP's pivotal first year as Ontario's newest jointly sponsored pension plan, and the first tailored by and for Ontario's university sector.

At the start of UPP's decade-long journey, those involved–university unions, faculty associations, administrators, and other staff groups –likely each had many goals, but one common vision: retirement security tailored for the entire Ontario University community. Through many years and extensive negotiations, our founders never lost sight of their vision, and worked tirelessly to bring it to fruition.

I, and the entire team at UPP, are deeply inspired by their ingenuity and determination, and honoured to continue their work and deliver our shared vision.

A Solid Start

Central to UPP, and to any defined benefit pension plan, is the promise for every member to receive a secure and predictable retirement benefit for the rest of their life. To deliver a sustainable pension promise now and for generations to come, the plan must be well funded and built to withstand any environment. I'm pleased to share that UPP is starting from a solid financial position - fully funded with a surplus, and clear goals for performance and growth. As of December 31, 2021, we managed over $11.8 billion in net assets on behalf of 37,000+ members.

In 2022, we welcomed new participants to the Plan, bringing us to four universities and 12 other affiliated organizations - with many more expressing interest in our custom-built, sector-specific retirement solution. We now have member participation from a wide range of employees within the university sector including unions, faculty members, faculty association staff, non-union groups and other affiliates such as academic publishers and research groups.

111%	$11.8B	37,000+
Fully funded	In net assets	Members

To serve our members well, we need to know what matters to them. We see engagement with our members as integral to our growth and success on their behalf. In our first 12 months, we directly consulted members through dozens of listening sessions, discussion forums, surveys and news updates. The ideas, perspectives and feedback we've received are essential inputs in shaping our path forward. We received over 10,000 written responses in our first member survey, and I can confirm that our team read each and every one to gain further insight to members' expectations and needs.

A key tenet at UPP is sustainability – both in how we invest and how we operate as an organization. With the deep practical experience in responsible investing and sustainable finance on our leadership team and Board of Trustees, we realize the value of integrating environmental, social and governance (ESG) factors into the DNA of our organization.

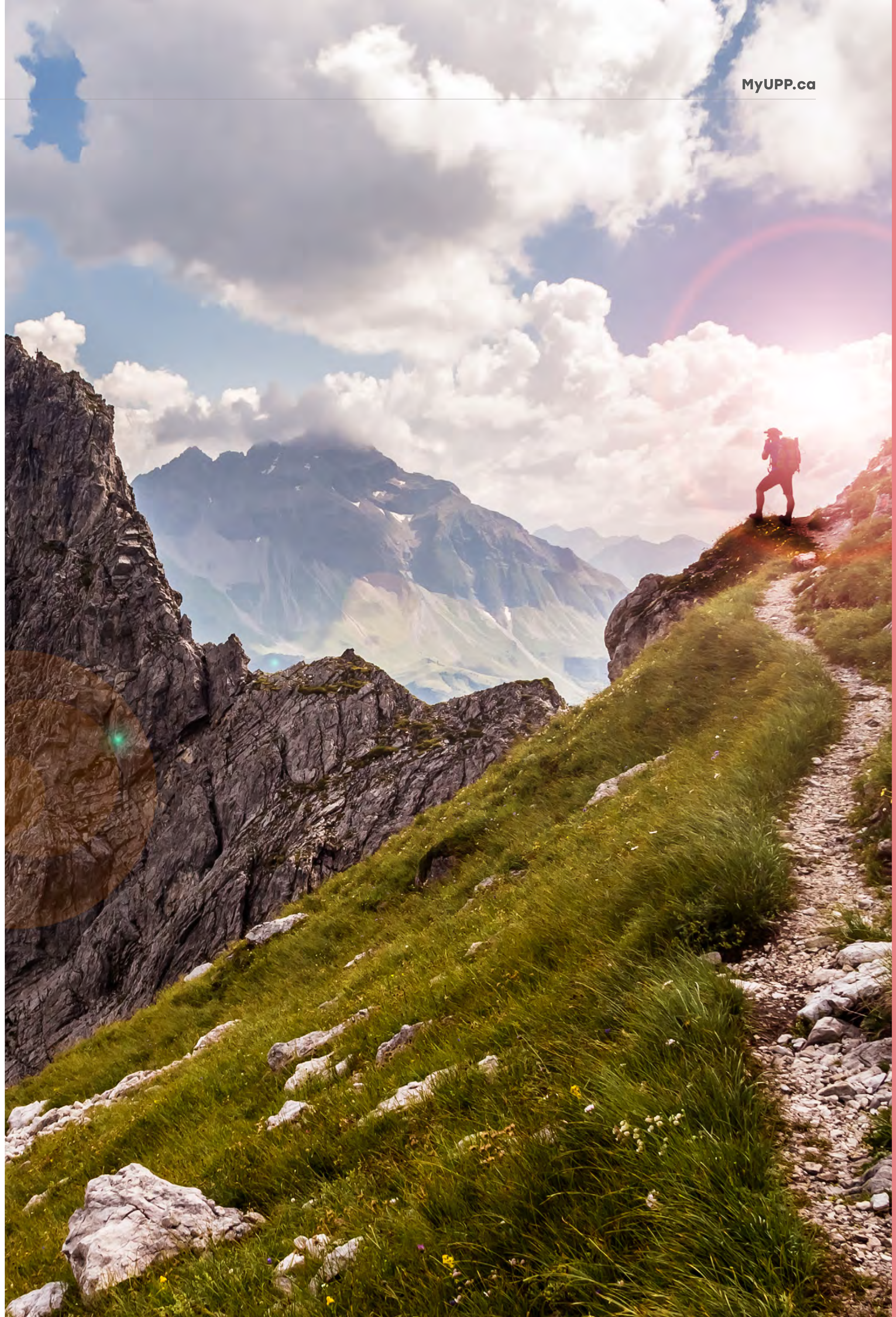
It is particularly relevant to a pension fund with generational responsibilities – our ability to deliver sustainable value to current and future members relies on a healthy, functioning market, society, and environment. Our choice to establish distinctive capabilities in ESG and responsible investing not only reflects our fiduciary duty to deliver long-term pension security, but also our value to members. As we build out our investment approach, we commit to doing the hard work to ensure our goals are backed by clear and transparent plans, timelines, and measurable targets that demonstrate a path to success. To that end, our recently released Climate Action Plan provides a tangible example of our commitments in action.

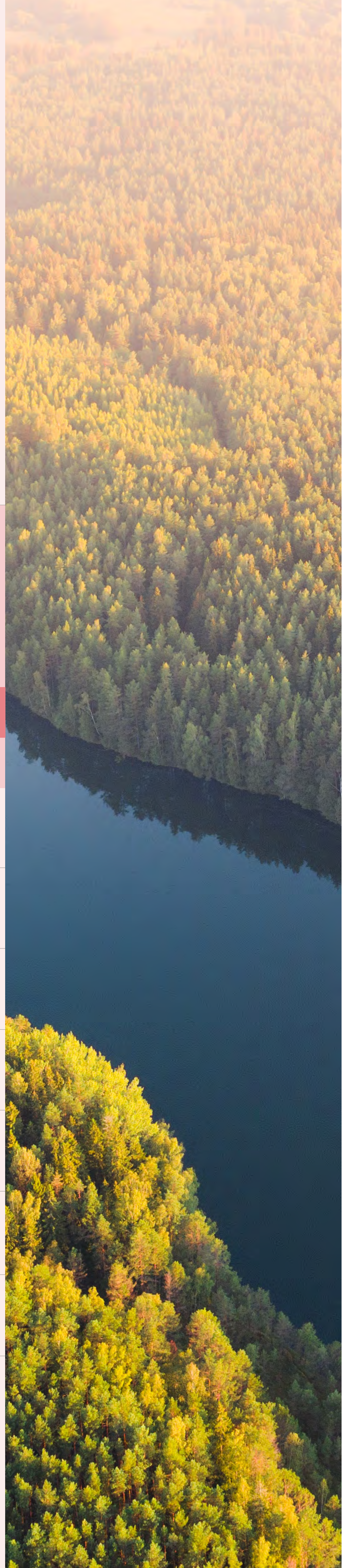
Shaping UPP's culture is something we have approached with early and deep intention, and the strongly held belief that diverse teams, perspectives, and lived experiences contribute to better decisions and a better workplace. Our people are the difference-maker in our ability to execute our strategy, build trusted relationships, and provide the service and investment results underpinning the pension promise.

At the core of our intentional culture is a commitment to Equity, Diversity, Inclusion, and Reconciliation (EDIR). We take our EDIR values seriously and have taken steps to embed them throughout the organization. While I'm proud of the progress we've made to date, it is imperative that we continue to make progress engaging and educating our employees, utilizing metrics to track progress, and diversifying our talent pools.

Looking back on 2021, I am humbled by the magnitude of what this exceptional UPP team has accomplished. We are deeply grateful for our many partners' dedication, support, and insights throughout this extraordinary journey. To our people, thank you for your passion and commitment in building this organization from the ground up —and ensuring it delivers long-term value and scaled advantages to our members. I also want to thank our Board of Trustees for its unwavering guidance and support, and the Joint Sponsors for their continued dedication and wisdom in helping shape and grow UPP. Thank you for all you have taught us and will continue to teach us along the way.

We are proud to have laid the foundations for a modern and resilient pension plan that will serve our members and Ontario's university sector for generations to come. We've made tremendous progress so far and have many exciting milestones ahead as we build this Plan's bright future.





A decade in the making

July 1, 2021, marked our day one and a significant milestone on a long journey to bring UPP's vision to life.

Where it began

In the late 2000s, pension plans in the university sector faced existential financial and political pressures. Employee groups and university administrations, with the support of the provincial government, began considering a multi-university jointly sponsored pension plan (JSPP) as a long-term pension solution for the sector. Moving to a JSPP model addressed many of the challenges facing university pension plans at the time, while offering a range of new advantages – including more member control over the future direction and outcomes of their pensions.

Introducing a sector JSPP would:

- Protect defined benefit pensions, which provide secure and predictable retirement income
- Establish a more stable funding regime
- Give plan members an equal voice in plan management

Employees and employers came together to build UPP.

We would like to recognize the extraordinary efforts of this plan's founders. It is our privilege to continue their work.

2009

Discussions begin between university unions, faculty associations, administrators, and other staff groups about customizing a JSPP to reshape and sustain the retirement income system in the Ontario university sector.

The goal is a gold standard plan open to any Ontario university. The question is – with a clean slate, what plan structure would deliver best-in-class retirement security while meeting the full range of university employee needs? The key principles arising from those broad-based discussions inspired UPP's early development and continue to guide the UPP, our Joint Sponsors, and our Trustees as we work toward fulfilling the Plan's potential.

2014-2015

The creation of a new JSPP does not happen often and requires legislative and regulatory amendments to allow the conversion and transfer of single-employer pension plans to a JSPP. Legislative changes to this effect are drafted in 2014 and come into place in 2015, marking a historic step forward.

2016-2017

Deep discussions happen among university administration, faculty associations, unions, and non-unionized staff on UPP's organizational structure, terms, and participants. Three initial university partners and associated unions and faculty associations step forward as UPP's founding participants, with the plan for others to join over time.

Joint decision-making and collaboration between these parties continues as a cornerstone of UPP's governance structure.

2018

A joint Milestones Agreement was established to set out the key steps required to establish UPP.

2019

Pension plan members at the founding universities consent to convert their existing plans to UPP through a transfer of assets and liabilities. The Joint Sponsors adopt UPP's Funding Policy, including an innovative risk-sharing arrangement for past service and future service liabilities.

2020

January – UPP's formal governance structure comes into effect through Joint Sponsor and Trust Agreements. Six Employer Sponsors and six Employee Sponsors (from representative unions and faculty associations) are appointed and select UPP's inaugural 14-member Board of Trustees as UPP's legal administrator.

July – Barbara Zvan is appointed as UPP's inaugural President and CEO.

November – UPP receives formal solvency funding exemption as a JSPP.

July 1st, 2021

UPP becomes the official pension provider for the founding participants and their 37,000+ members.

January 1, 2022

Trent University joins as UPP's fourth member university, along with the staff of the University of Guelph and University of Toronto faculty associations and eligible UPP employees.

> Spending many years on the development of the UPP has shown me that, when they share a deep commitment towards a common goal, university employers and employees can work together to achieve something great. This past year, all of the hard work of so many people culminated in the successful launch of a jointly-sponsored defined benefit pension plan that will allow employees at member universities not only to look forward to a secure and indexed retirement income, but also to be certain that they will now have an equal say in how their pension plan is managed.

Herb Kunze, Employee Sponsor Co-Chair

> We built the UPP to assure a dependable retirement income. We custom built the UPP for our sector, offering better value and security for contributions. For us, that means financial security, a secure defined benefit plan with indexation, and early unreduced retirement options. It also means that employers and employees cosponsor the Plan and have an equal say in its governance.

John Tartt, Employee Sponsor Co-Chair

> After our successful launch last July, the UPP is poised to make its founding members proud as we move forward with a strong and sustainable defined benefit pension plan for Ontario universities. The UPP's Joint Sponsorship will provide members a real voice in the plan's operations and, working together, we will ensure it delivers a secure retirement future for generations to come.

Angela Hildyard, Employer Sponsor Co-Chair

UPP’s inaugural year involved three interconnected phases

Phase 1: A seamless day one and solid start (pre-July 1, 2021)

The first half of 2021 focused on defining the "art of the possible" for day one, with a dual focus on delivering a smooth transition for members and participating organizations while establishing core infrastructure and the foundations for a resilient, high-performing plan and fund.

Highlights included:

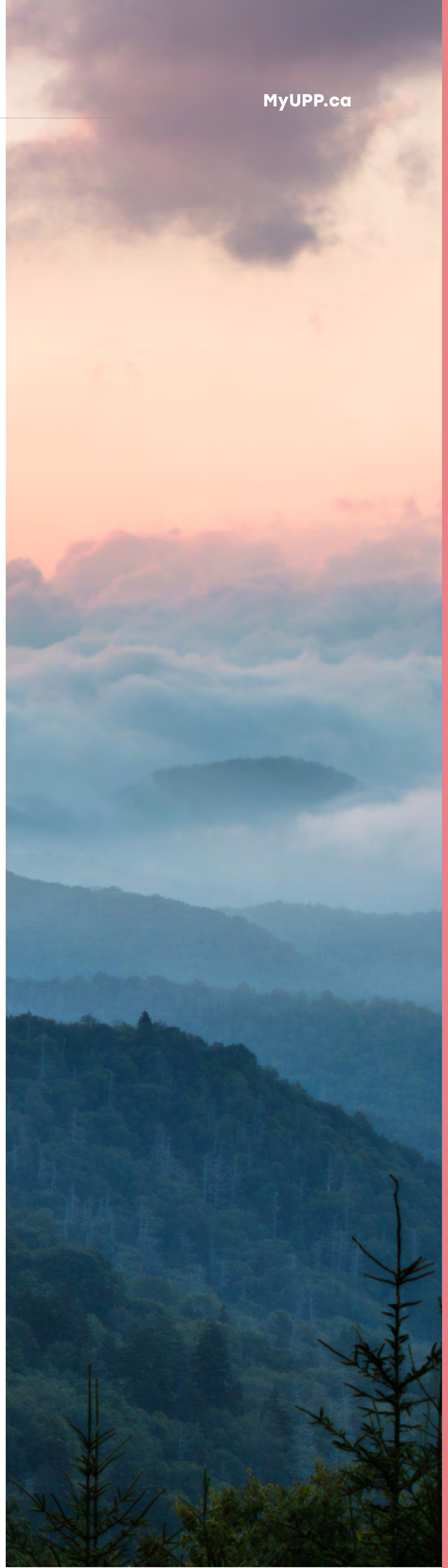
1. Establishing an experienced and versatile core team of subject matter experts and builders
2. Crafting agency arrangements with the founding universities to transition pension administration and investment responsibilities with precision and control

Agency agreements have served as an effective tool for maintaining a status-quo experience for working and retired members while UPP thoughtfully builds its infrastructure and systems.

Investment management – The investment portfolios from Queen’s University and the University of Guelph transferred to UPP on July 1, 2021. An investment agency arrangement was structured with the University of Toronto to continue managing its portion of assets as agents of UPP until March 31, 2022.

Member services – On a transitional basis, the founding universities continue to administer Plan benefits as agents of UPP, to ensure members maintain the service and benefits they expect while we design and implement a comprehensive member-driven service platform.

3. Transferring deep institutional knowledge from the founding universities and building UPP’s information and data foundations
4. Forming our operational building blocks across key functions, and a centralized enterprise project management office to support agile execution
5. Planning the transition and integration of the founding universities' distinct investment programs into a cohesive pension fund aligned to UPP’s needs and goals. This significant legal and operational effort involved a custodial transition and a controlled nine-month transition plan for the pension assets in the University of Toronto’s large investment portfolio.



Phase 2: Managed transition to a unified UPP (post-July 1, 2021)
Emerging from day one, UPP stood as an early-stage organization focused on three key tasks:

- Orienting as a unified plan with a comprehensive view of our combined assets and liabilities
- Advancing the systems, teams and structures to deliver on our investment goals, serve members with care, and prepare to welcome new sector participants of all sizes
- Acquainting with, and learning from, our participating organizations and members

Highlights included:

- Welcoming four new organizations on January 1, 2022
- Completing a staged transition of University of Toronto's investment program on March 31, 2022 and unbundling the individual asset pools to form a dynamic total fund strategy
- Preparing to procure UPP's pension administration solution to directly service current and future members
- Onboarding a seasoned executive team and focused talent and capabilities in key functions
- Establishing our first physical office and introducing hybrid and safe working policies
- Engaging with members to understand their base expectations, perspectives, and beliefs, as key inputs to our build

> Our sincere thanks to the many partners and advisors whose dedication, support, and insights helped make UPP a reality. Building a pension plan from the ground up is an ambitious task, and not one we could have accomplished alone.

Phase 3: Priming for sector growth (current focus)
UPP was designed to strengthen retirement security for Ontario's university community while delivering cost efficiencies, capabilities, and investment opportunities afforded by a scaled JSPP model. In the coming years, we will balance our core build with focused investment in growth, to bring those scaled advantages to members.

Our 2022–2025 organizational strategy serves as a critical beacon in our build, defined through six key imperatives:

STRATEGIC PILLARS

Serve Our Members
Deliver proactive, digitally enabled services that exceed member expectations

Invest for the Future
Design a dynamic, purpose-driven investment program with pension security at the core

Realize Sector Growth
Build trust and transparency with the diverse university community and welcome new Plan participants

END-TO-END FOUNDATIONS

Build for Resilience
Future-proof operations and technology while responsibly managing costs

Lean Into ESG[2]
Foster a financially, socially, and environmentally sustainable future for members in all we do

Foster Our Culture
Build an intentional, thriving culture underpinned by our purpose-driven people

With the foundational progress underway and a world-class team forming, we are excited by the choices articulated through our inaugural strategy. Those choices reflect our vision to be the trusted pension plan for the university sector, by establishing UPP as a compelling alternative and best-in-class solution.

> Our in-house strategic initiatives delivery team brings deep expertise in change management, business process improvement, and nimble delivery practices and supports the controlled delivery of our end-to-end strategy.

[2] Environmental, social and governance factors

Building for Resilience

As a new organization with a systems-clean slate, UPP has the unique opportunity (and challenge) to build efficient, agile business foundations from the ground up. We are investing in modern, scalable technology and tools to continue:

- Establishing robust organizational structures and controls
- Positioning UPP for resilient performance, operational excellence and growth
- Safeguarding members' assets and information
- Building a risk-smart organization and culture

A risk-smart organization

Disciplined risk management at UPP began from day one. Risk management is not about eliminating all risks or adding complex processes – it is about ensuring we understand, manage, and optimize risks in everything we do and make informed decisions accordingly. With strong governance, a systematic risk framework helps better assess and create sustainable value, achieve our strategic and operational objectives, pursue unique opportunities, and bring our members dependable income security.

> Free from legacy internal systems, we are laying intelligent, future-proof foundations that will evolve with the Plan and help us responsibly manage costs and risk on behalf of members. ”

Henry Kim
Chief Financial Officer and Head of Operations
Read bio

UPP's CEO, Barbara Zvan, is a trained actuary and former Chief Strategy and Risk Officer with more than 20 years of leadership in pension risk management and sustainable investing.

Risk management approach

UPP's risk management approach combines systems and cultural elements to build solid organizational risk awareness and ensure:

- Risk-based decisions are consistent with our business objectives
- Our risk approach is structured and disciplined, with clear oversight, roles, and responsibilities
- Expected returns adequately compensate for the risks taken
- A consensus view of risk and common risk language are shared across the organization

We are formalizing our risk principles and practices under an Enterprise Risk Management Framework, to holistically calibrate, monitor, manage, and report top risks – and their reputational impact – across four categories: funding, strategic, operational, and legal/regulatory. This framework will become operational in 2022 and reported against in future annual reports.

