2023 annual report

Building a bright future

UPP UNIVERSITY PENSION PLAN ONTARIO

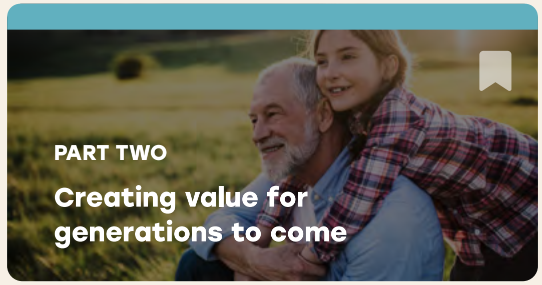
Land acknowledgment

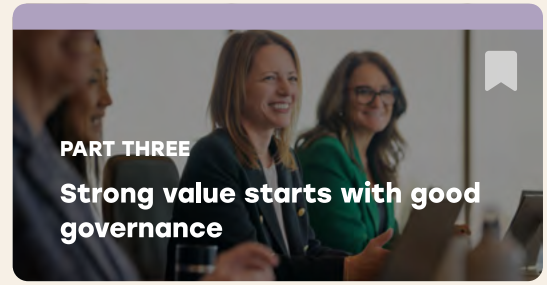
We respectfully acknowledge that we live and work on the traditional territories of many nations, including the Mississaugas of the Credit, the Anishinaabeg, the Chippewa, the Haudenosaunee and the Wendat Peoples. These lands fall within the territory protected by the “Dish With One Spoon” wampum treaty agreement. That wampum uses the symbolism of a dish to represent the territory and one spoon to represent that the people are to share the resources of the land and take only what they need. It is home to many past, present, and future First Nations, Inuit, and Métis Peoples. Our acknowledgment of the land is our declaration of our collective responsibility to this place and its peoples’ histories, rights, and presence. We are grateful to be able to live, learn, and meet on these lands.

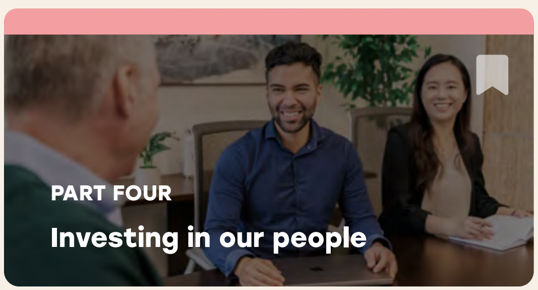
About UPP

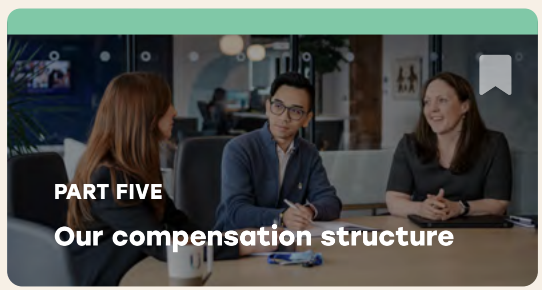
University Pension Plan Ontario (UPP) is a jointly sponsored, defined benefit pension plan designed to welcome all Ontario university sector employers and employees. Contributions to the Plan are funded equally by members and employers. We proudly provide pensions to over 40,000 working and retired members across four Ontario universities and 12 sector organizations and manage $11.7 billion in pension assets. Our commitment is to protect the security and sustainability of members' pensions while providing service excellence.

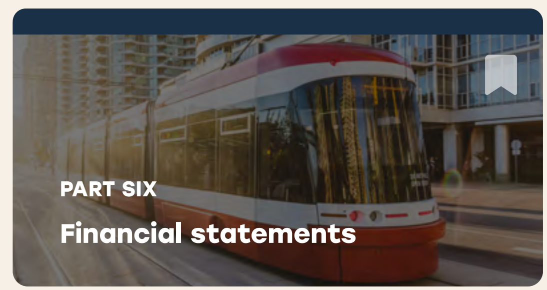
Explore the report











PART ONE

Delivering valuable, lifelong pension security

2023 at a glance

As at December 31, 2023

102%
funded
with a $0.2B surplus[1]

10.2%
annual rate of return

$11.7B
in net assets
up from $10.8B in 2022[2]

Paid
$559M
in pension benefits in 2023

[1] On a smoothed asset basis.

[2] All figures as at December 31, 2023, and expressed in Canadian dollars unless otherwise noted.

[3] Climate solutions are companies, assets, and technologies that can help mitigate the impacts of climate change and adapt to a changing climate.

Serving our members

- Grew our membership to 40,000+ working and retired members from 4 participating universities, 12 sector organizations, and across 13 unions and faculty associations.
- Prepared to deliver UPP's full suite of pension services, with the planned launch of our new administrative system and member and employer service experience in fall 2024.

Investing for the future

- Committed or invested $820 million+ since 2022, significantly increasing our exposure to high-quality, long-term assets.
- As part of our Climate Investment Transition Framework, established a target to commit at least $1.2 billion in climate solutions by 2030 to help catalyze the transition to a resilient, net-zero world.[3]
- Achieved a total 17% reduction in our portfolio carbon footprint against our 2021 baseline, exceeding our 2025 target.

Message from our Chair

I am honoured to chair the Board of the University Pension Plan and proud of what UPP has accomplished since our launch in July 2021. This past year has seen the successful implementation of many of our foundational initiatives. Our investment approach has enabled UPP to achieve a stellar return in a challenging time. We have also made great progress putting in place the infrastructure to provide innovative service excellence directly to you, our members.

UPP continues to grow. As part of our sector-wide strategy, UPP is dedicated to enhancing pension security for as many people as possible in Ontario's university sector. In three years, we have grown our membership from 37,000 to over 40,000 and expanded from three participating organizations to 16, with four more joining by 2025. Growth in our membership remains a critical element of our future plans.

As a jointly sponsored plan rooted in the university community, we are attuned to the financial challenges facing universities. As they navigate these challenges, UPP remains committed to providing a safe, secure pension plan for our members, present and future, that also provides a trusted solution for participating employers, allowing them to reduce management costs, financial risk and governance obligations. We share with our Sponsors the commitment to serve our members and the sector through these difficult times, ensuring that the Plan operates efficiently, strategically, and prudently.

Serving members and safeguarding pensions

In yet another difficult year for investors, UPP's talented investment team delivered strong results, ending the year fully funded and well positioned to continue providing lifelong, predictable pension security for members. Central to UPP's investment strategy is recognition of the importance of responsible investing and sustainable value creation for UPP and the communities we serve. Responsible investment, including a major focus on addressing climate risk, has been integral to UPP's ethos and operations since our inception and remains a priority for the Board, a lens through which to create and protect value for members. Under our CEO Barbara Zvan's leadership, UPP actively cultivates our standing as an influential and impactful responsible investor, spearheading collaborations and initiatives within the Canadian and global financial sectors.

UPP's dedicated management team has worked tirelessly to build an administration system and member services offering that is responsive to our members' needs, one that is both personalized and that can be readily adapted as new members join. The launch of these integrated services in 2024 will mark a transformative milestone for our Plan. Building a sophisticated member service model of this complexity in less than two years is indeed an achievement and the Board applauds the team for their work on this crucial project.

"In yet another difficult year for investors, UPP's talented investment team delivered strong results, ending the year fully funded and well positioned to continue providing lifelong, predictable pension security for members."

The Board recognizes that how we work is central to the quality of the work we do. UPP remains driven to maintaining an environment where all can work collaboratively and feel included and empowered to be and do their very best for our members.

Good governance

My fellow Trustees and I are united by our dedication to serving our members. I thank them for their insight and diligence over the past year. As the Plan's size and complexity grow, so too does the Board's responsibility to maintain a strong risk lens to address emerging and ongoing risks and opportunities. Together, we are committed to continuous learning and advancing our governance procedures to keep pace with an evolving organization and a changing world.