2021 risk management

Risk management in 2021 focused primarily on the short and long-term strategic, financial, and operational risks related to our launch and foundational build. For example, as a fully remote organization in 2021, heavy focus was placed on building cyber resilience through strong endpoint security, email and file exchange security and end-user security awareness training and testing. With the National Institute of Standards and Technology (NIST) Cyber Security Framework as our standard, we are designing UPP as a highly secure and modern digital workplace.

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Fostering our culture

Our people are the heart of our organization

Working at UPP means working toward a secure and sustainable future for our members. Together, our talented people are creating a purpose-driven and inclusive workplace focused on a culture of teamwork, collaboration, and respect – for one another and the world around us. It's why *Equity, Diversity, Inclusion, and Reconciliation*, and *Leaning Into ESG* are bedrocks of both our organizational strategy and intentional culture.

Equity, Diversity, Inclusion, and Reconciliation (EDIR)

EDIR is the umbrella term for the programs, policies, strategies, and practices underpinning our mission to create and sustain a diverse, equitable, and inclusive environment - no matter anyone's ethnicity; sexual orientation; gender identity; physical, cognitive, or mental ability; religion; age; marital status; socioeconomic status; national origin; or other identities.

EDIR is not just a core value at UPP; it's a business imperative. Diverse teams, perspectives, and lived experiences contribute to better decisions and a better workplace. Our EDIR program and three-year roadmap are the blueprints for our inclusive, respectful working environment and our way of honouring the *Truth and Reconciliation Commission's Call to Action #92*.

> *Truth and Reconciliation Commission's Call to Action #92:* We call upon the corporate sector in Canada to adopt the United Nations Declaration on the Rights of Indigenous Peoples as a reconciliation framework and to apply its principles, norms, and standards to corporate policy and core operational activities involving Indigenous peoples and their lands and resources.

> "We believe in the power of bringing our whole selves to work and will work tirelessly to create a diverse, inclusive, and equitable organization where all voices are heard and all employees are embraced with dignity and respect."

Omo Akintan,
Chief People Officer
Read bio

EDIR strategic objectives

1. **Make everyone accountable**

   Establish EDIR as an essential element in individual goal-setting and the Board evaluation scorecard, set UPP's leadership pledge.

2. **Build team diversity**

   Define EDIR together and create individual accountability, introduce self-identification to measure and enhance diversity representation, invest in internships and next-gen programs targeting underrepresented groups, establish partnerships with organizations to help diversify candidate pools.

3. **Equip and promote inclusive leadership**

   Embed inclusive leadership behaviours in performance management, create feedback and dialogue mechanisms and act on outcomes, include equity and inclusion in Board and leadership development programming.

4. **Create an equitable, bias-free, and inclusive culture**

   Position EDIR as a cornerstone of our people programs and policies, including all recruitment, onboarding, integration, promotion, and pay practices

5. **Leverage EDIR to enhance performance**

   Invest in diversely owned funds, develop an inclusive procurement policy and approach, and create an executive-sponsored employee resource group.

What success looks like

- UPP reflects the population we serve at all levels within our organization
- UPP employees of all identities feel embraced and empowered to thrive at UPP
- All UPP members receive fully accessible and excellent services that meet their needs
- Our investment portfolio and procurement partnerships reflect our EDIR values

EDIR highlights from the past year

We honour the opportunities to put our organizational commitments into action and learn, share, and reflect as individuals and as a collective.

Black History Month

UPP hosted a panel discussion – Black History Month 365 event: Translating Thought Into Action – moderated by Aina-Nia Ayo'dele Grant, Director, Community Resources at the City of Toronto, and featuring UPP member panelists Njoki Wane, Chair of the Department of Social Justice Education at the of the Ontario Institute for Studies in Education of the University of Toronto (OISE), and Philippe Lassou, Associate Professor, Accounting at the University of Guelph.

International Women's Day

UPP team members shared their personal and professional stories, memories, and quotes of the inspiring women in their lives, as well as highlighting #BreakTheBias resources, calls to action, and outreach events.

Truth and Reconciliation

UPP hosted a fireside chat with the Honourable Murray Sinclair (former chair of the Truth and Reconciliation Commission), facilitated a KAIROS Blanket Exercise, and honoured National Indigenous History Month, National Indigenous Peoples Day, and the National Day for Truth and Reconciliation.

Asian and South Asian Heritage Month

UPP honoured and celebrated Asian and South Asian Heritage Month, featuring a fireside chat with Dr. Eileen de Villa, Medical Officer of Health for the City of Toronto.

Pride Month

UPP marked Pride Month by establishing an organization-wide channel for team members to share their Pride stories, resources, educational tools, community events and other recommendations. UPP's email signatures and corporate logos featured Pride colours, extending our celebrations throughout our digital footprint.

Leaning into ESG

As a long-term investor, we must take meaningful action to create sustainable value through progressive, evidence-based practices. Sustainability is a comprehensive focus across UPP, with sound ESG practices as a fundamental means to create value and manage risk.

Two key factors drive our focus on ESG in our investments, organizational practices, and culture:

1. An ESG lens helps better assess and create value, identify differentiated opportunities, and drive stronger long-term financial performance. For a pension plan with long time horizons, this is pivotal for portfolio sustainability and overall health.
2. ESG matters to our member community and employees. We want our members and employees to be proud of UPP, knowing their pension delivers secure, lifelong income certainty while making a positive impact on the world.

We will foster a financially, socially and environmentally resilient future in all we do, by modeling leadership in responsible investing and ESG practices as an organization.

Learn more about our responsible investing approach and climate commitments.

> We know that companies are more sustainably profitable and resilient when they prepare for and act on the issues transforming our world. We will not only invest in those organizations, we will be one of those organizations.

Brian Minns
Managing Director, Responsible Investing
Read bio

Joint governance grounded on collaboration and trust

As a JSPP, governance and risk at UPP are a shared responsibility between members and employers, where each has equal say in plan design, funding, and administration.

Joint governance ensures a high degree of accountability and transparency while putting the interests of Plan members at the centre of every decision.

A new twist on a proven model

The JSPP model is an Ontario-made innovation highly regarded for "transparency, accountability and ethical conduct and achieving sustainable funding levels through risk-sharing and well-defined funding policies."[3]

Canada's large public pension plans have expanded and evolved the JSPP model into the renowned Canadian pension model, combining independent governance, professional in-house investment management, scale, and extensive geographic and asset class diversification. Independent studies show this combination to yield:

- Superior long-term investment performance
- Efficiencies and economies of scale
- Stable and predictable benefit and contribution levels
- Relief from financial pressures on employers

UPP is well-positioned to emulate this model and draw outsized benefits for a mid-sized plan. Our governance structure was intelligently designed to deliver the hallmark features of a JSPP and our leadership team houses architects of the Canadian Model, those on the ground decades ago, building the aptly named Maple Revolutionaries.

[3] World Bank Group, The Evolution of the Canadian Pension Model, 2017

How it works at UPP

Guided by individual and clearly defined mandates, UPP's Joint Sponsors and Board of Trustees work in concert to ensure the Plan is run efficiently, strategically, prudently, and in the best interest of all Plan members.

Role of the Joint Sponsors

UPP is jointly sponsored by representatives of our participating universities in equal partnership with member union and faculty association representatives. UPP's Joint Sponsors include a six-member Employer Sponsor Committee and a six-member Employee Sponsor Committee (seats are evenly split between faculty and non-faculty, as set out in a Labour Sponsor Agreement).

The Joint Sponsors are together responsible for all decisions about the terms and conditions of UPP, including:

- Amending Plan design, including benefit and contribution levels
- Determining when to file funding valuations and how to address any funding shortfalls and surpluses through the Joint Sponsors' Funding Policy
- Appointing the Plan's Administrator
- Setting terms for and approving new participating organizations

On January 1, 2020, the Joint Sponsors appointed a Board of Trustees as UPP's legal Administrator, with a fiduciary obligation to all Plan members. The Board includes six Trustees selected by the Employer Sponsor, six by the Employee Sponsor, one nominated by non-unionized members and appointed by the Employee Sponsor, and an independent, jointly-appointed Chair.

UPP's 14 Trustees bring varied experience and deep expertise in areas important to UPP, as assessed under the Joint Sponsors' Attributes, Skills, and Competencies Framework.

EMPLOYER SPONSORS

Donna Janiec
Queen's University

Steve Millan
Queen's University

Martha Harley
University of Guelph

Sharmilla Rasheed
University of Guelph

Angela Hildyard, Chair
University of Toronto

Kelly Hannah-Moffat
University of Toronto

EMPLOYEE SPONSOR COMMITTEE

Kelly Sedore
CUPE, Queen's University

Robert Hickey
QUFA, Queen's University

Herb Kunze, Co-Chair
UGFA, University of Guelph

John Tartt, Co-Chair
USW, University of Guelph

Colleen Burke
USW, University of Toronto

Cynthia Messenger
UTFA, University of Toronto

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Role of the Board of Trustees

The Board of Trustees is responsible for directing and overseeing the day-to-day administration of UPP and the investment of its assets – as delegated to Management – with the best interests of Plan members at the heart of every decision. This includes (but is not limited to) oversight of UPP's strategy implementation, investment approach and policies, budget, risk profile, and benefit administration. Notably, the Board sets the Plan's actuarial assumptions for valuation purposes.

MEMBERS OF THE BOARD OF TRUSTEES

Read full biographies and committee mandates

EXPLORE SECTIONS

Standing committees of the Board

Five standing committees of the Board oversee Management activities and make recommendations to the Board in areas specific to their respective mandates. The Board approves committee recommendations in its oversight of UPP's operational, investment, strategic, and governance matters. While an executive lead is assigned to each committee, no member of Management sits on a committee or the Board.

Audit and Finance Committee

8 meetings in 2021

98% average attendance rate

Monitors audit and financial matters, ensuring the integrity of UPP's accounting and financial reporting and system of internal controls, internal and external audit functions, operational risk management, and compliance monitoring functions.

Governance Committee

10 meetings in 2021

98% average attendance rate

Ensures UPP fulfils our responsibilities to strong governance and effective Board stewardship by establishing governance frameworks, committee structures, Board evaluation and effectiveness, and overseeing public disclosures, legal matters, and ethical and whistleblower reports.

Human Capital Committee

12 meetings in 2021

100% average attendance rate

Provides oversight and recommendations related to human capital matters and ensures human capital strategies support the fulfilment of UPP's purpose. Areas of oversight include CEO goals and objectives and performance evaluation, executive leadership team structure, compensation and succession planning, UPP's compensation philosophy and approach, and organizational culture and related areas, such as equity, diversity, inclusion, and reconciliation.

Investment Committee

23 meetings in 2021

99% average attendance rate

Oversees investment of the Plan assets per UPP's published Statement of Investment Policies and Procedures, as well as plan funding and risk management, and actuarial matters.

Pension Services Committee

8 meetings in 2021

100% average attendance rate

Provides oversight and support related to pension administration, member and participant services, and communications and engagement strategies and programs.

2021 board highlights

Between full Board and committee meetings, the Trustees met 79 times in 2021 and passed 75 resolutions. Management and the Board collaborated closely throughout the year to erect UPP's core structures and develop a shared knowledge foundation to inform strategic decisions.

Non-exhaustive examples of strategic focus areas include:

- Setting UPP's responsible investing priorities and core investment beliefs
- Establishing transitional agency agreements with the founding universities and overseeing each asset transition
- Defining UPP's 2022-2025 organizational strategy and our purpose, vision and core values
- Setting the road map for UPP's in-house administration platform
- Collaboration with the Joint Sponsors on UPP's sector outreach and new entrant approach for the university sector
- Implementing a phased talent and total rewards framework to build a versatile, high-performing team
- Setting an inaugural Statement of Investment Policies and Procedures, informed by direct consultation with members

Board engagement and education

As UPP evolves as an organization and enters new phases, shared understanding and mission clarity help us move together toward a common goal. In 2021, our Board and Management team engaged in deep educational programming and discussion with internal and external experts, to form an aligned vision, coalesce on critical strategic objectives, and set a unified knowledge baseline. Discussion topics included:

Topics	Description
Actuarial Series	
Part I – Actuarial Valuation Fundamentals	Introduction to actuarial concepts and methods; Joint Sponsor and Board responsibilities; and the process of preparing and reviewing actuarial valuation reports
Part II – Funding Policy and Valuation Strategy	In-depth overview of UPP's Funding Policy to assist the Board in making recommendations to the Joint Sponsors on contribution and conditional indexing changes
Part III – Transfer and Conversion Reports	Overview of transfer and conversion reporting, including why reporting is required and how reports are prepared and used
Part IV – Discount Rate and Actuarial Cost Method	Introduction and overview of discount rate factors and assumptions
Climate Change and Investments	Detailed discussion on the governance of climate-related risks and opportunities, the approaches taken by investors to address climate-related risks and opportunities (including targets and metrics), and an overview of climate-related risks and their financial impacts
ESG in Capital Markets and the Expert Panel on Sustainable Finance	Overview of the market exchanges' role in driving sustainable practices and disclosure, ESG terminology and drivers, presentation on Canada's expert panel on sustainable finance
Responsible Investing Foundations	Introduction to responsible investing, approaches to ESG, climate change and recent developments, and diversity and inclusion
Risk Governance	Risk management frameworks, the Board's role, and the evolution of risk management as organizations mature
Technology Trends and IT Board Governance	An overview of the evolution of technology and the changing role the Board plays in IT governance

UPP meets with the Joint Sponsors frequently (quarterly, at a minimum) to inform about Plan matters and provide updates on our organizational build. We share educational materials with the Joint Sponsors to help inform their decisions and build a common information foundation.

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- Message from the CEO
- A decade in the making
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Role of Management

UPP's executive team houses the leads of each internal division, serving as an advisory body to the President and CEO. Our expanding executive and senior leadership teams are responsible for building the Plan's foundations, establishing our overall strategic direction, and ensuring that UPP delivers on our stated long-term objectives. They also serve as models for our values-based culture.

MEMBERS OF THE EXECUTIVE TEAM

At December 31, 2021

Barbara Zvan
President and Chief Executive Officer

Henry Kim
Chief Financial Officer and Head of Operations

Aaron Bennett
Chief Investment Officer

Joanna Lohrenz
Chief Pension Services Officer

Christine Chen
General Counsel

Omo Akintan
Chief People Officer[4]

Learn more about UPP's Executive and Senior Leadership teams

[4] Omo Akintan was contracted in 2021 with a start date of February 2022.

Management Discussion & Analysis

A pension promise spanning generations.

We believe a sustainable plan is one where all current and future members receive secure, stable retirement benefits at a reasonable and predictable cost.

111%
Funded

5.45%
Discount rate

$1.2B
Funding surplus

$254M
Annual benefits paid

Funding highlights as at December 31, 2021

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Delivering plan sustainability

Plan sustainability requires a careful balance between the liabilities (cost of current and future pensions) and assets (member and employer contributions + investment returns), which can vary with economic conditions and plan demographics. The **funded status** is a key indicator of the balance between these aspects at any one time. A funded status greater than 100% means the Plan is in surplus and the assets exceed the liabilities; less than 100% indicates the Plan is in a deficit, and liabilities exceed assets.

We apply a number of measures and tools to maximize the Plan's funded status and stability while maintaining stable, sustainable contribution and benefit levels over time.

Actuarial valuations

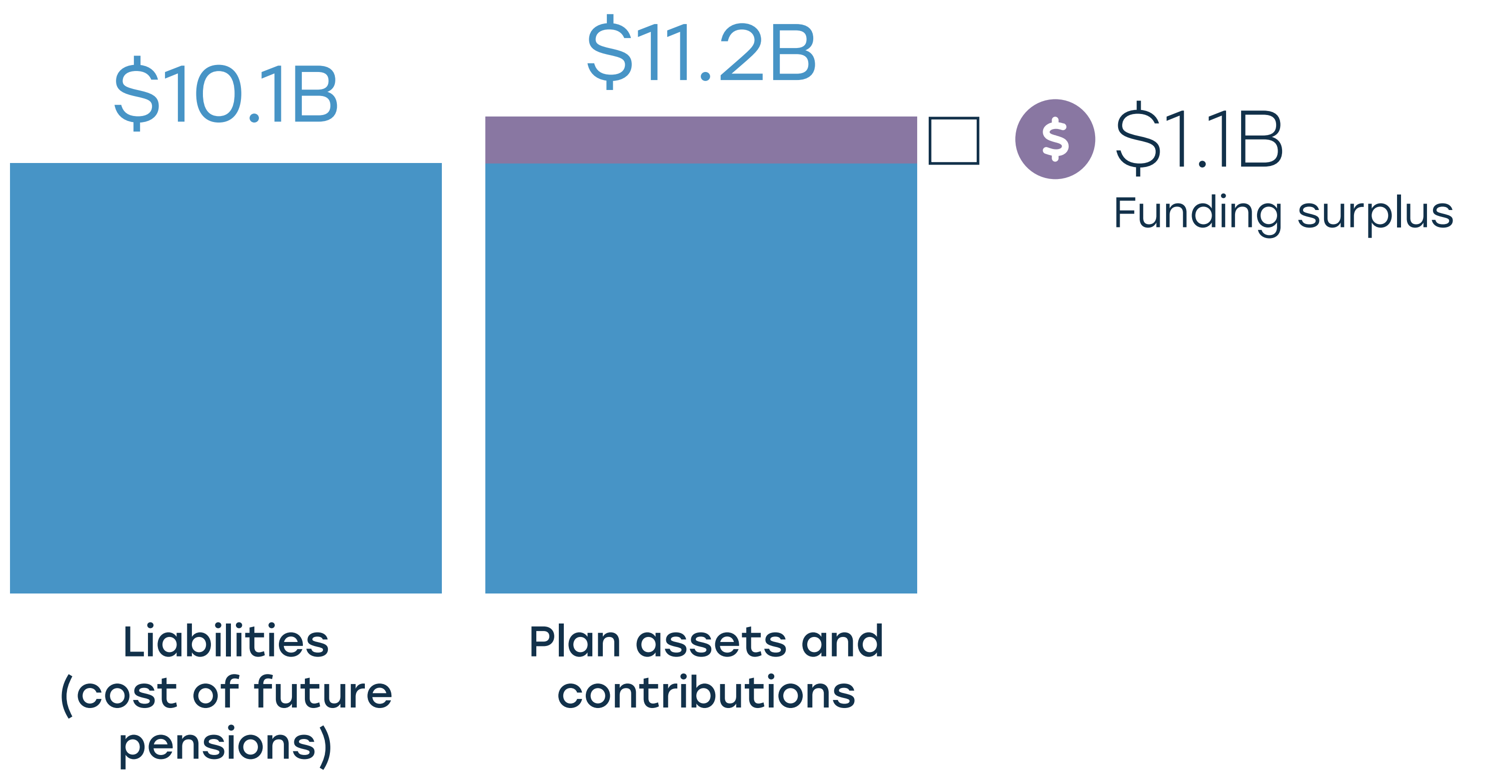
Regular actuarial valuations provide point-in-time snapshots of the Plan's health and funded status, based on a range of assumptions that align with the Canadian Institute of Actuaries' standards about future trends and events. UPP is valued on a going-concern basis, which measures whether the value of assets and the expected future investment return on those assets are sufficient to meet the projected liabilities, assuming the Plan continues indefinitely. We can think of the going-concern liabilities as our long-term funding target.

The Joint Sponsors must file a balanced funding valuation with regulators at least every three years. Whether or not the Joint Sponsors decide to file a valuation in any one year, UPP produces an annual funding valuation to maintain a line of sight to our financial health and will disclose this information in our annual report.

Filed July 1, 2021 Funding Valuation

The Plan began with an 111% funded status and a surplus of $1.1 billion on July 1, 2021, when the net pension assets and liabilities were transferred to UPP and UPP's first valuation was filed with regulators.

View UPP's actuarial valuation report filed July 1, 2021



Funded status at December 31, 2021

UPP maintained an 111% funded status at year end, with a surplus of $1.2 billion.

For the filed July 1, 2021, funding valuation, UPP used a pre-set nominal discount rate of 5.6%.[5] Upon assuming responsibility for setting UPP's go-forward discount rate, and through careful deliberation and discussion with the Joint Sponsors, the Board reduced the nominal discount rate to 5.45% to reflect the evolving market outlook and UPP's consolidated liability and investment profile. The revised discount rate is reflected in the December 31, 2021 funded status and UPP's 2021 financial statements.