In 2023, we welcomed new Trustees, Ranjini Jha and Kelly Bertrand, who bring a wealth of valuable and highly relevant experience in the finance and university sector. We thank departing Trustees Horatio Bot and Jonathan Ferris for their valuable contributions and service during UPP's launch and early build period.

The Board is grateful to Barbara Zvan for her inspiring leadership and dedication to establishing UPP as the pension provider of choice for Ontario's university sector. Our achievements are a testament to the exceptional team she has built, and to the Plan's excellent foundations.

The Board extends its deepest appreciation to UPP's Joint Sponsors for their partnership and guidance, and for their dedication to advancing the interests of UPP's members. We look forward to our continuing collaboration. We also wish to recognize Angela Hildyard for her tireless contributions and sage counsel in the creation of UPP and her service on the Employer Sponsor Committee, which concluded last year.

It is a privilege to be part of a pension plan that will endure for generations, helping to create a bright retirement future for our members. On behalf of the Board, and with thanks for the trust placed in us, we look forward to continuing this vital work.

Gale Rubenstein
Chair, Board of Trustees

Message from our CEO

It is my privilege to present UPP's third annual report, marking the completion of our second full year as Ontario's newest jointly sponsored pension plan. In 2023, we saw strong outcomes from the foundations we set over the last three years, finishing the year fully funded and with a 10.2% annual rate of return.

While the Plan continued to develop across various operational fronts, we advanced our organizational strategy, staying on track to deliver a resilient, high-performing Plan.

Shaping a purpose-driven fund

Since assuming full investment management of Plan assets in 2022, and with our Investment team firmly established, we have made significant strides to grow and align our investment portfolio to UPP's long-term objectives. In the last two years, we have committed or invested over $820 million in private market assets, which help diversify our portfolio with inflation-protected assets. Our investment approach positions us well to withstand short-term challenges while continuing to create long-term value and bring increasing cost efficiency, transparency, and control to the portfolio—all key benefits that UPP was designed to provide.

Enduring value in a changing world

UPP's efforts to protect long-term returns involve effectively managing risks and opportunities in our portfolio. Among other important material risks, climate change is an urgent challenge for which we have taken consistent action in line with our fiduciary duty. In 2023, we implemented new plans and frameworks to support our disciplined path to achieving net-zero greenhouse gas (GHG) emissions in our portfolio by 2040 or sooner, including a target to commit at least $1.2 billion in climate solutions by 2030. These initiatives – underpinned by member feedback – are all ways in which we seek to protect our investment returns against the impacts of a changing climate and pursue investment opportunities in the low-carbon transition that can enhance our ability to create value for our members.

Among my personal highlights and one of my greatest honours was to speak at the United Nations Climate Ambition Summit last fall about UPP's net-zero commitments and how they help us deliver sustainable value to our members. My sincere hope is that even more policymakers and investors take meaningful action to ensure that the financial, social, and environmental systems we rely on are healthy, resilient, and sustainable.

Pension peace of mind for the university sector

We know the invaluable role the university sector plays in shaping our collective future through education, research, and innovation. This is why we strive to provide our members with the pension security they deserve, especially as individuals and institutions come under financial pressure.

We are excited to welcome new members: the Association of Professors of the University of Ottawa and non-unionized staff from the Ontario Confederation of University Faculty Associations in 2024, and Trent University staff and Victoria University staff and faculty in 2025. As a plan built for the sector, our priorities remain to deliver a strong plan experience, understand and deliver on

"We finished the year fully funded and with a 10.2% annual rate of return. While the Plan continued to develop across various operational fronts, we advanced our organizational strategy, staying on track to deliver a resilient, high-performing Plan."

the expectations of the communities we were built to serve, and bring pension security to as many of those communities as possible.

My deep gratitude goes to the university administrators, unions, faculty associations, and other representatives from within and beyond the Plan who have devoted their time and perspectives on future possibilities for their pensions at a very challenging time for the university sector.

Delivering service excellence to our members

Central to our organizational strategy is a commitment to provide proactive, personalized service to members and participant organizations. We have spent the last two years preparing to take the last big step toward the provision of a full suite of pension services to the sector, with the planned launch of our new administrative system and member service offering in 2024.

As we put the final touches on our member services infrastructure and prepare to deliver personalized service to members and participant organizations, I want to recognize the role of member feedback in shaping our approach–both today and in the future. Our members' voices continue to be important inputs, helping ensure we meet their needs at every point in the pension journey.

An impact-driven culture

Shaping UPP's culture is something we approach with deep intention, with the strongly held belief that diverse and engaged teams drive exceptional outcomes and a thriving work environment. Our people are the difference-maker in our ability to deliver on our vision. I'm pleased that, for a second year, UPP maintained a healthy and high-performing culture score and affirmed our shared, deep-rooted commitment to create an environment where employees are supported and empowered to perform at their best.

Core to our intentional culture is a commitment to equity, diversity, inclusion, and reconciliation. We take our values seriously and continued to evolve them through our policies and practices, as well as events and initiatives throughout the year to support education, awareness, and allyship. It's a commitment we will continue to make in shaping an inclusive workplace built on collaboration and respect for one another and the world around us.

Stronger together

Our achievements over the past year underscore our commitment to operating a resilient, high-performing Plan and solidifying UPP's position as the solution of choice for Ontario's university sector. I am humbled by what the extraordinary UPP team has accomplished over the past three years and extend my deepest appreciation for their unwavering dedication to the well-being of UPP's members across the province.

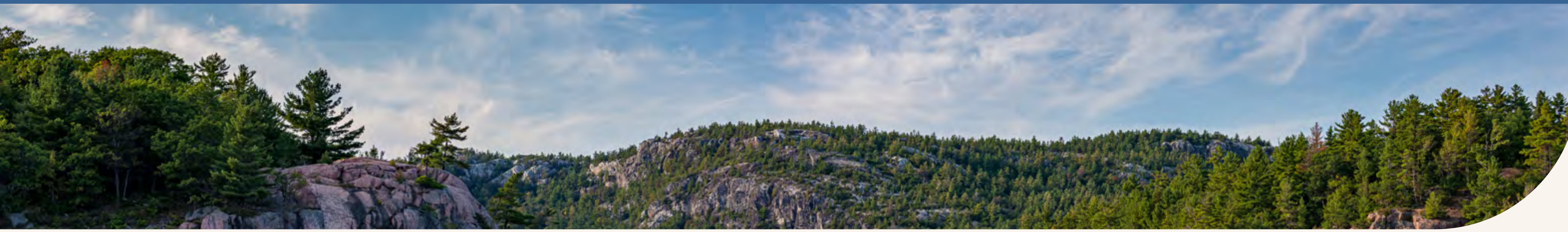
I would also like to thank UPP's Board of Trustees and Joint Sponsors for their continued guidance, as well as our many university partners, including administrations, unions, faculty associations, and non-unionized employee representatives, and collaborators within the financial community, with whom we work closely. Their ongoing support and insights throughout this extraordinary journey have helped shape UPP into the organization we have become.

And finally, to our members for their continued trust and support. It is an honour to build and operate this pension plan for you, and all those in Ontario's university community.

I look forward with confidence and anticipation of the exciting milestones ahead as we build this Plan's bright future.

Barbara Zvan
President and CEO

Our strategy



Our blueprint for a resilient, high-performing Plan

UPP's 2022–2025 organizational strategy, which features six key imperatives, is our blueprint to build a resilient, high-performing Plan for members and establish UPP as the solution of choice for Ontario's university community.

Our strategy is led by UPP's experienced leadership team and overseen by our highly qualified Board of Trustees. Progress is regularly measured and reported, and key developments are captured in our annual reports.