A preliminary January 1, 2022 funding valuation is in development, based on the 5.45% discount rate and reflecting UPP's updated membership data. Preliminary results show that the Plan remains fully funded and in a surplus position. The decision on whether to file the valuation rests with the Joint Sponsors.

	Surplus	Funded Ratio
Opening balance at July 1, 2021	**1,081,394**	**111%**
Interest on surplus	32,452	
Experience gains (losses)	264,907	
Discount rate change (from 5.60% to 5.45%)	(192,637)	
Miscellaneous	5,811	
Ending balance at December 31, 2021	**1,191,927**	**111%**

Actuarial assumptions used in the funding valuation

Plan net assets are measured at fair market value, the price a given asset would reasonably sell for on the open market. Pension benefits are funded through set contributions from employees and employers and investment earnings.

Plan liabilities are measured on a going-concern basis, using various long-term economic and demographic assumptions following actuarial standards, industry practice, and as required under Ontario's Pension Benefits Act.

[5] Set by the Joint Sponsors in establishing UPP's Sponsors' Agreement, in consultation with their respective actuarial advisors and in accordance with UPP's Funding Policy and guidance from the Canadian Institute of Actuaries.

The going-concern basis assumes the Plan will continue over a very long time horizon, reflecting the period of active employment of current members and the expected lifetime of such members after their retirement.

The liability assumptions used in UPP's July 1, 2021 actuarial valuation were pre-negotiated and set in 2018 by the various parties involved in establishing UPP. This advanced agreement provided the incoming universities with a fixed price on their pension obligations and avoided any unknown future costs associated with their plans' transfer and conversion to UPP.

Economic assumptions reflect the external market environment and Plan experience, to estimate our benefit funding needs and how much money to set aside. These assumptions consist of basic wages, regulatory caps, inflation, salary increases, and expected investment returns.

The discount rate is the most important economic assumption in any pension valuation. It is used to "discount" future benefit payments and contributions into a present value, or value in today's dollars. The discount rate considers what the pension fund can earn over the long term, net of costs, and how conservative to be today to ensure sufficient future funding. It can be thought of as a tool to set a funding target and manage a fair Plan experience between current, retired, and future members.

Demographic assumptions help forecast when and for how long pension benefits will be payable to members, on average, based on Plan experience and industry-wide standards.

Two key assumptions underpinning UPP's liability forecast are the retirement scale, which is the range of ages at which members switch from active contributors to pensioners, and life expectancy, which informs how long we can expect to pay a pension.

Our retirement scale reflects the combined expected experience of the founding universities over the past five consecutive years. It indicates what percentage of the active employee population is expected to retire at each age. The scale is reviewed and compared to actual experience annually.

With respect to life expectancy, we expect our members to continue enjoying longer lives and track this experience against a custom mortality table based on industry-accepted Canadian public sector employee mortality rates and improvement scales.[6] This table is commonly used by all large public sector plans across the country.

Both the retirement and mortality scales are set by UPP's external actuary and peer reviewed by a consulting actuary and UPP Management.

[6] A standard Canadian Pensioners' Mortality table for public sector employees published by the Canadian Institute of Actuaries in 2014.

Asset-liability (AL) analysis

UPP uses comprehensive asset-liability modelling to understand the Plan's long-term dynamics and potential outcomes, and support strategic, sustainability-driven decisions. In 2021, we projected the Plan's assets and liabilities across 2,000 scenarios with varying economic and demographic profiles. The results informed our initial asset mix policy and revealed opportunities to optimize Plan sustainability.

> These AL studies, which UPP performs on an ongoing basis, bring together all important aspects of the Plan to simulate outcomes over thousands of different scenarios – incorporating our asset mix, liabilities, future economic scenarios, demographic changes, actuarial assumptions, Funding Policy, and the high-level impacts of Plan amendments.

Ongoing asset-liability modelling allows us to stay ahead of potential challenges that could impact our sustainability and closely aligns the investment portfolio with the pension commitments it is built to fund, all to help maintain a strong funded status over time.

Joint Sponsors' Funding Policy

In the event of a funding surplus or deficit, the Joint Sponsors' Funding Policy provides a decision-making framework for maintaining or bringing the Plan to a fully funded status. The guiding document is based on sound actuarial and economic principles and contains specific provisions to promote Plan sustainability and maintain stable contributions and benefit levels.

Transitioned risk sharing is a key sustainability provision in UPP's Funding Policy. All new plans entering UPP must be fully funded or establish a payment schedule to become fully funded over an agreed-upon initial period, subject to pension legislation. Over the long term, Plan risks - including funding risk - are shared equally and addressed jointly between Plan members and employers. This phased mechanism was designed specifically to ensure no negative impact to existing members from new organizations coming into the Plan.

The Joint Sponsors' primary funding levers are contribution levels, benefit levels, and conditional indexation. Decisions on changes to these elements rest with the Joint Sponsors.

- **Contributions:** UPP's current contribution rate is 9.2% of capped pensionable earnings[7] up to the Canada Pension Plan (CPP) level (known as YMPE[8]) plus 11.5% of capped pensionable earnings above YMPE. Employee contributions rates are 100% matched by UPP employers and set by Joint Sponsors.
- **Defined benefit:** Individual benefits are defined as 1.6% x best average 48 months of pensionable earnings up to average YMPE[9] + 2.0% x best average 48 months of pensionable earnings above average YMPE x years of pensionable service.
- **Funded conditional indexation:** UPP's target is to provide inflation protection for at least 75% of the annual increases in the Consumer Price Index (CPI) over the long term, conditional on the health and funded status of the Plan. Our funding is structured to deliver this benefit over the long term.

Conditional indexation is a flexible lever to help mitigate funding risk and promote intergenerational equity in the face of shorter-term fluctuations. It enables the Joint Sponsors to temporarily reduce future inflation protection increases for retirees as an alternative to increasing contribution rates for active members. This distributes risk between working and retired members, ensuring each generation pays a fair amount for the benefits they receive.

The Joint Sponsors are responsible for the decision on whether to invoke conditional indexation and the level of indexation provided. When invoked, base pension payments never decrease, but there could be periods where annual indexation increases are less than 75% of CPI.

[7] Capped at the maximum level under Canada's Income Tax Act. In 2021, this limit was $181,700.
[8] The YMPE is defined as the year's maximum pensionable earnings under the terms of the Canada Pension Plan Act. It is the maximum earnings on which CPP contributions are made each year. In 2022, the YMPE is equal to $64,900.
[9] Average of the YMPE in the last 48 months before an individual retires.

Serving our members

As a growing Plan, ensuring a smooth member experience through transitions and change is a steadfast priority.

On an interim basis, the founding universities continue to service members as agents of UPP. This ensured that members experienced no disruption on day one and continue to receive the support and payments they expect while we onboard our Pension Administration Solution and advance our service capabilities.

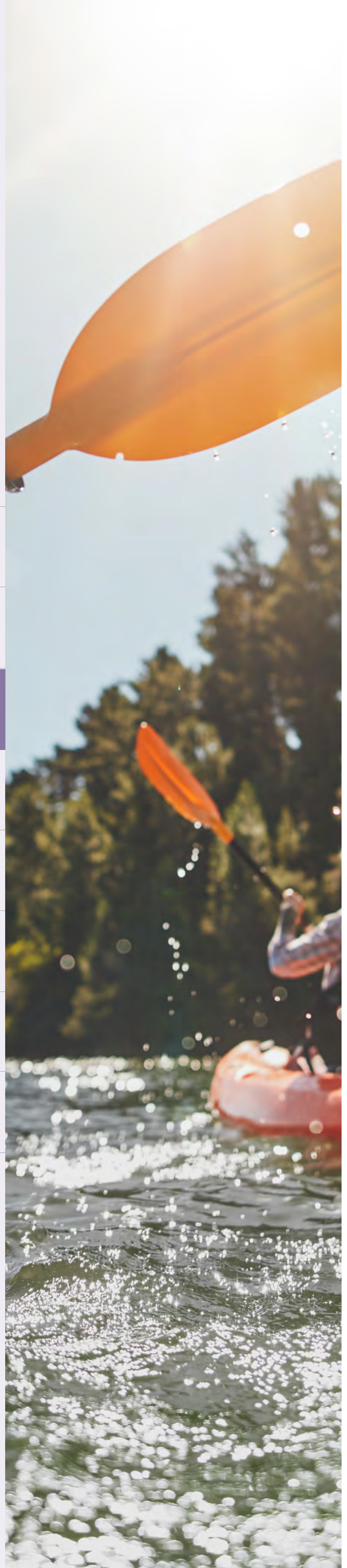
In anticipation of welcoming four new participating organizations on January 1, 2022, UPP established direct administration capabilities for small plans. We are well-positioned to serve these and other new smaller participants while implementing our full Pension Administration Solution. The conversion experiences to date have uncovered creative ways to optimize efficiency and cost for our participant organizations, and provide comprehensive transition and onboarding support.

37,084 Members

19,818 Active

11,935 Retired

5,331 Deferred



A member-driven approach

UPP was founded with a promise to preserve a comfortable and secure retirement income for our members, deliver member service excellence, and give our members a voice in their plan.

We are at a pivotal stage – building our long-term foundations, defining our member experience and engagement approach, and solidifying our investment roadmap. With an exciting road of opportunity ahead at UPP, our members' direct perspectives, expectations, and priorities are an essential compass.

> My mother worked at an Ontario university for over 30 years. I remember how proud she was to contribute to her pension, knowing she could retire with peace of mind. That stuck with me, and when given a chance to work for an organization that could help others like my mom, I jumped at it. I'm committed to serving members with excellence and care, and that begins by understanding what that means to our members.

Joanna Lohrenz
Chief Pension Services Officer
Read bio

Throughout 2021 and early 2022, we engaged with members to understand their general sentiment, values, and priorities on two core aspects of their pension journey: member experience and the investment of their assets. These insights set important guideposts in building two foundational elements of our organization:

- A digital multi-channel service offering that provides the information and tools members need to feel empowered and informed in their retirement planning, with proactive, caring support in the moments that matter
- An ambitious responsible investing platform designed to enhance long-term value and help shape a resilient economic future

The collective dialogue helped set a base understanding of current member opinions and beliefs and will be an ongoing aspect of our member relationship.

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Keeping members informed and engaged

In our first 12 months, we've directly consulted members through dozens of:

- Listening sessions
- Discussion forums
- Surveys
- News updates

The collective dialogue helped set a base understanding of current member opinions and beliefs and will be an ongoing aspect of our member relationship.

"I'm extremely impressed with the team and the information that's been shared to date."

- UPP member

"I greatly appreciate the transparency and the seeking out input from members. Thank you for the good work you all do on our behalf."

- UPP member

"I know that this is a huge undertaking, but appreciate getting the opportunity to voice what matters to me with this UPP."

- UPP member

Our responsible investing sessions and survey brought out a highly engaged section of UPP's membership base with:

95%

of survey respondents indicating interest in how their pension is invested

86%

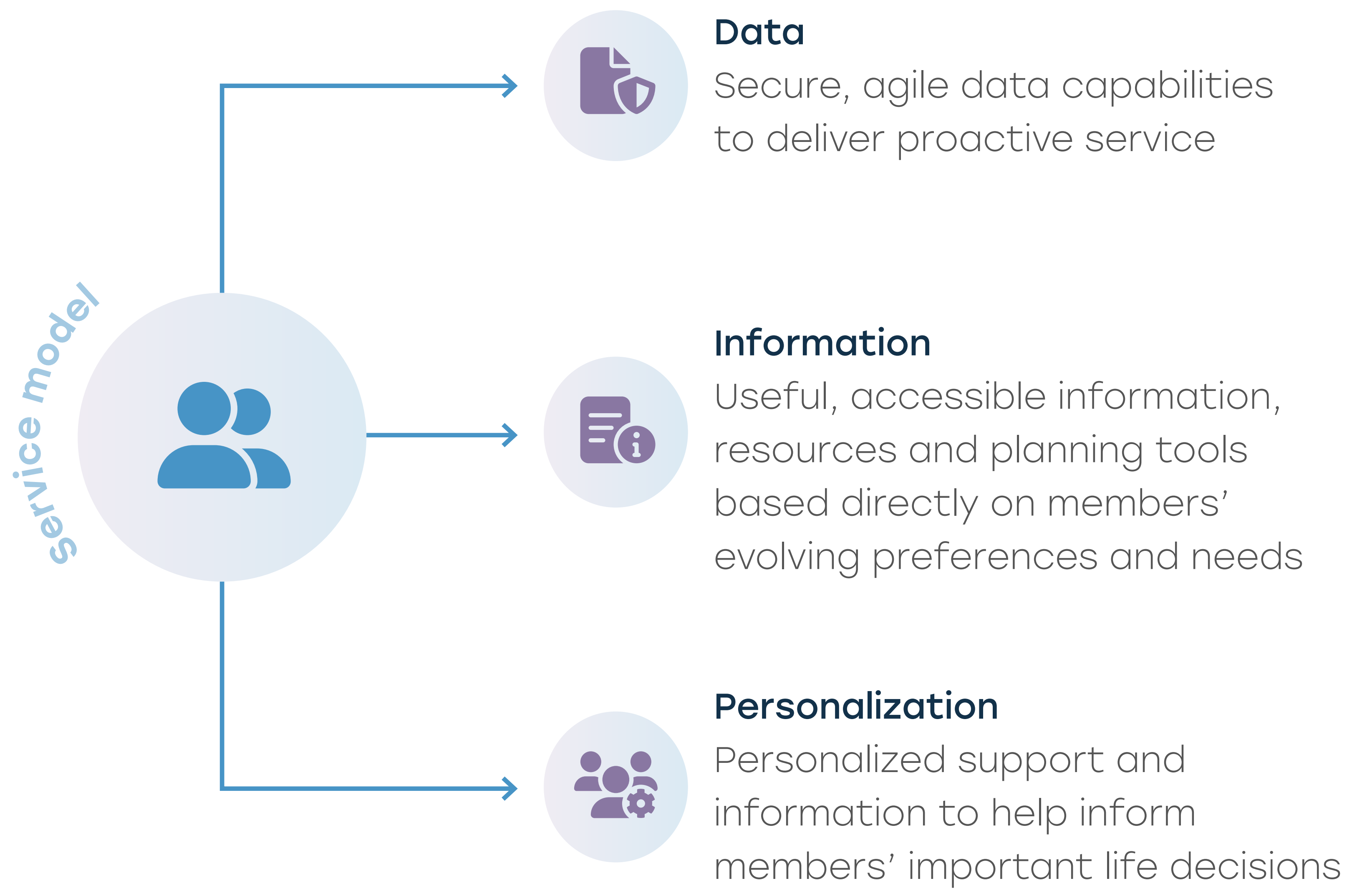
interested in learning more about UPP's investment approach

Explore further insights from our member engagement series. Members are encouraged to reach out and share feedback anytime through MyUPP.ca

At the heart of our strategy is an aspiration to offer distinctive, superior pension service to all Ontario university employers and employees.

UPP is currently procuring its Pension Administration Solution. Our commitment is proactive, personalized service to members and participant organizations through state-of-the-art systems, tools, and techniques. With no internal legacy systems to transform, UPP is free to build intelligent, scalable solutions that will evolve in line with our organization and create lasting value for members.

A progressive, member-drive service model



Investing for the future

On July 1, 2021, UPP assumed fiduciary responsibility for the asset portfolios and distinct investment programs of Queen's University, the University of Guelph, and the University of Toronto. Building on the work of our founding universities, we start from a solid financial position with clear priorities for funding sustainability and asset growth.

ONGOING ACTIVITIES

- **Advancing our investment infrastructure, teams and controls to unify plan assets and liabilities**
- **Deep investment and external manager analysis**

Jul 1 2021 — UPP begins directly managing the pension assets of Queen's University and University of Guelph. Through a joint decision, University of Toronto continues managing its investment program as an agent to UPP for a set nine months, through a detailed agency agreement and transition plan. This enabled focus on building core infrastructure and priority capabilities for day one.

Reporting period

Dec 31 2021

Mar 31 2022 — Investment agency with University of Toronto concludes, UPP manages the total consolidated portfolio.

Today

6-month investment highlights

Investment metrics reflect UPP's six-month operating period from July 1, 2021 to December 31, 2021

$11.8B
Net assets

Six-month Investment Return

5.7%	2.9%	$0.6B
Net return	Above six-month discount rate[10]	Net investment income

Highlights

- Defined UPP's guiding Investment Beliefs
- Committed to net-zero greenhouse gas emissions by 2040, with interim targets
- Developed an initial carbon footprint

[10] A proxy for the long-term returns required to fund the pension benefits

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Setting our investment foundation - a dual focus

Managed transition to a unified fund

UPP's first and most consequential investment task was to carefully transition, integrate, and understand the three distinct investment programs of the founding universities. This task required deep investment, legal, and operational effort; focused infrastructure and resources; and careful planning with an array of partners. It concluded on March 31, 2022 with the legal transfer of University of Toronto assets and consolidation to one custodian, representing a significant milestone for UPP.

> As a sector plan, our growth over time allows us to establish the structures and capabilities to expertly manage members' assets in line with our liabilities while contributing to healthy capital markets. Each is an essential aspect to delivering a sustainable pension promise. Through our choices today, we prepare for tomorrow's scale, building invaluable intellectual capital along the way.

Aaron Bennett
Chief Investment Officer
Read bio

A purpose-driven investment strategy

When pension assets are comingled with endowment assets, as they often are at universities, investment strategies have a dual focus. As a pension plan, our investment strategy is designed with the single focus of earning the returns to secure members' pensions for the long term. Essential to that approach is a holistic view of asset performance and resilience in the context of our funding requirements (the liability).

Building on the work of our founding universities, we conducted a deep-dive analysis in 2021 and early 2022 of the incoming assets, liabilities, and external managers, to form a comprehensive total portfolio view of risk and return while laying strategic foundations for sustainable growth.

These combined elements are inputs to our total fund investment strategy, target asset mix, and developing asset class sub-strategies - which together will form UPP's unified investment program aligned to our:

- Long-term investment beliefs and objectives
- Liabilities and risk profile
- Opportunities to leverage our structure and scale
- Responsible investing ambitions and strengths

We are now configuring the teams, tools and partnerships to execute our investment program, with sustainable pension security at the core. Progress on implementation will be reported in the 2022 Annual Report.

Getting to know our investment partners

UPP's current portfolio is primarily invested through external managers. These investment partners play an essential role in the success of our investment strategy; alignment in vision and value is imperative.

Much of 2021 and early 2022 focused on external manager due diligence and dialogue to understand these partners' investment commitments, capabilities, and goals and to express our expectations and objectives.

UPP performed investment, ESG, and operational analysis to assess and rate external managers and their mandates by:

- Long-term performance sustainability and risk management
- Alignment with UPP's investment philosophy, responsible investing ambitions, and portfolio requirements
- Collaboration and responsiveness to UPP

Managers were assessed against a responsible investing rubric focused on ESG integration and outcomes on priority aspects such as climate change response and diversity, equity, and inclusion.

With our inaugural investment policies as a foundation, we have set criteria for the types of new investments we will and won't make and are developing processes to apply these criteria to the existing portfolio. We will work with managers whose approach fundamentally aligns with our Investment Beliefs and those ready and willing to evolve with our ambitions and portfolio needs.