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

Operate with resilience

Future-proof operations and technology while responsibly managing costs

Lean Into ESG[4]

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

[4] Environmental, social, and governance factors

Putting our strategy into action

As we started building the Plan in 2021, UPP's Board of Trustees and staff were tasked with developing every operational aspect of a defined benefit pension plan from the ground up. That foundational build has encompassed the comprehensive investment capabilities and partnering functions needed to expertly manage the fund. It has also meant creating in-house pension administration and member services to securely administer the Plan for an ever-growing number of members and securing the specialized requirements and capabilities of a sector-wide solution designed for scale.

Less than three years in, UPP is proud to have laid the foundations of a modern, full-service pension organization, one that will serve our members and Ontario's university sector for generations to come. At every step, we have pursued our foundational work with unwavering focus, oversight, and precision. Leveraging our clean slate, we have been building for efficiency, continuous growth, and sustainable value creation, ensuring that crucial strategy enablers, such as responsible investing and service excellence, were ingrained in our values from day one.

Building a cost-efficient and scalable Plan has required investments in core structures, systems, and multidisciplinary expertise across the organization. UPP's expense profile to date largely reflects those initial costs. As we move toward a business-as-usual operating state, while growing the Plan through new entrants and investment returns, UPP's expenses relative to our assets will normalize to levels similar to more mature pension peers.

In 2023, UPP maintained our strategic focus on securing member benefits and establishing a first-rate pension solution for the university sector. Now in the final stages of our build, our approach is already materializing benefits for our members. We look forward to more exciting milestones as we pave the way for the Plan's bright future.

2023 strategy highlights

Investing for the future

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 life. For that, the Plan must be well funded and built to withstand any environment. Accordingly, UPP's first and most consequential investment task was to carefully analyze and merge the investment programs of our participating organizations into a unified portfolio and establish the core investing competencies of a Canadian pension fund with clear priorities for funding sustainability and asset growth; one that can seamlessly integrate new portfolios in the future.

Establishing critical functions for our investment activities
Effectively managing a complex investment portfolio requires more than strong market capabilities; it relies on essential behind-the-scenes functions. These include portfolio construction, investment risk management, financial analysis and reporting, tax and legal compliance, actuarial services, responsible investing integration, and treasury management. These critical functions are integral to supporting effective investment operations and conducting thorough due diligence.

With our in-house investment team now in place and fully managing Plan assets, we have made significant strides in streamlining and further optimizing the strong investment foundations set by our participating plans in line with UPP's long-term strategy. In doing so, our public and private market teams have negotiated millions in investment fee savings while bringing greater transparency and control to the portfolio. They have also substantially expanded UPP's exposure in target areas, including stable, inflation hedging assets, contributing to the portfolio's strength over the long term.

"We are really well positioned with a great foundation to build from here to grow. We are open for business and that includes new members and new partners in the investment world."

Aaron Bennett
UPP's Chief Investment Officer in an interview with industry publication Benefits and Pensions Monitor

Serving Ontario's university sector with care

At launch, UPP brought together pension plans from three universities and nine participating sector organizations. As of year-end 2023, we proudly provide pensions to over 40,000 members from four universities and 12 sector organizations, with four more participants joining in the next two years. These new participants further expand our membership to a wide range of employers across the university sector—from unions, faculty members, and faculty association staff to academic publishers and research groups.

As the final milestone in our foundational build, UPP will launch a pension administration system and a new member and employer service experience in 2024. This includes the myUPP Member and Employer Portals, secure digital platforms designed to guide and inform on all pension matters and provide consistent, high-quality service directly to all our employers, active members, and retirees. We have onboarded a team of pension experts to provide support through every stage of our members' pension journey, from early career through retirement, and developed easy-to-use member resources that empower members in their pension planning. Together, these resources and efforts reflect our dedication to service excellence and serving our members with care.

"Members need to understand how much they're saving and how much they're expected to have saved when they retire. By having easy-to-understand member resources on our website and launching a powerful member portal, we're helping to ensure our members stay engaged and informed year-round."