Understanding the combined Plan liabilities and risk profile

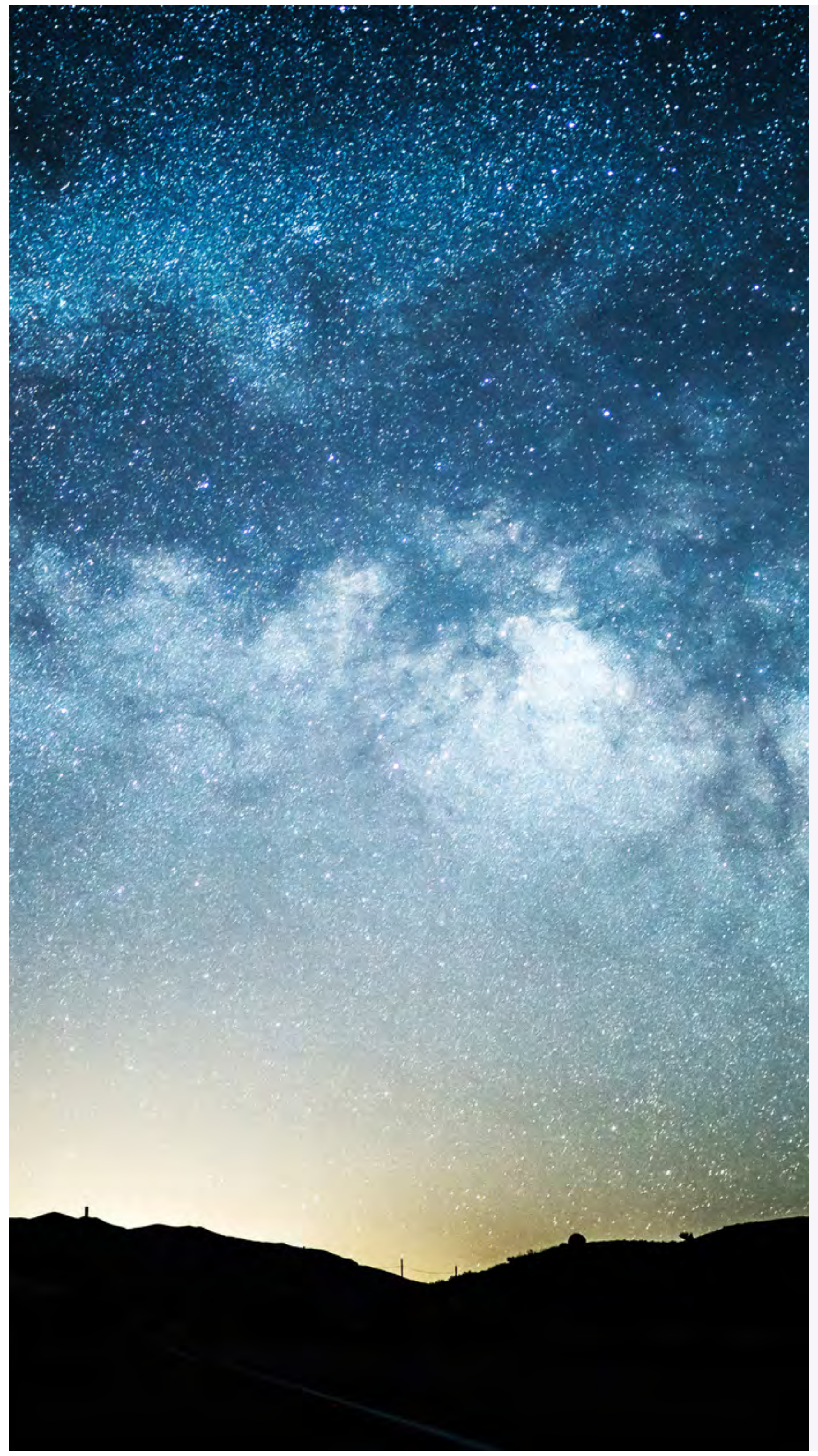
Every investment decision made at UPP is in the context of the pension promise. This means that our long-term portfolio must consider how both assets and liabilities respond – together and independently – to changes in our external environment.

In 2021, we made early, select investments in people and analytical tools to better understand our pension obligations now and into the future. Our Portfolio Construction, Investment Risk, and Actuarial teams collaborated to project the Plan's assets and liabilities across thousands of scenarios with varying economic and demographic profiles. The results revealed opportunities to rebalance equities and hedge inflation and interest rates as we strengthen our members' retirement security. Analysis and results were reviewed by the Board of Trustees and Joint Sponsors.

This internal expertise allows us to continually simulate and study the Plan's long-term sensitivities, dynamics, and potential outcomes under any array of investment and economic scenarios and timeframes. That line of sight helps us build a resilient, responsive portfolio aligned to our pension commitments. It also helps us strategically integrate portfolios from new organizations.

Setting our investment north star

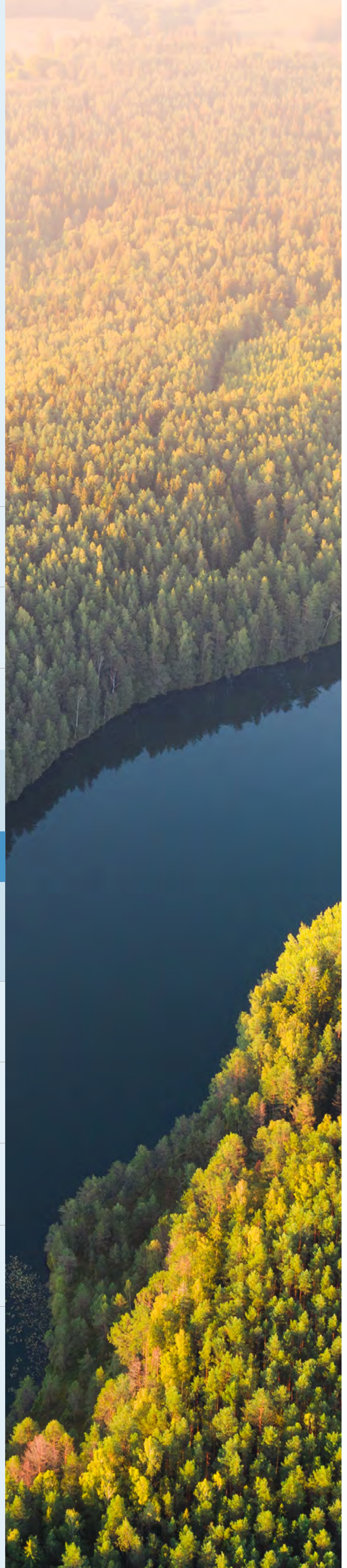
We believe that long-term sustainable growth depends on action grounded in strong, clear values. At UPP, all investment strategies and decisions are guided by the following Investment Beliefs, as set by Management and the Board in early 2022.



UPP INVESTMENT BELIEFS

1. UPP invests with a purpose: to fulfill the pension promise to members, now and in the future.
2. As a long-term investor, UPP has a responsibility to promote the health of the capital markets and the financial, social, and environmental systems on which capital markets rely.
3. Creating value and managing risk involve exercising UPP's voice to influence outcomes related to material issues through active ownership, policy advocacy, and collaboration with other investors and stakeholders – all of which must be approached with the same intention and rigour as selecting investments.
4. All aspects of investing should be forward-looking and intentional. Successful investing requires rigorous research and analysis, alignment with UPP's capabilities, and focused innovation.
5. Culture is an essential investment input. How we invest should reflect UPP's culture of collaboration and forward vision.
6. UPP embraces partnership as a foundation for enhanced performance and impact.
7. Costs are an asset that should be treated as judiciously as any other plan asset. The goal is neither to reduce costs to the lowest possible level, nor squander a plan asset. Rather, the goal is to employ costs wisely in delivering a secure pension promise.
8. Transparency engenders trust. Our investment of members' pension earnings has bearing on their retirement security; they have a right to know how we approach and perform that responsibility.

In 2021, UPP adopted several foundational investment policies to codify our investment approach and drive consistent application of our processes.



Leading with sustainability

We know that environmental, social and governance (ESG) factors, such as climate change, will present material and evolving impacts over time and must be firmly embedded in our investment analysis and risk management.

Responsible investing – being the integration of ESG considerations into our investment processes and stewardship practices – helps us ensure we can fulfil our pension promise to generations of members while helping influence a resilient financial, social, and environmental future. This is essential for a pension fund with generational responsibilities – our ability to deliver sustainable value to current and future members relies on healthy, functioning systems.

We began laying the foundations for UPP's responsible investing approach in 2021, with focus on the governance, strategies and partnerships that would serve as a launchpad for this priority focus of our investment program. This early work was guided by our founding responsible investing beliefs and consultation with members. These beliefs will continue to evolve in line with our investment beliefs.

RESPONSIBLE INVESTING BELIEFS

1. ESG factors, such as climate change and diversity, will present material and evolving impacts on our investments over time and should be managed as part of comprehensive risk management.
2. An ESG lens helps better assess and create sustainable value, identify differentiated opportunities, and drive stronger long-term financial performance.
3. Investors can use their voice to influence a culture of sustainability among investee companies and external managers and promote fair, efficient, and transparent market practices.
4. Investors have a responsibility to not only respond to evolving real-world challenges but also to promote a just, sustainable society and economy.

Proxy voting is a key component of our stewardship program, allowing UPP to influence the oversight and management of ESG factors by publicly traded companies. We began voting under our inaugural Proxy Voting Policy in early 2022 and will begin publishing our votes and associated rationale quarterly to MyUPP.ca in the latter half of 2022.

Gathering member perspectives

We believe members have a right to understand and weigh in on their hard-earned pension investments.

UPP consulted members on their investment and responsible investing perspectives and priorities through a series of investment listening sessions in spring 2021 and a responsible investing member survey and accompanying discussion forums in winter 2022. The survey responses and discussions gave insight into the broad preferences, expectations, and beliefs across our membership, which in turn informed our inaugural investment policies and climate action plan.

These were the first of many discussions to come with members, as we evolve along our investment journey and use responsible investing as a tool to meet our return needs and manage risk over time.

Here's some of the early feedback from members:

> "The world appears to be at an inflection point, and we have a responsibility to consider not just the financial well-being for our members retirement, but how we leverage our financial power to create a better society for our members to enjoy their retirement in."

> "This fund has the opportunity to be a real leader in developing investment strategies that fulfil ESG goals."

> "Universities should be a leader in ESG, and investment bodies with voting rights have the power to change companies. Let's use this ability to be a source for good."

> "I am very excited at the initiative shown by UPP... I think you are building a sector-leading model, which is a wonderful statement of ambition."

End-to-end ESG integration

Our ESG focus extends to the highest level at UPP and is embedded throughout the organization. Every investment professional is responsible for integrating ESG considerations into their investment decisions and communicating UPP's policies and expectations to external investment managers. We do this to deliver sustainable long-term value and fulfil our pension promise to generations of members.

Reporting directly to the CEO, our Responsible Investing team sets ESG strategy and targets, identifies emerging focus areas and activities, and ensures the Investment team has the ESG tools and resources to achieve our strategic ambitions. UPP's Managing Director of Responsible Investing regularly reports on ESG strategies and developments to the Management Investment Committee, Board Investment Committee, and overall Board.

We use a variety of processes and tools to understand and manage ESG risks, opportunities, and impacts from the total portfolio level down to our individual investment mandates:

- Training and education for our investment professionals and Board members

> **Over the last year, Management held Board education sessions on climate change and investments, ESG in capital markets, and responsible investing foundations, as well as a UPP employee lunch-and-learn series on key climate change themes, such as carbon footprinting.**

- Equipping our investment teams with analytical tools and resources
- Using third-party data to evaluate holdings and measure ESG performance
- Identifying ESG focus areas and, where appropriate, setting ESG targets

Partnering for impact

UPP participates in broader collaborative initiatives to:

- Leverage the power of scale to amplify our impact
- Enhance access to global tools, data, and best practices
- Help deliver a strong, unified voice to companies about material matters

We are fortunate to house experts and contributors to the global responsible investing community, with deep experience building comprehensive ESG programs. See MyUPP.ca for our full list of partners and associations

CLIMATE ENGAGEMENT CANADA

A founding member of Climate Engagement Canada

In 2021, UPP became a founding member of Climate Engagement Canada (CEC), a Canadian finance-led initiative to bring a unified investor voice to Canadian companies on climate risk governance, disclosure, and the transition to a low-carbon economy in Canada.

Alongside 25+ leading financial institutions, UPP will play an active role engaging CEC's Focus List of forty select TSX-listed companies, leading engagement with a listed company and supporting engagement efforts for others. Over the next months, engagements with the boards and senior leaders of these organizations will commence to spur organizational change.

SHARE

Partnering with SHARE to influence public companies

In 2021, we appointed the Shareholder Association for Research and Education (SHARE) to engage public companies in our investment portfolio, with a focus on advancing climate action, reconciliation, and human rights. We also joined the SHARE-led University Network for Investor Engagement, a climate-focused collaborative engagement initiative with some of Canada's most prominent universities. Through that partnership, we negotiated an agreement with a Canadian bank to develop, implement, and disclose tools to measure the carbon risks in its lending portfolio in line with the Paris Agreement and the International Energy Agency's 1.5°C climate change scenario requirement

Government of Canada

Active participation in Canada's Sustainable Finance Action Council

In May 2021, the Government of Canada launched the Sustainable Finance Action Council. The Action Council includes 25 select banks, insurance companies, and pension funds - including UPP - with more than $10 trillion in assets. Its mandate is to support the growth of a sustainable finance market in Canada and help mobilize private capital to mitigate climate-related risks.

Through this partnership, UPP will lean into efforts to move finance activity in the direction of global climate and decarbonization commitments while establishing Canada as a trusted source of climate-smart solutions, expertise and investment. Learn more about the Council.

UPP's climate action plan

Part of being a responsible investor is advancing climate readiness across our portfolio. This is critical not only to the success of Canadian companies and communities as we move toward a net-zero world, but also the long-term strength of our Fund. Recognizing climate change as a defining challenge of our time, a transparent and deliberate climate action plan is and will be a priority component of our developing investment and risk management strategy.

UPP will transition its investment portfolio to

net-zero GHG emissions by 2040 or sooner

With interim emissions reduction targets:

16.5% by 2025 60% by 2030

This means our investment portfolio will emit minimal greenhouse gases, and 100% of the remaining emissions will be offset starting 2040.

> The UPP is for university employees. Universities should be on the cutting edge of social change and fully in line with scientific evidence. We know climate change is here; we know what causes it; we know how to start to fix it. Let us not be laggards in this but leading the way for how investment should be done.

-UPP Member

HIGHLIGHTS FROM OUR CLIMATE ACTION PLAN

While setting a 2040 net-zero target may seem ambitious for a new fund, we see this commitment as central to delivering long-term value and an essential beacon for our evolving investment strategy.

Our **Climate Action Plan** outlines the steps and tools we will take to achieve our target. Formal governance and oversight of the Action Plan will include set performance objectives and regular updates to executive management and the board. We will publish targets and report on progress in line with the Net-Zero Asset Owner Alliance requirements and will publicly report on our climate management practices annually, in line with the recommendations of the Task Force on Climate-Related Financial Disclosures.

Highlights from the Action Plan include:

Evaluate
Processes and tools to evaluate climate-related investment risks, opportunities, and impacts at the total fund and individual mandate levels

Engage
Engaging with companies and market actors to encourage a swift transition to a net-zero, climate-resilient future and strong climate-related disclosures

Invest
Investing in climate solutions and ensuring new investments align with the transition to a net-zero world and reduce the greenhouse gas intensity of our assets

Advocate
Advocating for public policy and market systems that help limit global warming, in line with the Paris Agreement

Exercising our influence
We will engage in proactive dialogue with the companies we invest in and our external investment managers to make our expectations for the climate transition clear – and advocate for public policies and regulations that will support a well-managed transition.

In 2021, UPP submitted an official comment to the Canadian Securities Administrators on proposed climate-related disclosure requirements for Canadian companies, encouraging the need for publicly listed companies to 1) disclose plans to transition to a low-carbon economy in line with the goals of the Paris Agreement, 2) report scope 1 and 2 greenhouse gas emissions and scope 3 emissions[8] if the company deems them to be relevant, and 3) seek assurance of their emissions reporting.

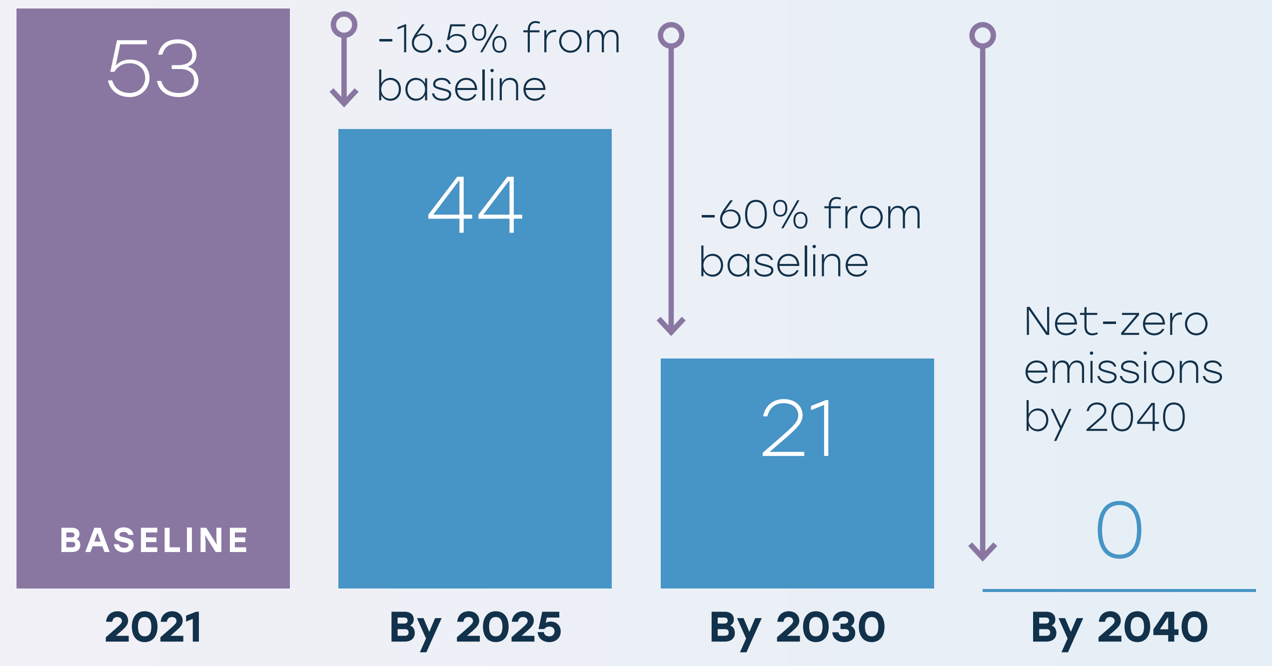
UPP's first carbon footprint

In support of our climate commitment, we have assessed the greenhouse gas (GHG) emissions associated with our investments to calculate the carbon footprint of UPP's portfolio. The process and the resulting analysis are an important step in understanding and addressing the interaction between climate change and UPP's investments.

Carbon footprint methodologies and the attribution of GHG emissions to investors is an early and evolving process. Today, limited GHG emissions data is disclosed by investee companies, and what is disclosed is largely estimated and unverified by a third party. As such, calculating and disclosing our carbon footprint will be a journey of continual improvement that will see us seek to improve the quality of our data and methodology over time.

Our inaugural carbon footprint also forms the baseline for our interim emission reduction targets, as shown below. We will calculate and report our carbon footprint annually to demonstrate progress toward our long-term objective of net-zero portfolio GHG emissions by 2040 and our interim 2025 and 2030 emission reduction objectives.

UPP's 2021 carbon footprint and targets
Metric tonnes CO2-eq/$M invested



The disclosure of our carbon footprint meets one of the recommendations of the Task Force on Climate-related Financial Disclosures. Though most of our climate-related exposure comes from the investment portfolio, which is managed through pooled funds rather than direct investments, we also plan to address our operational scope 1 and scope 2 emissions in the future.

See Appendix 1 for an overview of our carbon footprint and supporting methodology.

Investment performance

UPP performance period: July 1–December 31, 2021
In the six months with assets under management, the UPP investment portfolio returned 5.7%, representing a net growth of $0.6 billion in net income.

5.7%
Net Return[11]

$0.6B
Net income

Asset class returns

We categorize assets by exposure type, based on their risk-return characteristics and roles in funding the pension. Thoughtful diversification and a mix of passive and active strategies across these categories help us capture opportunity and spread investment risk across factors such as geography, currencies, sector, duration, and asset classes. They also help manage short-term volatility and ensure we maintain a resilient portfolio.

As we work to optimize our portfolio, we will continue to build selective internal capabilities to position UPP to expertly manage risk and return in the context of our funding requirements and net-zero target. We have already formed the basis of a seasoned investment leadership team, who will carefully assess their needs and draw on their global networks to bring bright, diverse talent to UPP.

[11] Rounded from 5.67%

As of December 31, 2021, the UPP portfolio employed $6.9 billion active and $5.6 billion passive strategies. Approximately $3.1 billion represents exposure obtained through passive synthetic strategies.

Net returns by asset class for the six-month period from July 1, 2021 to December 31, 2021

Asset Class	Asset mix %	Net return %
Return enhancing	66	8.5
Inflation sensitive	5	9.9
Interest rate sensitive	36	0.8
Short-term money market and funding	-7	-0.1
Total UPP	100%	5.7%

Top external managers
Approximately $8.6 billion of UPP's current assets are managed through external investment managers partnerships and private market fund investments. See Appendix 4 for a list of our external managers with $50 million or more of our assets under management.

For more information, see our top single-name public equity holdings here.

Asset class overview

Asset mix weights and returns reflect the period between July 1, 2021, and December 31, 2021. UPP benchmarks will be established in 2022, once sub-asset class strategies are set. In the interim, we provide the six-month performance for major financial indices most reflective of our respective asset class categories for comparative reference.

RETURN ENHANCING ASSETS

Asset mix weight: 66% ($7.8 billion)
Six-month return: 8.5%

Six-month major index performance[12]

- MSCI All Country World Net Index returned: 7.7%
- S&P/TSX Composite Index returned: 6.7%

Return enhancing assets – which include public equity, private equity, private debt, and absolute return strategies – generally reduce funding risk over the long term by delivering higher relative rates of return. They can, however, display higher relative volatility (a measure of market risk) in the short term.

On average, our return-enhancing assets outperformed the broader equity markets in the last half of 2021. Performance was positive across the asset class, with key contributions coming from private equities. During this time, we reduced our exposure to public equities and allocated proceeds primarily to fixed income (part of the interest rate risk sensitive asset class). The change was driven by the medium-term outlook for equity returns, the desire to balance the risk exposures across the portfolio, and alignment with the asset mix threshold stated in our Statement of Investment Policies and Procedures.

INFLATION SENSITIVE ASSETS

Asset mix weight: 5% ($0.6 billion)
Six-month return: 9.9%

Six-month major index performance[12]

- Canadian Consumer Price Index (CPI) + 4%: 4.3%
- MSCI/REALPAC Index: 6.0%

Assets such as real estate and infrastructure mitigate the impact of long-term inflation on the value of the Plan liabilities. In addition to returns and inflation hedging, these assets offer unique opportunities to apply our ESG lens as we strengthen members' retirement security. As such, we intend to increase allocation to this asset class through selective fund and co-investments.

Performance for this category was steady from July to December 2021.

INTEREST RATE SENSITIVE ASSETS

Asset mix weight: 36% ($4.2 billion)
Six-month return: 0.8%

Six-month major index performance[12]

- FTSE Canada Universe Corporate Bond Index: 0.9%
- FTSE Canada Universe Overall Bond Index: 1.0%

Allocations to these assets, such as fixed income and inflation-linked bonds, generally reduce funding risk over the long term through tighter asset and liability matching and by hedging the sensitivity of the Plan's liabilities to changes in interest rates. They do, however, typically have lower expected returns.

The interest rate risk sensitive portfolio performed at par with relevant market indices in the last half of 2021, primarily due to our exposure to corporate and short-term bonds.

SHORT-TERM MONEY MARKET AND FUNDING

Asset mix weight: -7% (-$0.7 billion)
Six-month return: -0.1%

Six-month major index performance[12]

- FTSE Canada 91 Day T-Bill Index: 0.1%

Short-term money market and funding instruments (including derivatives) are used to manage liquidity and funding needs. Our asset mix includes the derivative exposures in the relevant asset class and a corresponding offset in funding.

The reported negative exposure represents leverage used to fund investments in the return-enhancing asset class.

[12] Index performance presented as general references and not UPP benchmarks

An evolving cost journey

UPP is a new organization investing in the foundations for long-term value and scaled advantages for our members. Our costs to date reflect the unique, one-time expenses associated with building our structural and operating core while onboarding and integrating UPP's inaugural five pension plans and asset portfolios.

As we complete our foundational build and grow the Plan through new entrants and investment returns, UPP's expenses relative to assets will normalize to a level similar to other more mature peers.

The foundations built today are to prime UPP for economies of scale, and should yield outsized benefits and value for members.

Cost segments

Total costs

$95.8 million

Prior to July 1, 2021 | **Jul 1 2021** | **July 1, 2021, and beyond**

1 $25.6M Establishing UPP costs

2 $60.3M Investment costs[13]

3 $9.9M Pension costs[13]

INVESTMENT AND PENSION COST SEGMENTS

Build and transition

Costs to establish the core structures, talent, and tools to confidently assume pension and investment responsibilities from the founding universities and deliver sustainable financial security to members.

Agency

Cost associated with the focused agency agreements set with the founding universities, to ensure a smooth member experience and avoid transition risk while UPP thoughtfully builds our infrastructure and systems.

Run the business

Costs inherent to day-to-day business operations, including people, technology, and corporate functions. We know that a "business as usual" state will take time to achieve and have plotted our path with the realistic view that our foundational build will continue for three to four years.

[13] July 1 – December 31, 2021

$25.6 million

Establishing UPP (prior to July 2021) 1

Build and transition

To support UPP's establishment in 2021, Ontario's Ministry of Finance exempted the founding single-employer plans of their annual obligation to the Pension Benefits Guarantee Fund, totaling a collective $20.7 million. Instead, the $20.7 million was used to offset the one-time costs incurred in establishing UPP.

As an extension of this arrangement, the universities and UPP instituted a formal review process and reported all one-time startup costs to the Ministry.

With a condensed timeline and challenges created by the pandemic, UPP's initial priority was to establish necessary day one foundations and hire high-capacity leaders to guide our build – beginning with UPP's inaugural CEO, Barbara Zvan, and CFO, Henry Kim.

To augment a lean team, UPP formed strategic partnerships with external consultants and independent advisors to help design and implement necessary operating structures, capabilities, controls, and processes. This included legal partnerships to transfer numerous service partner and external manager agreements from the founding universities to UPP.

All in, UPP incurred $10 million in one-time setup costs in 2020 and $15.6 million 2021. This includes the defined start-up funding of $20.7 million and ancillary administrative expenses outside of the one-time scope, which were covered through a pre-funding provision from the founding universities.

EXPLORE SECTIONS

We are UPP

Plan funding

Serving our members

Investing for the future

Evolving cost journey

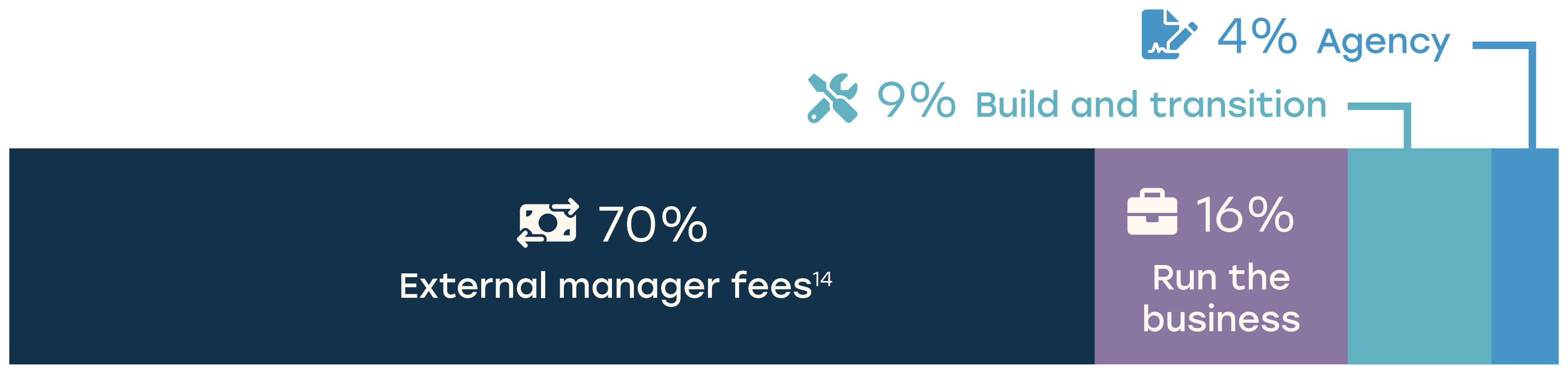
Compensation analysis

Financial statements

Appendix

$60.3 million Investment costs

2



Build and transition: 2021 investment costs relate to 1) infrastructure to facilitate the transition of assets to UPP and associated agreements, processes and procedures, and 2) establishing a centralized accounting view to facilitate reporting, monitoring, and analysis of risk, return, and cost sources for the total portfolio.

Agency: Under an investment agency agreement, the University of Toronto Asset Management Corporation continued to provide investment management services for University of Toronto's pension portfolio until March 31, 2022. Costs were passed through to UPP on a cost-recovery basis.

Run the business: Costs include our people, research, technology, data, and external custody fees.

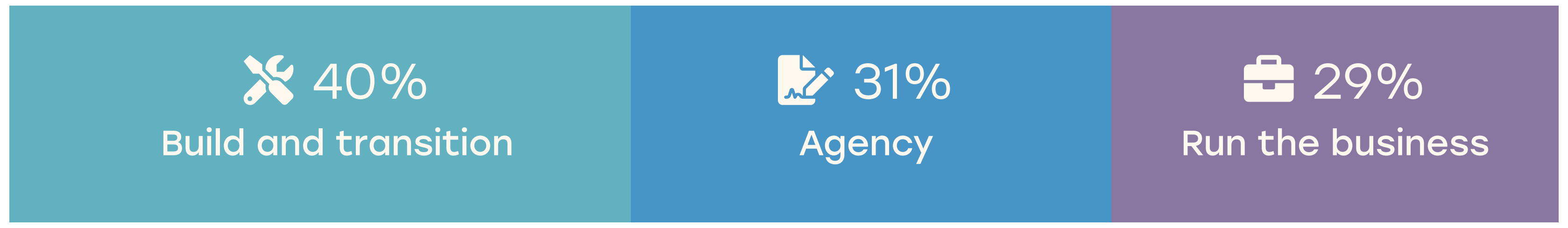
External manager fees: Most of the invested assets transitioned to UPP are managed through legacy external arrangements, the fees for which accounted for roughly 70% of investment costs in the last half of 2021.

> UPP will leverage its growing scale to lower investment management fees as a percentage of the assets deployed in each asset class, but it will take time to reposition certain existing illiquid mandates. We will optimize these exposures as they mature, focusing on managers and strategies that produce value worth their fees through persistent outperformance and alignment on critical areas such as risk and responsible investing.

[14] Reported in Net Investment Income, including external manager fees of $17.8 million

$9.9 million Pension costs

3



Build and transition: The administrative conversion from the prior plans to UPP was a multistep and collaborative process involving the individual founding universities, administrators, actuaries, and UPP team. Much of this work straddled day one, including the completion of the actuarial valuation and administrative reconfiguration to capture UPP provisions in the existing pension systems. During this period, we also prepared to onboard four new organizations on January 1, 2022.

Agency: Costs are for the continued pension administration services provided by the founding universities as agents of UPP, and related oversight. Costs are passed through to UPP on a cost-recovery basis.

> UPP's Pension Services team is procuring an advanced pension administration solution through a multiyear project to establish our foundations for member service excellence.

Run the business: Costs relate to strategic planning, the formation of our pension leadership team, establishing a lean member call centre,[15] facilitating a series of member engagements, and establishing a foundational website.

[15] Three of the four organizations joining UPP on January 1, 2022, had no prior pension plan. UPP directly services this small cohort.

Compensation Discussion & Analysis

Total Rewards Philosophy

In our early years, UPP seeks to attract a blend of:

- versatile leaders with broad knowledge and experience, to establish the Plan's core business functions,
- key mid-career talent, and
- enthusiastic early-career employees who will grow with us as we progress.

Ultimately, UPP will recognize performance and differentiate rewards based on successful contribution to individual and organizational goals, encompassing financial, non-financial and cultural aspects.

Our total rewards program maintains a meaningful degree of competitiveness with the external labour market in our base salary, incentive, pension, group benefit, and intangible rewards. UPP's compensation design is internally fair and equitable but allows for flexibility and discretion, particularly in UPP's initial build-out phase.

Total rewards practices at UPP adhere to a formal governance process established by our Board of Trustees.

A transitional approach for structure and flexibility

UPP takes seriously its responsibility to 1) hire specially skilled and high-performing talent to build the organization and effectively deliver on the pension promise to members, and 2) effectively steward the Plan's assets and manage its expenses. To that end, great rigour is applied in setting compensation across the organization.

UPP's 2021 imperative was building the critical foundations and team to ensure a successful launch and solid operational start. We needed to attract and secure top talent quickly. With limited people structures in place, the Board Human Capital Committee reviewed every proposed hire and compensation recommendation for all senior roles in 2021, until formalized delegations of management authority, job ranges and compensation structures were put in place as the year progressed. The Committee continues to review and recommend the total compensation for all executive leadership team members.

UPP's Total Rewards program and performance management framework, Strive & Thrive, integrate with our organizational strategy to create alignment throughout the organization.

Strive & Thrive Performance Management Program
Strive & Thrive is a holistic employee development and performance approach designed to engage and empower our people to own and pursue their careers and personal development, with continuous feedback and dialogue encouraging peak performance.

Through the framework, performance is assessed and managed against strategic objectives, as expressed in our organization scorecard and individual goals, providing increased structure and the opportunity to pay for performance through annual incentive payments.

Total Rewards

Total rewards at UPP consist of base salary, incentive opportunities, group benefits, pension, and intangibles. The framework in effect for 2021 reflects UPP's early development stage, guided by defined principles set between Management and the Board.

Total compensation =

Base Salary (fixed) + Annual Incentive (variable) + Benefits and Pension Programs (fixed)

Compensation components:

Base Salary
2021 salary bands were developed based on rigorous market benchmarking to ensure competitive compensation for an individual's experience, skills and level of responsibility. Salaries are reviewed upon hire, annually, and/or with material changes in roles or responsibilities.

UPP's total compensation is designed to maintain a meaningful degree of competitiveness with the relevant external labour market. The appropriate comparator market is defined as one that balances geographic and industry-specific comparability which may vary based on role and experience level.

Our pay practices target the

50th percentile

of the comparator market with an appropriate degree of flexibility to attract specialized skills and experience.

Annual Incentive

Market-based annual incentives were fixed for 2021. In 2022 and beyond, annual incentives connect compensation to organizational and individual performance. The compensation mix is designed such that, generally speaking, employees with more influence over organizational performance have a larger share of their compensation as variable annual incentives, or pay at risk. For instance, for the executive leadership team, the target incentive component exceeds base salary.

> A **Long-Term Incentive Program (LTIP)** is in development for 2023, to further align leadership remuneration with long-term performance and with industry best practice.

Group Benefits

UPP provides a comprehensive and wellness-focused insurance and benefit program.

Pension Benefits

UPP employees are Plan Members and receive a defined benefit pension under UPP.

Independent Benchmarking

UPP retained Mercer Canada to independently evaluate and benchmark the majority of UPP's roles against third-party market data, ensuring a sound job hierarchy and effective compensation structure. The data points were carefully scoped to reflect UPP's size and stage, business operations, and each role's respective talent market.

Compensation Oversight

Total rewards practices at UPP adhere to a formal governance process established by our Board of Trustees. The Human Capital Committee (HCC) of the Board is responsible for overseeing and recommending UPP's developing compensation philosophy and approach, policies and programs.

> As these programs evolve, we remain steadfastly committed to building a rewarding and fulfilling environment for our people and to the delivery of long-term value for all Plan members.

Compensation Disclosure

We are committed to transparency on the compensation of UPP's Named Executive Officers (NEO), being the President & CEO, Chief Financial Officer, and three other highest-paid executives. Given that executives joined at various times during 2021, we show below annualized 2021 salaries and incentives. Most NEOs were paid a pro-rated portion of these totals.

The Board determines total compensation for the CEO and executive leadership team, while the Board's Human Capital Committee approves the CEO's recommendation on aggregate annual incentives for all other employees.

Executive compensation is set in line with UPP's 50th percentile pay target.

UPP's pension program came into effect on January 1, 2022. All employees and executives who joined UPP in 2021 can purchase retroactive pension service for their employment period during UPP's July 1 – December 31, 2021 operating term. Options must be exercised by the end of 2022, after which the pension component will be captured in our 2022 executive compensation disclosure.

2021 Annualized Executive Compensation

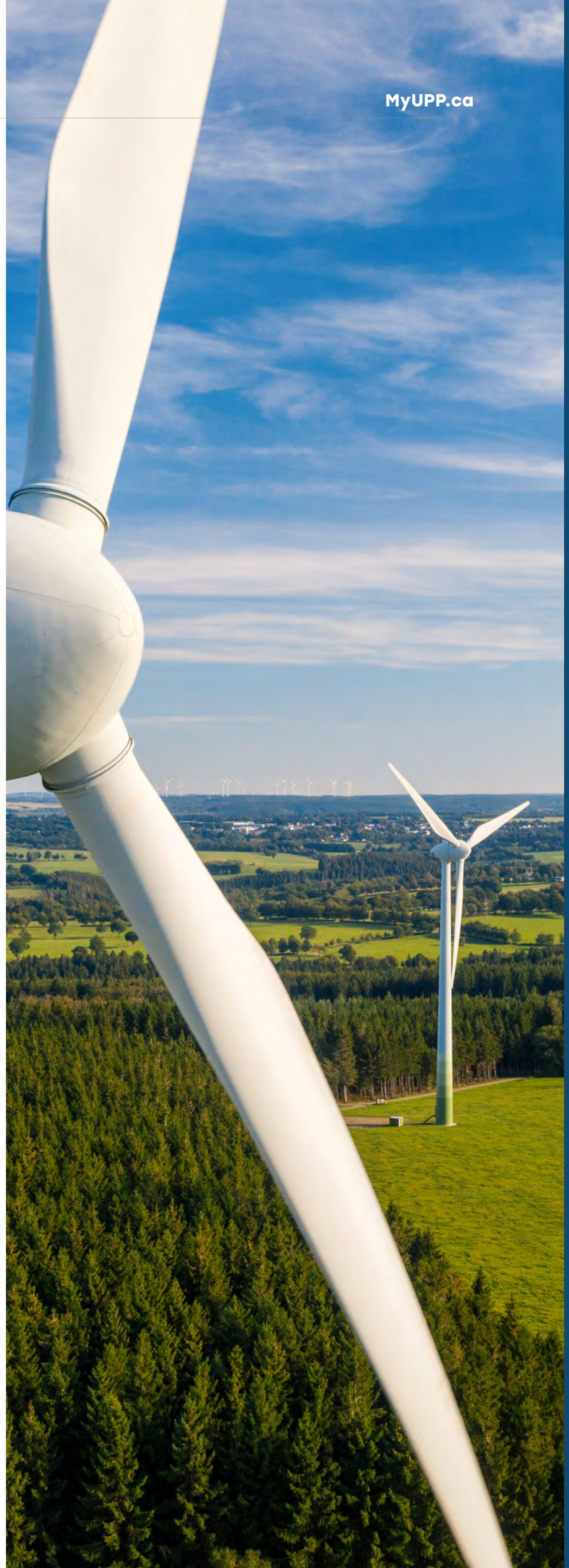
($thousands, annualized)	Base Salary A	Annual Incentive B	Total A+B
Barbara Zvan President and Chief Executive Officer	$500 (42%)	$700 (58%)	$1,200
Aaron Bennett Chief Investment Officer	$350 (37%)	$600 (63%)	$950
Henry Kim Chief Financial Officer and Head of Operations	$325 (43%)	$425 (57%)	$750
Christine Chen General Counsel	$325 (43%)	$425 (57%)	$750
Joanna Lohrenz Chief Pension Services Officer	$280 (43%)	$370 (57%)	$650

Trustee Remuneration

Board compensation for 2021 was as follows:

($thousands)	
Chair	$175
Trustee	$50

Generally, Trustees are reimbursed for reasonable and necessary expenses incurred in carrying out the business of the UPP. These reimbursements relate primarily to travel, meals, and accommodations related to attendance at UPP board, committee or similar meetings, or related to relevant professional and educational programs or designations. For 2021, these expenses totaled $13.9 thousand.



Financial statements

Management’s responsibility for financial reporting

The financial statements of the University Pension Plan Ontario (“UPP”) have been prepared by management and approved by the Board of Trustees. Management is responsible for the preparation and fairness of the financial statements, which have been prepared in accordance with Canadian accounting standards for Pension Plans, as set out in the Chartered Professional Accountants of Canada Handbook Section 4600 – Pension Plans. The financial statements also comply with the financial reporting requirements of the Pension Benefits Act (Ontario) and Regulations (PBA). For accounting policies that do not relate to its investments or pension obligations, the financial statements follow the requirements of International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board. To the extent that IFRS in Part 1 is inconsistent with Section 4600, Section 4600 takes precedence. The financial statements include certain amounts based on management’s judgments and best estimates where deemed appropriate.

Systems of internal controls and procedures over financial reporting and disclosure controls have been designed and established to maintain proper records and to safeguard the assets. These controls include appropriate segregation of responsibilities, an organizational Code of Conduct, and accountability policies and framework that outlines delegated authorities at UPP. We report any significant deficiencies to the Audit and Finance Committee (“Committee”) of the Board of Trustees of UPP.

The Committee assists the Board of Trustees in discharging its responsibility to approve the annual financial statements. The Committee meets regularly with management and with the External Auditors to discuss the scope and findings of audits and to satisfy itself that their responsibilities have been properly discharged.

The Committee reviews the annual financial statements and recommends them to the Board of Trustees for approval. UPPs’ External Auditors, PricewaterhouseCoopers LLP, (the “External Auditors”) have conducted an independent audit of the financial statements in accordance with Canadian generally accepted auditing standards, performing such tests and other procedures as they consider necessary to express an opinion in their Auditors’ Report. The External Auditors have full and unrestricted access to management and the Committee to discuss findings related to the integrity of UPP’s financial reporting and the adequacy of internal control systems.

University Pension Plan Ontario

Barbara Zvan
Chief Executive Officer
June 29, 2022

Henry Kim
Chief Financial Officer
June 29, 2022

Actuaries' opinion to the Board of Trustees of the University Pension Plan Ontario

Aon has been retained by the University Pension Plan Ontario Board of Trustees (the "Board") to perform the following actuarial valuations of the University Pension Plan Ontario (the "UPP"):

- An actuarial valuation prepared on a going concern basis as at July 1, 2021, as described in Note 7 of these financial statements, prepared in accordance with applicable pension legislation.
- The actuarial valuation prepared on a going concern basis as at July 1, 2021 was then rolled forward to December 31, 2021 to determine the pension obligations as at December 31, 2021 for financial statement purposes.

The actuarial valuation of the UPP prepared on a going concern basis as at July 1, 2021 was based on membership data provided by the UPP as at July 1, 2021.

We have prepared a valuation of the liabilities as of July 1, 2021 on the basis of the accounting methodology required by the Chartered Professional Accountants of Canada Handbook, Section 4600, as disclosed in Note 7, and extrapolated the liabilities to December 31, 2021. The valuation and extrapolation were based on assumptions that reflect the best estimate assumptions of future events as of December 31, 2021, such as future rates of inflation, future retirement rates and future rates of return on the pension fund. The amounts are set out in the Statement of Changes in Pension Obligations.

We hereby certify that, in our opinion:

- The data provided to us by the UPP as of July 1, 2021 are sufficient and reliable;
- The actuarial assumptions used are appropriate for the purposes of each valuation; emerging experience differing from the assumptions will result in gains or losses which will be revealed in future valuations;
- The valuations as at July 1, 2021 and rolled forward to December 31, 2021 have been completed in accordance with our understanding of the requirements of CPA Chartered Professional Accountants of Canada Handbook, Section 4600; and
- The methods used are appropriate for purposes of each valuation and are consistent with the applicable regulatory requirements.

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

AON

Allan Shapira

Allan H. Shapira
Fellow of the Canadian Institute of Actuaries
June 29, 2022

Andrew Hamilton

Andrew Hamilton
Fellow of the Canadian Institute of Actuaries
June 29, 2022

FINANCIAL STATEMENTS

Independent auditor's report

To the Trustees of University Pension Plan Ontario

Our opinion

In our opinion, the accompanying financial statements present fairly, in all material respects, the financial position of University Pension Plan Ontario (the Plan) as at December 31, 2021 and the changes in its 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.

What we have audited
The Plan's financial statements comprise:

- the statement of financial position as at December 31, 2021;
- the statement of changes in net assets available for benefits for the year then ended;
- the statement of changes in pension obligations for the year then ended; and
- the notes to the financial statements, which include significant accounting policies and other explanatory information.

Basis for opinion

We conducted our audit in accordance with Canadian generally accepted auditing standards. Our responsibilities under those standards are further described in the *Auditor's responsibilities for the audit of the financial statements* section of our report.

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

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

Comparative information

The financial statements of the Plan for the year ended December 31, 2020 were audited by another auditor who expressed an unmodified opinion on those statements on May 21, 2021.

Other information

Management is responsible for the other information. The other information comprises the Management's Discussion and Analysis.

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

In connection with our audit of the financial statements, our 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 our knowledge obtained in the audit, or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of management and those charged with governance for the financial statements

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

In preparing the financial statements, management is responsible for assessing the Plan's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the Plan or to cease operations, or has no realistic alternative but to do so.

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

Auditor's responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with Canadian generally accepted auditing standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

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

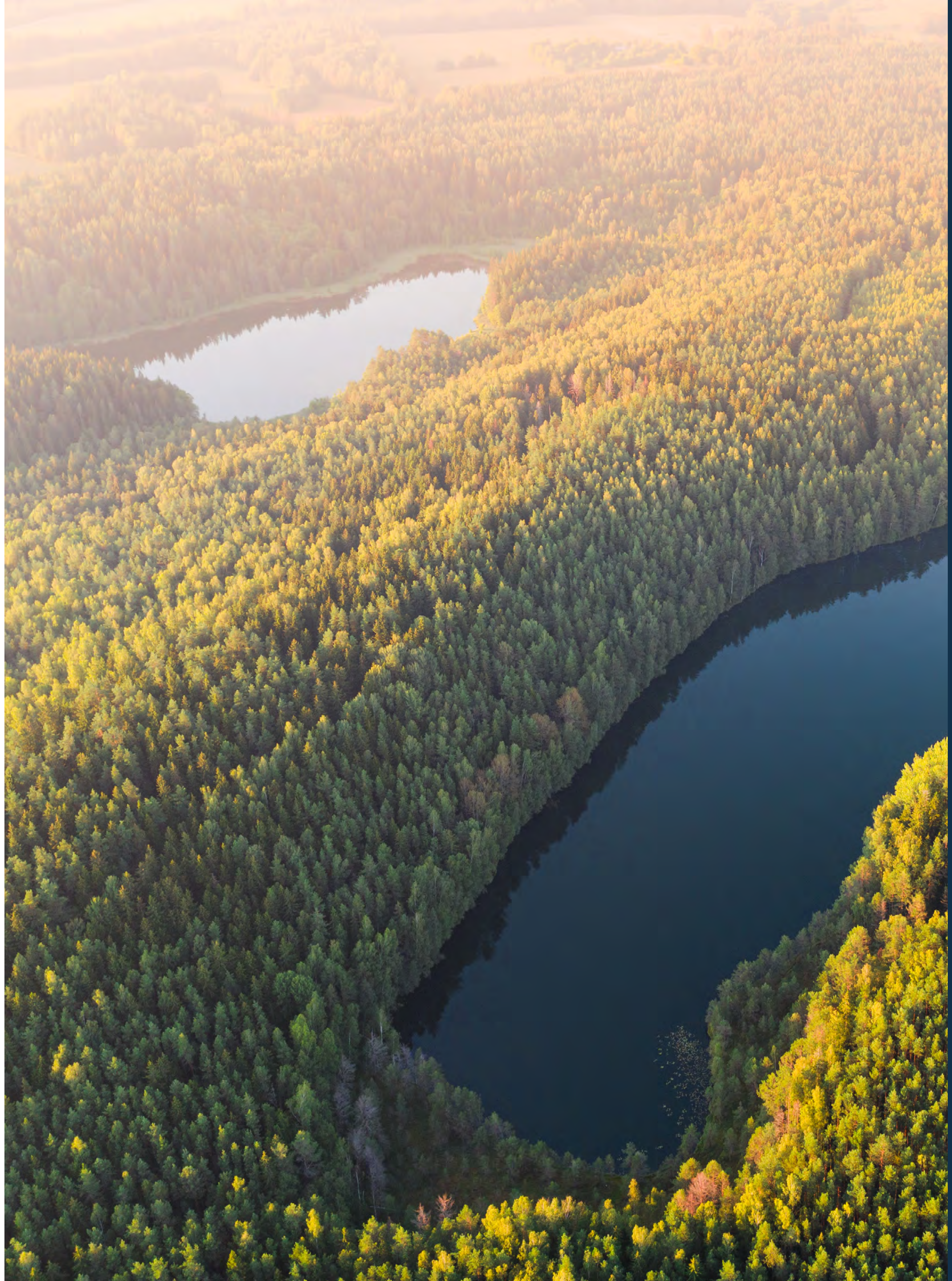
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Plan's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Plan to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

PricewaterhouseCoopers LLP

Chartered Professional Accountants, Licensed Public Accountants

Toronto, Ontario
June 29, 2022



Statement of financial position

As at December 31,
(Canadian $ in thousands)

		2021		2020
Net Assets Available for Benefits				
Assets				
Investments (Note 4)	$	**11,649,544**	$	79
Investment related assets (Note 4)		**159,589**		-
Contributions receivable:				
Employee		**1,296**		-
Employer		**1,200**		-
Special contributions		**-**		1,611
Other receivables and prepaids		**23,603**		273
Total Assets		**11,835,232**		1,963
Liabilities				
Accounts payable and accrued liabilities		**14,225**		1,906
Investment related liabilities (Note 4)		**26,252**		-
Pre-funding facility (Note 3)		**-**		2,713
Total Liabilities		**40,477**		4,619
Net Assets (Liabilities) Available for Benefits		**11,794,755**		(2,656)
Accrued Pension Obligations and Surplus (Deficit)				
Accrued pension obligations (Note 7)		**10,602,828**		-
Surplus (deficit)		**1,191,927**		(2,656)
Accrued Pension Obligations and Surplus (Deficit)	$	**11,794,755**	$	(2,656)

See accompanying notes to financial statements.

On behalf of the Trustees

Gale Rubenstein
Board of Trustees Chair

Statement of changes in net assets available for benefits

Years ended December 31,
(Canadian $ in thousands)

		2021		2020
Changes due to Investment Activities				
Net investment income (Note 6)	$	**647,980**	$	-
Investment administrative expenses (Note 10)		**(18,043)**		-
Total Changes due to Investment Activities		**629,937**		-
Changes due to Pension Activities				
Transfer from predecessor plans (Note 3)		**11,232,518**		-
Contributions (Note 8)		**214,338**		7,368
Benefit payments (Note 9)		**(253,832)**		-
General and pension administrative expenses (Note 10)		**(25,550)**		(10,024)
Total Changes due to Pension Activities		**11,167,474**		(2,656)
Total Increase (decrease) in net assets available for benefits		**11,797,411**		(2,656)
Net Assets (Liabilities) Available for Benefits, Beginning of Year		**(2,656)**		-
Net Assets (Liabilities) Available for Benefits, End of Year	$	**11,794,755**	$	(2,656)

See accompanying notes to financial statements.

Statement of changes in pension obligations

Years ended December 31,
(Canadian $ in thousands)

	2021	2020
Increase in Pension Obligations:		
Transfer from predecessor plans (Note 3)	$ 10,151,124	$ -
Current service costs	186,507	-
Interest on accrued benefits	317,431	-
Changes in actuarial assumptions and methods	190,941	-
Past service buybacks	10,657	-
Total Increase	10,856,660	-
Decrease in Pension Obligations:		
Benefit payments (Note 9)	253,832	-
Total Decrease	253,832	-
Increase (Decrease) in Pension Obligations	10,602,828	-
Pension Obligations, Beginning of Year	-	-
Pension Obligations, End of Year	$ 10,602,828	$ -

See accompanying notes to financial statements.

Notes to the financial statements

(Amounts are in thousands of Canadian dollars except where otherwise noted)

1. Description of the Plan

(a) General

The University Pension Plan Ontario (UPP or the Plan) and the Trust Fund (the Fund) were established on January 1, 2020, pursuant to a Sponsors' Agreement between the Employee Sponsor (made up of the Faculty Associations and the Non-Faculty Unions that sponsor and participate in the Plan acting through their Employee Sponsor Committee) and the Employer Sponsor (made up of the Universities that sponsor and participate in the Plan, acting through their Employer Sponsor Committee) and a Trust Agreement between the Employee Sponsor, the Employer Sponsor and the Board of Trustees as the legal administrator of the new jointly sponsored pension plan (JSPP).

As a trust, without separate legal personality, the UPP must act through its Board of Trustees, who take all actions and enter all contracts in their capacity as Trustees. The UPP Board of Trustees is comprised of 14 individuals including an independent Chair and was established as plan administrator through the Trust Agreement between the joint sponsors officially constituted on January 1, 2020.

On July 1, 2021, the net assets and pension obligations of the Revised Pension Plan of Queen's University, the University of Toronto Pension Plan, Pension Plan for Professional Staff of University of Guelph, the Pension Plan for Non-Professional Staff of University of Guelph, and the Retirement Plan of University of Guelph (collectively the Predecessor Plans), were transferred to UPP (see note 3). Prior to July 1, 2021, all transactions in the plan were related to the set up of the Plan (see note 10).

The Plan is registered provincially under the Pension Benefits Act Ontario (PBA)with the Financial Services Regulatory Authority of Ontario (FSRA) and federally under the Income Tax Act (Canada) with the Canada Revenue Agency (CRA) under registration number 1357243.

The Plan is a registered pension plan as defined in the Income Tax Act and is not subject to income tax in Canada. The Plan may be subject to tax on income earned in other jurisdictions.

The following is a summary description of the Plan. For more complete information, reference should be made to the Plan text.

(b) Funding

Plan benefits are funded by member and employer contributions and investment income. The determination of the Plan's funded status and contribution requirements to fund regular benefits and any deficits are made on the basis of periodic actuarial valuations.

(c) Contributions

Each member shall contribute to the Fund by payroll deductions each Plan Year effective July 1, 2021, 9.2% of pensionable earnings up to or equal to the Year's Maximum Pensionable Earnings (YMPE) and 11.5% of pensionable earnings above the YMPE up to the maximum pensionable earnings for contributions. Contributions made by members of the Plan are matched 100% by their employers.

(d) Retirement Pensions

Under the Plan, active members have two parts to their pensions. The first part is brought in from the pension plan they were previously participating in before they joined UPP. This first part is for service to July 1, 2021, which is called pre-conversion service. In this first part, members keep the pensions they've earned based on the prior plan's benefit formula for service to June 30, 2021. The pre-conversion service does not change going forward, however the pre-conversion pensions can increase as members future earnings increase.

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The second part is for service on and after July 1, 2021, which is called post-conversion service or UPP service. All active members from any prior plan can only earn UPP service on and after July 1, 2021. UPP pensions are determined in accordance with the Plan text using a formula that considers a member's best average earnings over 48 months of pensionable earnings up to a maximum limit under the Income Tax Act, average of YMPE established by the federal government in the last 48 months before a member's retirement, and years of pensionable service. A member is eligible for a reduced retirement pension from age 55. An unreduced retirement pension is available from age 65 or on and after age 60 if the sum of a member's age and qualifying service equals at least 80 at such pension commencement date.

(e) Inflation Protection

Inflation protection is designed to increase the amount of a pensioner's monthly pension to maintain purchasing power.

Under UPP, pensioners receive pre-conversion inflation protection based on the prior plan's indexing formula which varies by each plan joining UPP. For post-conversion service, UPP's target funded conditional indexation is 75% of the increase in Consumer Price Index (CPI) for Canada. The funded conditional indexing is subject to the Plan's funded status, terms of the Funding Policy, and is not guaranteed at this level except during the first 7 years of the Plan for UPP service.

(f) Death Benefits

Death benefits are available on the death of an active member, deferred vested member, or retired member. For retirees, the survivor benefit depends on the guarantee period and/or survivor pension elected at time of retirement. In general, the benefit may take the form of a lump-sum payment, an immediate pension, or deferred pension to the surviving spouse.

(g) Disability Pensions

A member who becomes disabled shall continue to accrue pensionable service until the earliest that the member is no longer disabled, the member retires after reaching their earliest retirement date, or the member passes away. While disabled employer contributions will fund both employer and member contributions, provided a member satisfies the Plan's definition of disability.

2. Summary of Significant Accounting Policies

(a) Basis of Presentation

These financial statements have been prepared by management in accordance with Canadian accounting standards for Pension Plans, as set out in the Chartered Professional Accountants of Canada Handbook Section 4600 – Pension Plans (Section 4600). The recognition and measurement of UPP's assets and liabilities, inclusive of pension obligations, are consistent with the requirements of Section 4600. The financial statements also include disclosures required by Regulation 909 of the Pension Benefits Act.

For accounting policies that do not relate to its investments or pension obligations, the financial statements follow the requirements of International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board. To the extent that IFRS in Part 1 is inconsistent with Section 4600, Section 4600 takes precedence.

(b) Functional and Presentation Currency

These financial statements are presented in Canadian dollars, which is the Plan's functional currency.

(c) Use of Estimates

The preparation of the financial statements requires management to make estimates and assumptions that affect the application of accounting policies and the reported amounts of assets and liabilities at the date of the statement of net assets available for benefits and the reported amounts of changes in net assets available for benefits during the year. Actual results may differ from those estimates.

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

The global health pandemic created by the spread of COVID-19 (Pandemic) has caused global economic disruption and uncertainty, amplifying the uncertainty related to the estimates and assumptions used in the determination of fair values of investment assets. In all cases, UPP's estimates are sensitive to key assumptions and drivers that are subject to material change, and Management continues to monitor developments in these inputs.

Measurement uncertainty exists in the valuation of the pension obligations of the Plan and the Plan's Level three investments. Measurement uncertainty arises because:

- the Plan's actual experience may differ, perhaps significantly, from assumptions used in the valuation of the pension obligations of the Plan; and
- the estimated fair values of the Pension Fund's Level three investments may differ significantly from the values that would have been used had an active market existed for these investments.

While best estimates have been used in the valuation of the pension obligations of the Plan and the Plan's Level three investments, management considers that it is possible, based on existing knowledge, that changes in future conditions in the short-term could require a material change in the recognized amounts.

Differences between actual results and expectations in the pension obligations of the Plan are disclosed as changes in actuarial assumptions or methods, experience gains and experience losses in the Statement of Changes in Pension Obligations in the year when actual results are known.

Differences between the estimated fair values and the amount ultimately realized for investments are included in investment and other income, net in the year when the ultimate realizable values are known. The Plan is exposed to a variety of financial risks as a result of its investment activities which are described in Note 5 – Financial Risk Management.

(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 and unrealized gains and losses arising from these translations are included within net realized and unrealized gains on investments in investment income.

(e) Net Investment Income (Loss)

Investment income is recorded on an accrual basis and includes interest income, dividends, distributions from hedge funds, pooled funds, private equity investments and funds, and other income. Realized gains and losses on the disposal of investments and unrealized gains and losses in the fair value of investments are recognized in net investment income.

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(f) Management Fees

Management fees for external investment managers are recognized in external manager fees reported in net investment income as incurred in Note 6 – Net Investment Income. Certain investments, including pooled funds and certain private equity investments, where the investment return is net of fees and are not separately invoiced, the external manager fees are offset directly to investment income.

(g) Financial Assets and Financial Liabilities

i) Financial Assets

Financial assets are recognized initially on the trade date, which is the date that the Plan becomes a party to the contractual provisions of the instrument.

Investment assets are measured at fair value. The change between the fair value of investments at the beginning and end of each year is recognized as unrealized gains or losses included in net investment income in the Statement of Changes in Net Assets Available for Benefits.

All non-investment financial assets are subsequently measured at amortized cost.

The Plan derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred or in which the Plan neither transfers nor retains substantially all the risks and rewards of ownership and does not retain control of the financial asset.

On derecognition of a financial asset, the difference between the average cost of the asset and consideration received is recognized in the Statement of Changes in Net Assets Available for Benefits as a net realized gain or loss on sale of investments.

ii) Financial Liabilities

All financial liabilities are measured at fair value and recognized initially on the trade date at which the Plan becomes a party to the contractual provisions of the instrument.

The Plan derecognizes a financial liability when its contractual obligations are discharged, cancelled, or expired.

All non-investment financial liabilities are subsequently measured at amortized cost.

iii) Derivative Financial Instruments

Derivative financial instruments are financial contracts where the value is determined based on changes in prices of the underlying assets, interest rates, foreign exchange rates or indices. The fair value of derivative assets and derivative liabilities are presented in investment related assets and investment related liabilities, respectively, in the Statement of Financial Position. The changes in fair value of these instruments are recognized in net investment income in the Statement of Changes in Net Assets Available for Benefits in investments.

iv) Fair Value Measurement

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

In determining fair value, the Plan follows the guidance in IFRS 13, Fair Value Measurement (IFRS 13), in Part I of the CPA Canada Handbook as required by Section 4600. As allowed under IFRS 13, if an asset or a liability measured at fair value has a bid and an ask price, the price within the bid-ask spread that is the most representative of fair value in the circumstances shall be used to measure fair value. The Plan uses closing market price as a practical expedient for fair value measurement.

When available, the Plan measures the fair value of an instrument using quoted prices in an active market for that instrument. A market is regarded as active if quoted prices are readily and regularly available and represent actual and regularly occurring market transactions on an arm's-length basis.

If a market for a financial instrument is not active, then the Plan establishes fair value using a valuation technique. Valuation techniques include using recent arm's-length transactions between knowledgeable, willing parties (if available), reference to the current fair value of other instruments that are substantially the same, discounted cash flow analyses and option pricing models.

The best evidence of the fair value of a financial instrument at initial recognition is the transaction price, i.e., the fair value of the consideration given or received, unless the fair value of that instrument is evidenced by comparison with other observable current market transactions in the same instrument or based on a valuation technique whose variables include only data from observable markets.

All changes in fair value are recognized in the Statement of Changes in Net Assets Available for Benefits as part of the net investment income.

Fair values of the investments held by the Plan are determined as follows:

- Cash and short-term investments are valued based on cost plus accrued interest, which approximates fair value. Cash includes cash balances held with investment managers.
- Money market funds are valued based on closing quoted market prices.
- Bonds and publicly traded equities are valued based on quoted closing market prices. If quoted closing market prices are not available for bonds, estimated values are calculated using discounted cash flows based on current market yields and comparable securities, as appropriate.
- Investments in pooled funds (other than private investment interests and hedge funds) are valued at their net asset value per unit supplied by the pooled fund manager, who is directly investing the funds in the underlying operating units. The net asset value is determined using quoted market prices or alternative valuation methods where quoted market prices are not available.
- Fair value is based on the net asset values as reported by the fund manager.
- Private investments, real estate and infrastructure are recognized at fair values using amounts supplied by the fund managers. The fund managers use a valuation methodology that is based upon the best available information that may incorporate assumptions and best estimates after considering a variety of internal and external factors. Investments in derivative financial instruments, including futures, forwards, and bond and equity return swaps, are valued at year-end quoted market prices where available. If quoted market prices are not available, values are determined using pricing models, which consider current market and contractual prices of the underlying instruments, as well as time value and yield curve or volatility factors underlying the positions.

The fair value of certain financial instruments are based on interest rates. A comprehensive review of major interest rate benchmarks has been undertaken globally, including the replacement of some interbank offered rates (IBORs) with alternative nearly risk-free rates (referred to as IBOR reform). The Plan may invest in instruments that have exposure to IBORs that will be replaced or reformed as part of this market-wide initiative. Any potential effects of the transition away from London Interbank Offered Rate (LIBOR) on the Plan, or on certain instruments in which the Plan invests, cannot yet be determined. The transition process may result in, among other things, an increase in volatility or illiquidity of markets for instruments that currently rely on LIBOR, a reduction in the value of certain instruments held by the Plan, or a reduction in the effectiveness of related fund transactions such as hedges.

In response to IBOR reform, the International Accounting Standards Board (ASB) issued Interest Rate Benchmark Reform: Phase 2 Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 (Phase 2 amendments) in August 2020.

The Plan monitors the progress of transition from IBORs to new benchmark rates by reviewing each financial instrument and the total number and amount of financial instruments that have yet to transition to an alternative benchmark rate. The Plan has exposure to USD LIBOR and Canadian Dollar Offered Rate (CDOR) on its fixed income assets and derivatives as included in interest rate risk in Note 5 – Financial Risk Management.

(h) Accrued Pension Obligations

Pension obligations are determined based on the results of an actuarial valuation prepared by an independent firm of actuaries and these results are summarized using an actuarial valuation report prepared for funding purposes. This valuation uses the projected benefits method pro-rated on service for actuarial cost and various economic and demographic assumptions. All assumptions are set by management and approved by the Board of Trustees with the concurrence of the Plan's independent actuaries, and each assumption, except for the discount rate, is typically best estimate but may include a margin for conservatism. The discount rate is a risk adjusted long-term rate of return on the pension fund reflecting its long-term asset mix.

(i) Contributions

Contributions from the sponsors of the Plan as at the end of the year are recorded on an accrual basis.

(j) Sales Taxes

Non-refundable sales taxes are recognized as administrative expenses. Refundable amounts are recognized as a recoverable amount from tax authorities and recoveries are netted against the respective investments that they pertain to.

3. Transfer from Predecessor Plans

On November 12, 2020, Financial Services Regulatory Authority of Ontario (FSRA) consented to the conversion of the Revised Pension Plan of Queen's University, University of Toronto Pension Plan, and University of Guelph Pension Plan[1] from single employer pension plans to a jointly sponsored pension plan, effective July 1, 2021, through the transfer of assets and liabilities of the Plans to the UPP, pursuant to s. 80.4 of the Pension Benefits Act (Ontario). Pension benefits are accrued in accordance with the UPP Plan text.

Effective July 1, 2021, net assets of $11,232,518 were transferred to UPP in accordance with the transfer requirements per Transfers to jointly sponsored pension plan (conversion of a single employer pension plan) section 80.4 of the PBA and Conversions and Transfers, regulation 311/15.

($ thousands)		July 1, 2021
Net Assets Transferred from Predecessor Plans		
Revised Pension Plan of Queen's University	$	2,556,749
University of Toronto Pension Plan		6,866,089
University of Guelph Pension Plan[1]		1,809,680
Total Net Assets Available for Benefits	**$**	**11,232,518**
Total Pension Obligation[2]	**$**	**10,151,124**

1. University of Guelph Pension Plan includes the Pension Plan for Professional Staff of University of Guelph, the Pension Plan for Non-Professional Staff of University of Guelph, and the Retirement Plan at University of Guelph.

2. The Total Pension Obligation is measured by the UPP engaged actuary using a 5.6% discount rate.

The net assets transferred from the University of Toronto Pension Plan and University of Guelph Pension Plans were previously administered in master trust structures. 100% of the units of the master trusts were transferred into UPP at fair value.

To support the establishment of UPP, the Employer Sponsors made an interest free facility in the amount of $9,000 available to the Plan on a recourse basis. Once 10% of the total assets to be transferred from the Predecessor Plans to the UPP was received, any amount drawn by UPP was repayable to the Employer Sponsors within 15 business days. On December 31, 2020, the Plan had utilized $2,713, classified as a pre-funding facility on the Statement of Financial Position. In 2021, UPP had drawn $4,787 of the pre-funding facility for a total payable of $7,500 at June 30, 2021. The facility was fully repaid on July 16, 2021.

4. Investments

This note presents the balances as at and for the year ended December 31, 2021, as the Plan did not hold any investments as at or for the year ended December 31, 2020.

(a) Investments by Fair Value and Cost:

The following table summarizes these investments at both their fair value and cost as at December 31, 2021:

($ thousands)	Fair Value	2021 Cost[1]
Cash and Short-Term Money Market	$ 2,362,382	$ 2,355,946
Interest Rate Sensitive Assets		
Fixed Income		
Canadian Bonds	904,442	898,108
Non-Canadian Bonds	2,062	2,073
Bond Funds	1,405,442	1,400,077
Private Debt	371	375
Return Enhancing Assets		
Private Debt		
Bond Funds	165,657	165,810
Private Debt	525,971	455,812
Mortgages	131,818	131,685
Absolute Return		
Hedge Funds	797,422	526,775
Public Equity		
Canadian Equity	220,151	209,249
Non-Canadian Equity	166,011	159,858
Hedge Funds	28,898	22,256
Equity Funds	3,646,931	2,925,108
Private Equity	717,788	520,160
Inflation Sensitive Assets		
Infrastructure	194,352	186,196
Real Estate	379,846	327,615
Total Investments not including Investments Related Assets and Liabilities	11,649,544	10,287,103
Investment Related Assets		
Derivatives (Note 4d)	159,589	-
Investment Related Liabilities		
Derivatives (Note 4d)	(26,252)	-
Total Investments including Investment Related Assets and Liabilities	$ 11,782,881	$ 10,287,103

1. At December 31, 2021 $7,255,944 fair value of assets were held within a master trust structure and the unit values of the master trust have a cost of $6,822,162 at December 31, 2021.

(b) Investment Fair Value Hierarchy:

Determination of fair values of investments and derivatives are as described in note 2. The fair values of cash accrued investment income, contributions receivable, accounts payable and accrued liabilities approximate their carrying values due to the short-term nature of these financial instruments.

Fair value measurements recognized in the Statement of Net Assets Available for Benefits are categorized using a fair value hierarchy, which reflects the significance of inputs used in determining the fair values.

- Level 1 – unadjusted quoted prices in active markets for identical assets or liabilities; primarily includes publicly listed equity instruments;
- Level 2 – inputs other than quoted prices included in Level 1 that are observable by market participants either directly through quoted prices for similar but not identical assets or indirectly through observable market information used in valuation models; and
- Level 3 – inputs for assets and liabilities that are not based on observable market data.

The following table illustrates the classification of the Plan's assets and liabilities recognized at fair value as at December 31, 2021:

($ thousands)	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3	2021 Total
Cash and Short-Term Money Market	$ 104,550	$ 2,257,832	$ -	$ 2,362,382
Interest Rate Risk Sensitive Assets				
Fixed Income				
Canadian Bonds	-	904,442	-	904,442
Non-Canadian Bonds	-	2,062	-	2,062
Bond Funds	-	531,008	874,434	1,405,442
Private Debt	-	371	-	371
Return Enhancing Assets				
Private Debt				
Bond Funds	-	-	165,657	165,657
Private Debt	-	-	525,971	525,971
Mortgages	-	131,818	-	131,818
Absolute Return				
Hedge Funds	-	-	797,422	797,422
Public Equity				
Canadian Equity	220,151	-	-	220,151
Non-Canadian Equity	166,011	-	-	166,011
Hedge Funds	-	-	28,898	28,898
Equity Funds	-	287,092	3,359,839	3,646,931
Private Equity	-	-	717,788	717,788
Inflation Sensitive Assets				
Infrastructure	-	-	194,352	194,352
Real Estate	-	-	379,846	379,846
Total Investments not including Investments Related Assets and Liabilities	490,712	4,114,625	7,044,207	11,649,544
Investment Related Assets				
Derivatives	46	159,543	-	159,589
Investment Related Liabilities				
Derivatives	(972)	(25,280)	-	(26,252)
Total Investments including Investment Related Assets and Liabilities	$ 489,786	$ 4,248,888	$ 7,044,207	$ 11,782,881

The following table reconciles the Plan's Level 3 fair value measurements on December 31, 2021:

($ thousands)	Fair Value July 1, 2021	Gain/(Loss) included in Total Net Investment Income[1]	Purchases	Sales and Return of Capital	Fair Value December 31, 2021
Bond, Equity, and Hedge Funds	$ 3,466,170	$ 559,481	$ 2,829,878	$ (1,629,279)	$ 5,226,250
Private Debt	490,750	13,486	22,389	(654)	525,971
Private Equity	637,449	54,088	26,306	(55)	717,788
Infrastructure	174,360	18,630	179,526	(178,164)	194,352
Real Estate	337,022	42,452	216,500	(216,128)	379,846

1. Includes net realized gain of $10,931 and net unrealized gain of $677,087 in 2021.

Included in the Purchases and Sales and Return of Capital is $1,652,518 of bond, equity, and hedge funds transfers.

The fair value of Level 3 investments are provided by external parties. Sensitivity to changes in assumptions are not provided for these investments as the fair values are based on information provided by external parties where the Plan has a lack of information rights over assumptions and methodologies used to determine the fair value.

(c) Significant Investments

The following information is provided in respect of individual investments with a cost or fair value in excess of 1% of the cost or fair value of the Plan, as at December 31, 2021:

($ thousands)	Number of Investments	Fair Value	2021 Cost
Bond Funds and Mortgages	8	$ 1,679,274	$ 1,674,006
Equity Funds	12	2,867,612	2,325,741
Real Estate and Infrastructure	2	245,715	230,158

Bond funds and Mortgages – Addenda Commercial Mortgages Pooled Fund, Canadian Core Plus Bond PFT, CIBC Canadian Bond Long Term Index Pool, CIBC Canadian Short Term Bond Index Fund (Class O), PIMCO Canadian CorePLUS Bond Trust, Robeco High Yield Bonds, RP Broad Corporate Bond Fund, SLC Management Private Fixed Income Plus Fund

Equity Funds – Arrowstreet (Canada) Global All-Country Alpha Extension Fund I, Artisan International Value Fund, BlackRock CDN MSCI Emerging Markets Index Class A, BlackRock CDN US Equity Index Non-Taxable Class A, Canadian Market Capped PFT, Cooper Square Fund, L.P., MW TOPS World Equities Fund, Egerton Investment Partners, Orbis Institutional Global Equity LP, State Street MSCI United States Index Non-Lending Common Trust, WindWise MSCI EAFE Index Non-Lending Fund for Exempt Organizations, Egerton Investment Partners, L.P., and other

Real Estate and Infrastructure – OIM O2 2014 LP, OIM B5 2014 LP

(d) Derivatives

Derivatives are financial contracts, where the value is derived from the value of the underlying assets, interest rates or exchange rates. The Plan utilizes such contracts to enhance investment returns and for managing exposure to interest rate and foreign currency volatility. Derivative contracts, transacted either on a regulated exchange market or in the over-the-counter market directly between two counterparties, include:

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i) Futures and forwards:

Futures and forwards are contractual obligations either to buy or to sell a specified amount of money market securities, bonds, equity indices, commodities or foreign currencies at predetermined future dates and prices.

Futures are transacted in standardized amounts on regulated exchanges and are subject to daily cash margining.

Forwards are contractual customized contracts transacted in the over-the-counter market between two parties to exchange a notional amount of one currency for another at a specified price for settlement at a future date. UPP utilizes foreign exchange forward contracts to modify currency exposure for both economic hedging and active currency management.

ii) Bond and equity swap contracts:

A bond/equity swap is a contractual agreement between two parties to provide the investment return on a referenced asset. The receiver of the total return on the asset pays a floating or floating rate of interest to the payor of the asset total return. UPP utilizes bond/equity swaps to promote asset risk diversification.

At December 31, 2021, the Plan had the following derivative contracts outstanding. The notional amounts represent economic exposure and are the contractual amounts to which a rate or price is applied for computing the cash flows to be exchanged. The notional amounts do not necessarily represent the amount of potential market risk or credit risk arising from derivatives.

($ thousands)	Notional Value	Fair Value Assets	2021 Fair Value Liabilities
Interest Rate Contracts			
Bond futures	$ 54,359	$ 11	$ (160)
Bond swap contracts	1,869,980	27,020	-
Equity Contracts			
Equity futures	140,170	35	(811)
Equity swap contracts	1,368,898	116,617	(3,323)
Foreign Exchange Forward Contracts	2,965,844	15,906	(21,958)
Total	$ 6,399,251	$ 159,589	$ (26,252)

5. Financial Risk Management

The Plan is exposed to a variety of financial risks as a result of its investment activities and has formal policies and procedures that govern the management of market, credit, foreign currency, and liquidity risk. This note presents the balances as at and for the year ended December 31, 2021, as the Plan did not hold any investment as at or for the year ended December 31, 2020.

(a) Market Price Risk:

Market price risk is the risk that the value of an instrument will fluctuate as a result of changes in market prices, whether those changes are caused by factors specific to an individual investment, its issuer or all factors affecting all instruments traded in the market. As all of the Plan's financial instruments are carried at fair value with fair value changes recognized in the Statement of Changes in Net Assets Available for Benefits, all changes in market conditions will directly result in an increase (decrease) in net assets. Market price risk is managed by the Plan through construction of a diversified portfolio of assets traded on global markets and across various industries.

The Plan's investments in equities are also sensitive to market fluctuations. An immediate hypothetical appreciation or decline of 10% in equity values will impact the Plan's equity investments by an approximate gain or loss of $417,451.

The following are other key components of market price risk:

i) Foreign Currency Risk:

Foreign currency risk is the risk that the value or future cash flows of a financial instrument will fluctuate due to changes in foreign exchange rates. The Plan is exposed to risk that the exchange rates of the various currencies may change in a manner that has an adverse effect on the value of the portion of the Plan's assets or liabilities denominated in currencies other than the Canadian dollar. In accordance with the Plan's Statement of Investment Policies and Procedures ("SIPP"), foreign currency hedging may be employed for certain non-Canadian currency exposures to mitigate this volatility.

Net investments by currency, after the impact of currency hedging as at December 31, 2021 are as follows:

($ thousands)	2021 Net Exposure
Canadian Dollar	$ 9,126,616
Foreign Currency Exposure	
United States Dollar	3,098,068
Other	(441,803)
Total	$ 11,782,881

The impact of a 5% absolute change in the Canadian dollar against the United States dollar currency exposures at December 31, 2021, holding all other variables constant would have resulted in a $154,903 change in net assets available for benefits as at December 31, 2021.

ii) Interest Rate Risk:

Interest rate risk refers to the effect on the fair value of the Plan's assets and liabilities due to fluctuations in interest rates. This risk arises from changes in floating interest rate risk impacting investment income or changes in fixed income securities held directly by the Plan which increase or decrease unrealized gains or losses.

At December 31, 2021, the fair value of total exposure in fixed income was $3,191,258 composed of Canadian and Non-Canadian bonds, private debt, short-term money market, and derivative instruments.

The following table summarizes the profile of the Plan's directly held fixed income investments, which are subject to interest rate risk, based on term to maturity as at December 31, 2021:

($ thousands)	Within 1 year	1-5 years	5-10 years	Over 10 years	2021 Total
Short-Term Money Market	$ 2,257,512	$ -	$ -	$ -	$ 2,257,512
Canadian Bonds	11,022	686,358	119,486	87,576	904,442
Non-Canadian Bonds	-	183	1,879	-	2,062
Private Debt	-	2	369	-	371
Derivative	6,744	20,127	-	-	26,871

As at December 31, 2021, for every 1% increase or decrease in prevailing market interest rates, the fair value of the direct fixed income holdings in the Plan would decrease or increase by approximately $(318,223) and $365,974, respectively.

The following table outlines UPP's derivative and non-derivative exposures to IBORs reform that have yet to transition to alternative benchmark rates as at December 31, 2021:

($ thousands)	CAD CDOR	USD LIBOR
Non-derivative financial assets	$ 471,245	$ -
Derivative notional amounts	449,700	1,367,800

CAD CDOR is transitioning to CORRA – Canadian Overnight Repo Rate Average, and USD LIBOR transitioning to SOFR – Secured Overnight Financing Rate.

(b) Liquidity Risk:

Liquidity risk is defined as an inability to meet payment obligations in a timely manner when they become due, and the risk that assets may not be in the form required (e.g., converted into cash when needed). Liquidity exposures are created when derivatives and other financial instruments are used in the management of balance sheet exposures. Since the liquidity risk from these exposures is triggered by market volatility outside of UPP's control, these exposures are closely monitored and managed. Various other investment activities create demand for liquidity such as capital calls as well as operational aspects.

UPP's liquidity management approach is to ensure UPP has sufficient liquidity to meet its expected and unexpected obligations in normal and stressed market conditions, while preserving its desired asset mix exposure. UPP accesses liquidity through cash or cash equivalents, high quality liquid assets and redemptions from external managed assets.

As of December 31, 2021, UPP maintained $2,362,382 liquid assets in the form of cash and short-term money market instruments. The remaining terms to contractual maturity of UPP's derivative and non-derivative liabilities as at December 31, 2021 is presented in the table below.

($ thousands)	2021 Within 1 year
Accounts payable and accrued liabilities	$ 14,225
Derivative contracts	26,252

(c) Credit Risk:

Credit risk is the risk that an issuer or counterparty will be unable or unwilling to meet a commitment that it has entered into with the Plan.

The Plan's credit risk exposure is primarily in Canadian Bonds which are diversified among federal, provincial, corporate, and other issuers, and derivative contract counterparties. There were no significant concentrations of credit risk in the portfolio in 2021.

Credit ratings issued by S&P Global, Fitch Ratings and Moody's rating agencies are regularly monitored and analyzed. The breakdown of the Canadian Bonds portfolio by credit rating as at December 31, 2021, is:

($ thousands)	Fair value	2021 Percentage of portfolio
AAA	$ 147,619	14%
AA	407,483	39%
A	425,137	41%
BBB	49,511	5%
NR	8,954	1%
Total	$ 1,038,704	100%

Certain financial transactions, such as derivatives transactions, involve a legally enforceable right to offset the recognized amounts and to settle payments on a net basis, or to realize upon an asset and liability simultaneously. Financial assets and liabilities that are offset are reported as a net amount in the financial statements.

In the following table, the net amount presents the effect of the amounts that are subject to conditional netting arrangements or similar arrangements:

($ thousands)	Gross amounts of recognized financial instruments	Amounts available for offset in financial statements	Net amounts before collateral	Financial collateral (received) pledged	2021 Net Amount
Derivative assets	$ 159,589	$ (1,347)	$ 158,242	$ -	$ 158,242
Derivative liabilities	(26,252)	1,347	(24,905)	17,099	(7,806)

EXPLORE SECTIONS

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6. Net Investment Income

The Plan's net investment income for the six months ended December 31, 2021, is presented in the table below. This note presents the net investment income of the Plan beginning July 1, 2021, as the Plan did not hold any investments prior to this period.

($ thousands)	Investment Income	Net Gain/(Loss) on Investments[1,2]	2021 Total Investment Income/(Loss)[1,2]
Cash and Short-Term Money Market	$ (2,204)	$ (42,948)	$ (45,152)
Interest Rate Risk Sensitive Assets			
Fixed Income			
Canadian Bonds	17,629	5,827	23,456
Non-Canadian Bonds	(7)	(47)	(54)
Bond Funds	16,831	558	17,389
Private Debt	(10)	(4,650)	(4,660)
Return Enhancing Assets			
Private Debt			
Bond Funds	3,214	(247)	2,967
Private Debt	77	32,852	32,929
Mortgages	2,163	(795)	1,368
Absolute Return			
Hedge Funds	-	67,527	67,527
Public Equity			
Canadian Equity	5,163	26,256	31,419
Non-Canadian Equity	6,765	22,552	29,317
Hedge Funds	20,464	(7,896)	12,568
Equity Funds	9,201	179,075	188,276
Private Equity	-	98,157	98,157
Inflation Sensitive Assets			
Infrastructure	-	11,361	11,361
Real Estate	-	44,183	44,183
Derivative Instruments	(2,064)	156,802	154,738
Total Investment Income	77,222	588,567	665,789
Investment Management Expenses			
External Manager Fees	(17,809)	-	(17,809)
Net Investment Income	$ 59,413	$ 588,567	$ 647,980

1. Includes net realized gain of $183,177 and net unrealized gain of $405,390 in 2021.

2. Net of certain investment management fees and performance management fees.

7. Accrued Pension Obligations

The accrued pension obligations are the actuarial present value of pension obligations, applying the best estimate and discount rate assumptions set by management and approved by the Board of Trustees, using the projected benefits method pro-rated on the service. The pension obligations of $10,602,828 as at July 1, 2021, were determined by an external actuarial firm, AON, using the actuarial funding valuation performed as at July 1, 2021. The pension obligation at December 31, 2021 was prepared using the Board of Trustees approved discount rate for the January 1, 2022 actuarial valuation. This reflects the revised long-term asset mix return estimates for the purposes of the actuarial valuation going forward. Under the Pension Benefits Act, an actuarial valuation report prepared by an independent external actuarial firm must be filed with FSRA at least once every three years. The Plan valuation report was last filed for the July 1, 2021 period end.

The following are the significant assumptions used in the actuarial valuation of the Plan as at December 31, 2021:

	2021
Discount rate[1]	5.45% per year
Inflation rate	2.00% per year
Cost-of-Living Adjustments	1.50% per year
YMPE and ITA Maximum Pension	2.75% per year
Pensionable Earnings	4.00% per year
Mortality Table	95% of 2014 Canadian Public Sector Pensioners' Mortality Table, with mortality improvement scale MI-2017 from 2014
Retirement Rates	Age-related table[2]

1. The discount rate on July 1, 2021 was 5.60%. The pension obligation at December 31, 2021 was prepared using the Board of Trustees approved discount rate for the January 1, 2022 actuarial valuation. This reflects the revised long-term asset mix return estimates for the purposes of the actuarial valuation.

2. Faculty retirement rates are as follows: 2% from ages 55 through 59 inclusive, 5% from ages 60 through 64 inclusive, 30% from ages 65 through 68 inclusive, 50% from ages 69 through 70 inclusive, 100% age 71, and additional 5% at age 60 with 80 age-plus-service points; Staff retirement rates are as follows: 2% from age 55 through 59 inclusive, 7% from ages 60 through 64 inclusive, 50% from ages 65 through 67 inclusive, 100% at age 68, and additional 15% at age 60 with 80 age-plus-service points.

8. Contributions

Contributions received or receivable during the years ended December 31 were comprised of the following:

($ thousands)	2021	2020
Member Contributions		
Current service contributions[1]	**$ 94,032**	$ -
Total Member Contributions	**94,032**	-
Employers		
Current service contributions[1]	**98,326**	-
Past service buybacks	**14**	-
Total Employer Contributions	**98,340**	-
Transfers in from Other Plans	**8,303**	-
Total Defined Benefit Contributions	**200,675**	-
Special Contributions	**13,663**	7,368
Total Contributions	**$ 214,338**	$ 7,368

1. All contributions paid by members for current service are required contributions.

In support of the establishment of the UPP and the transfer of assets and liabilities from single employer pension plans to the UPP, Employer Sponsors provide special contributions to defray some of the costs to transfer their plan to the UPP. The Plan recognizes these amounts, as special contributions receivable and special contributions in the Statement of Financial Position and the Statement of Changes in Net Assets Available for Benefits, respectively.

The Employer Sponsors of the Predecessor Plans to the UPP, received an exemption from the Ministry of Finance from their obligation under the PBA to pay the Pension Benefits Guarantee Fund (PBGF) annual assessments in respect of their single employer pension plans. The cash flows of $20,700 that would have been used to pay these annual assessments were used to defray the one-time set up costs of the UPP. Special contributions of $13,332 and $7,368 were received from the Employer Sponsors of the Predecessor Plans in 2021 and 2020, respectively.

9. Benefit Payments

The Plan started paying benefits from July 1, 2021. Benefit payments for the six months ended December 31 were comprised of the following:

($ thousands)	2021
Retirement benefits	$ (211,071)
Termination/death benefits	(39,202)
Transfers to other pension plans	(3,559)
Total Benefit Payments	$ (253,832)

10. General Administrative, Investment Administrative and Pension Administrative Expenses

In 2021 and 2020, the Plan incurred general administrative, investment administrative and pension administrative expenses. General administrative expenses include the costs to establish the UPP prior to the transfer of assets and liabilities from the Predecessor Plans. Special contributions, as described in Note 8, were used to defray one-time set up costs incurred by the Plan.

(a) General Administrative Expense (incurred prior to the transfer of assets and liabilities from the Predecessor Plans on July 1, 2021):

($ thousands)	2021	2020
Salaries and benefits	**$ 2,178**	$ 642
Professional, agency, and consulting fees	**12,853**	8,838
Technology and communications	**559**	544
Other general and administrative	**84**	-
Total General Administrative Expenses	**$ 15,674**	$ 10,024

The Plan began incurring investment administrative and pension administrative expenses when the assets and liabilities of the Predecessor Plans transferred to the UPP on July 1, 2021.

Investment administrative and pension administrative expenses below are for the period of July 1, 2021 to December 31, 2021.

(b) Investment Administrative Expense:

($ thousands)	2021
Salaries and benefits	$ 7,886
Professional, agency, and consulting fees[1]	7,996
Technology and communications	1,796
Premise	267
Other	98
Total Investment Administrative Expense	$ 18,043

(c) Pension Administrative Expense:

($ thousands)	2021
Salaries and benefits	$ 2,144
Professional, agency, and consulting fees[1]	7,491
Technology and communications	147
Premise	73
Other	21
Total Pension Administrative Expense	$ 9,876

1. Total professional fees include $638 in actuarial fees and $216 in external audit fees.

11. Related Party Transactions

Related party transactions include the following:

(a) an agency agreement with each of University of Toronto, Guelph University, and Queen's University to provide pension administrative services for the Plan, and an agency agreement with University of Toronto to provide investment management services for the Plan. In 2021, $2,929 fees were expensed for administrative services for the six month period ending December 31, 2021;

(b) interest free facility made available by the Employee Sponsors. Please see Note 3 for further details; and

(c) compensation to key management personnel, which includes the Board of Trustees of the Plan and members of executive leadership team who are responsible for planning, controlling, and directing the activities of the Plan.

The aggregate key management compensation is included in the table below:

($ thousands)		2021		2020
Salaries and short-term employee benefits	**$**	**4,527**	$	339

12. Capital

UPP defines its capital as the Plan's surplus or deficit. The objective of managing the Plan's capital is to ensure that the Plan is fully funded to meet the pension obligations over the long term. Refer to Note 5 for further disclosure on management of financial risks.

13. Commitments

In the normal course of business, UPP may enter into commitments to fund certain investments over the next several years in accordance with the terms and conditions agreed to, which may be considered material. As at December 31, 2021, these commitments totaled $1,064,306.

14. Subsequent Events

Subsequent to year-end, we successfully transferred the net assets of approximately $277 million and pension liabilities of Trent University Faculty Association pension plan on January 1, 2022. Also, joining the UPP on January 1, 2022 are staff of the University of Guelph and University of Toronto faculty associations and eligible UPP employees.

On March 31, 2022, the agency arrangement with University of Toronto to provide investment management services for the Plan ended. Beginning April 1, 2022, UPP provides investment administration over all of the invested assets of the Plan.

Appendix

Appendix 1 – Carbon footprint methodology and scope

The methodology for calculating our carbon footprint is based on The Global GHG Accounting and Reporting Standard for the Financial Industry developed by the Partnership for Carbon Accounting Financials (“PCAF Standard”), which is widely adopted in the financial sector.

Emissions from UPP’s investments are attributed to UPP based on our proportional share of investment in the investee. For example, if UPP owns 1% of an investee’s enterprise value including cash, 1% of its GHG emissions are included in our carbon footprint.

Our carbon footprint metrics include the Scope 1 and Scope 2 emissions of investees and we have reported Scope 3 emissions for energy (oil & gas) and mining investments separately.

Three scopes of GHG emissions

Scope 1
Direct GHG emissions from sources a company directly owns or controls

Scope 2
Indirect GHG emissions associated with the electricity or heat a company consumes

Scope 3
Indirect GHG emissions associated with a company’s value chain, including for example emissions associated with products from a supplier, and emissions from its products when customers use them

Our methodology calculates carbon dioxide equivalent (CO_2-eq) GHG emissions and includes the GHG emissions included in the Greenhouse Gas Protocol: Carbon Dioxide (CO_2), Methane (CH_4), Nitrous Oxide (N_2O), Hydrofluorcarbons (HFCs), Perfluorcarbons (PFCs), Sulphur Hexafluoride (SF_6) as well as Nitrogen Trifluoride (NF_3).

We have calculated and disclosed the GHG emissions associated with our long investment exposures in equities and corporate fixed income (publicly traded and privately held), including the notional exposure of synthetic equity and fixed income investments. We have not included short exposures.

We have excluded government bonds, cash, cash equivalents, derivatives funding, absolute return assets and investments for which it was not possible to determine GHG emissions from our calculations which is why the value of exposures analyzed does not always match UPP’s total exposure.

Carbon footprint methodologies, including the attribution of investee emissions to investors are evolving at a rapid pace. We have calculated our metrics to the best of our ability as of the timing of publication, but our approach is subject to various limitations and challenges. For example, we rely entirely on the emissions data reported by companies and made available to us by a third-party service provider. The company data is then used in our calculations, or it is used to generate the estimated emissions we use. Much of the reported data is not verified by a third party and indeed our third-party service provider does not provide investors a System and Organization Controls report to enhance our confidence in the integrity of their processes. A larger portion of carbon footprint relies on estimated data from our third-party service provider or as calculated by ourselves.

Calculating and disclosing our carbon footprint will be a journey of continuous improvement that will see us seek to improve the quality of our data and methodology over time. For instance, we plan to continually improve quality of the input data through engagement with companies and service providers and we also plan to enhance our analytical capabilities.

APPENDIX

Results

Combined, the results in Exhibit 1 represent more than 70% of our net investment exposures as of December 31, 2021.

Exhibit 1. UPP's financed greenhouse gas emissions

	Public Equity	Private Equity	Private Debt	Infra-structure	Real Estate	Fixed Income	Total
Value of exposure analyzed ($M CAD)	5,683	731	773	196	400	1,245	9,028
Total carbon emissions (tonnes CO_2-eq)	301,131*	27,786	27,464	29,221	4,421	84,516	474,539
Carbon footprint (tonnes CO_2-eq / $M CAD invested)	53*	38	36	149	11	68	53
Weighted average carbon intensity (tonnes CO_2-eq / $M CAD revenue)	135	73	77	583	31	202	139
Emission weighted data quality score	2	5	5	5	5	3	3

Scope 3 emissions associated with our energy (oil & gas) and mining investments totaled approximately 1 million tonnes CO_2-eq.

We engaged PricewaterhouseCoopers LLP, an independent third party, to conduct a limited assurance engagement on the public equity portion (as noted by a * in Exhibit 1) of our 2021 carbon footprint metrics. Their assurance report is included as Appendix 3. Their limited assurance covers 45% of our net investment exposures as of December 31, 2021.

Data Quality

In the last row of Exhibit 1 we included the emission weighted data quality score of our calculations. Emissions data comes from a variety of sources and Exhibit 2 below describes where the data came from and how we assigned a data quality score to each investment. Reported and estimated GHG emissions were provided by a third-party data provider whereever possible and UPP calculated geography/industry averages when GHG emissions were not available from the data provider.

Exhibit 2. Description of data quality scores

	Data quality score	Source of GHG emissions data
More certain	1	Reported by issuer and issuer indicated emissions have been verified or assured by a third party
	2	Reported by issuer
	3	Estimated by third-party data provider using physical activity data (for example, electricity generation)
	4	Estimated by third-party data provider using historical issuer emissions or geography/industry averages
Less certain	5	Estimated by UPP using geography/industry averages

Appendix 3 – Limited assurance opinion of public equity portion of carbon footprint

Independent practitioner's limited assurance report on select performance metrics of University Pension Plan Ontario (UPP) as presented in UPP's 2021 Annual Report

To the Board of Directors and Management of University Pension Plan Ontario

We have undertaken a limited assurance engagement on select performance metrics (the subject matter) of University Pension Plan Ontario (UPP) for the period from January 1, 2021 to December 31, 2021 as presented in UPP's 2021 Annual Report.

Our limited assurance engagement was performed on the following select performance metrics:

Performance metrics	2021
Total Carbon Emissions	301,131 tCO2e
Carbon footprint	53 tCO2e/$M invested

Management's responsibility
Management is responsible for the preparation of the subject matter information in accordance with the applicable criteria established in Exhibit 1. Management is also responsible for such internal control as management determines necessary to enable the preparation of the subject matter information that is free from material misstatement, whether due to fraud or error.

Our responsibility
Our responsibility is to express a limited assurance conclusion on the subject matter information based on the evidence we have obtained. We conducted our limited assurance engagement in accordance with Canadian Standard on Assurance Engagements (CSAE) 3000, *Attestation Engagements Other than Audits or Reviews of Historical Financial Information.* This standard requires that we plan and perform this engagement to obtain limited assurance about whether the subject matter information is free from material misstatement.

A limited assurance engagement involves performing procedures (primarily consisting of making inquiries of management and others within the entity, as appropriate, and applying analytical procedures) and evaluating the evidence obtained. 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 decisions of users of our report. The procedures are selected based on our professional judgment, which includes identifying areas where the risks of material misstatement, whether due to fraud or error, in preparing the subject matter information in accordance with the applicable criteria are likely to arise.

The extent of our procedures included but was not limited to inquiries, observation of processes performed, inspection of documents, analytical procedures, evaluating the appropriateness of quantification methods and reporting policies, and agreeing or reconciling with underlying records. Given the circumstances of the engagement, in performing the procedures listed above we:

- reviewed the UPP methodology and evaluated whether UPP's methods for determining the boundaries and quantification of the subject matter were appropriate and consistent with the applicable criteria;
- through inquiries, obtained an understanding of the UPP control environment and the information systems relevant to the subject matter quantification and reporting. Our procedures did not evaluate the design of particular control activities, obtain evidence about their implementation or test their operating effectiveness;
- evaluated whether UPP's methods for developing estimates are appropriate and consistently applied. However, our procedures did not include testing the data on which the estimates are based or separately developing our own estimates against which to evaluate UPP's estimates;
- for a limited sample of assets, reconciled the subject matter data back to the underlying records; and
- Reviewed the subject matter information disclosure in the Annual Report to ensure consistency with our understanding and procedures.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement and, consequently, the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

Our independence and quality control
We have complied with the relevant rules of professional conduct/code of ethics applicable to the practice of public accounting and related to assurance engagements, issued by various professional accounting bodies, which are founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behaviour.

The firm applies Canadian Standard on Quality Control 1, *Quality Control for Firms that Perform Audits and Reviews of Financial Statements, and Other Assurance Engagements,* and, accordingly, maintains a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Inherent limitations
Emissions data are subject to inherent limitations given the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Conclusion
Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that UPP's select performance metrics for the period from January 1, 2021 to December 31, 2021 are not prepared, in all material respects, in accordance with the applicable criteria.

Purpose of statement and restriction on distribution and use of our report
The subject matter information has been prepared in accordance with the applicable criteria to report on the select performance metrics in accordance with the criteria. As a result, the subject matter may not be suitable for another purpose. Our report is intended solely for UPP.

We acknowledge the disclosure of our report, in full only, by UPP at its discretion, without assuming or accepting any responsibility or liability to any other third party in respect of this report.

Our report should not be distributed to parties other than UPP.

PricewaterhouseCoopers LLP
Chartered Professional Accountants

Vancouver, BC
June 29, 2022

Exhibit 1
Selected sustainability performance metrics and reporting criteria

The selected sustainability performance metrics and reporting criteria include:

1. **Total Carbon Emissions**

Description: The absolute GHG emissions associated with the measured portfolio, expressed in Metric tonnes CO2-equivalent (tCO_2eq).

Methodology: Scope 1 and Scope 2 GHG emissions are allocated to investors based on an enterprise value including cash approach.

Scope by asset class: Public Equity

2. **Carbon footprint**

Description: Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tCO_2eq/$M invested.

Methodology: Scope 1 and Scope 2 GHG emissions are allocated to investors based on an enterprise value including cash approach as described under methodology for Total Carbon Emissions. The portfolio value on the measurement date is used to normalize the data.

Scope by asset class: Public Equity

The reporting criteria against which the Selected Information will be assessed includes:

- Implementing the Recommendations of the Task Force on Climate-related Financial Disclosures, available at: https://assets.bbhub.io/company/sites/60/2021/07/2021-TCFD-Implementing_Guidance.pdf.
- Greenhouse Gas Protocol, Portfolio Carbon Initiative, Guidance for financial institutions to assess the climate impact from investing and lending activities. Available at: https://ghgprotocol.org/portfolio-carbon-initiative.
- The Global GHG Accounting and Reporting Standard for the Financial Industry developed by the Partnership for Carbon Accounting Financials (PCAF), available at: https://carbonaccountingfinancials.com/standard.

Appendix 4 – Top External Managers with $50 million or more of our assets under management[16]

Name	Active/passive
Acadian Asset Management LLC	Active
Addenda Capital	Active
AQR Capital Management	Active
Arbour Lane Capital Management LP	Active
Arrowstreet Capital L.P.	Active
Artisan Partners Limited Partnership	Active
Bayview Asset Management	Active
BlackRock Asset Management Canada Limited	Passive
Bridgewater Associates	Active
Brookfield Asset Management	Active
Capital Fund Management	Active
CC&L Investment Management Ltd	Active
CIBC Asset Management	Passive
Clearlake Capital Group, L.P.	Active
Q Management LP	Active
Crestline Management, L.P.	Active
Egerton Capital	Active
First Pacific Advisors, LP	Active
Fourth Sail Capital L.P.	Active
Hillhouse Group	Active
Impax Asset Management Group	Active
Jarislowsky, Fraser Limited	Active
Lansdowne Partners (UK) LLP	Active
Marshall Wace LLP	Active
Orbis Investment Management Limited	Active
PAG	Active
PIMCO Canada Corp.	Active
Redwheel	Active
Robeco Institutional Asset Management B.V.	Active
RP Investment Advisors LP	Active
Samlyn Capital LLC	Active
Select Equity Group, L.P.	Active
Springs Capital (Hong Kong) limited	Active
State Street Global Advisors	Passive
Stepstone Group	Active
Sun Life Capital Management (Canada) Inc.	Active
TD Asset Management	Active and Passive
Trustbridge Partners	Active
Two Sigma Advisers, LP	Active
Tybourne Capital Management Ltd.	Active
Voloridge Investment Management, LLC	Active

[16] For external managers who have consented to disclosure. UPP provides this investment information for information purposes only. The information is not intended to provide investment or financial advice and should not be relied upon for that purpose. The information is current as of December 31, 2021 and may not reflect UPP's current holdings. UPP does not guarantee the completeness, timeliness, or accuracy of this information. UPP will not accept any liability in relation to the use of or reliance on the information. Any reliance on or use of the information for any purpose is at the risk of the user.

UPP UNIVERSITY PENSION PLAN ONTARIO

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