Joanna Lohrenz
UPP's Chief Pension Services Officer in an interview with Benefits Canada

Our dedication extends to welcoming new Plan participants transitioning to UPP, as well as those considering it. With extensive experience and knowledge of university environments and communities, UPP and our Joint Sponsors collaborate closely with all parties to make informed decisions about their pension and a seamless transition to the Plan. To support this work, UPP's service infrastructure includes operational readiness for onboarding new plans of every type and size.

See what UPP can offer to Ontario's universities and sector organizations.

UPP's service and onboarding experiences are supported by secure technology and data platforms, ensuring proactive service delivery and the ability to accommodate any level of plan complexity as UPP grows and welcomes new plans.

See below how we're planning a secure and adaptable future with technology

Since technology touches every part of our business, UPP needs future-ready systems that can respond to our evolving needs. Our technology foundations are built on the philosophy of using out-of-the-box cloud-based platforms that provide efficiency, security, and swift adaptability.

Supporting high-quality, trusted data
At UPP, we recognize that data is a strategic asset requiring strong governance, systems, and processes to store, maintain, and optimize its use. This is why we established a Data and Analytics Centre of Excellence in 2023, to support informed decisions based on high-quality, trusted data—now and in the future.

Continuous focus on data security
We continually advance our security and risk management processes and procedures to protect the information of our members, employees, and partners. In addition to a comprehensive cyber-resilience program and frequent employee awareness training and testing, we have implemented robust standards for procurement, legal, and vendor management.

"We have made great progress in our foundational data capabilities by taking a pragmatic approach, enabled by strong partnerships across technology and the organization. This approach has allowed us to deliver organizational solutions grounded in trusted and decision-useful data."

Giorgio Scocco
Managing Director,
Data and Technology

Investing and acting responsibly

Knowing that environmental, social and governance (ESG) factors can fundamentally influence the long-term sustainability of financial markets, we made responsible investing an early and integral priority at UPP. With a systems-level view, our in-house Responsible Investing and Investment teams work seamlessly to account for ESG factors at every stage of the investment process. We also work with our external investment partners and industry peers to continuously improve performance in this area.

Climate change stands out among the significant material risks to our portfolio, demanding immediate action in line with our fiduciary responsibility. Nearly a year after UPP's launch, we published a Climate Action Plan featuring our commitment to achieve net-zero GHG emissions in our portfolio by 2040 or sooner. This target, while ambitious for a new organization, is essential to our ability to fulfil our pension promise today and for generations of members to come. In 2023, we advanced our responsible investing governance structure with a Climate Stewardship Plan and Climate Transition Investment Framework. Together with our investment policies, these initiatives help us progress our commitment to manage the impacts of climate change on investment performance and to achieve a net-zero portfolio—supporting long-term value creation for members.

Read more on our progress against our climate-related commitments.

"When it comes to sustainability, it's a comprehensive focus across UPP—in how we both invest and operate as an organization—and a fundamental lens through which we derive and protect value for members."

Brian Minns
UPP's Senior Managing Director, Responsible Investing in an interview with Net Zero Investor, a UK-based publisher featuring sustainability-focused institutional investors around the globe

Milestone in reducing our portfolio carbon footprint

In 2023, we reached a significant milestone on our journey to decarbonize UPP's portfolio. We achieved a 17% reduction from our 2021 baseline, exceeding our target to decrease our portfolio's carbon footprint by 16.5% for 2025. We are now setting our sights on our next target: a 60% reduction by 2030.

In 2023, Barbara Zvan, UPP's President and CEO, addressed the United Nations Climate Ambition Summit about UPP's net-zero commitment under our Climate Action Plan and how this helps us deliver sustainable value to our members across Ontario's university sector.

Barbara Zvan and Kathy Bardswick, UPP Trustee and Chair of the Sustainable Finance Action Council, were named People to Watch in Canadian ESG by the Logic, a business publication about people and organizations driving transformational change.

Our dedication to delivering sustainable value to our members extends to acting responsibly. For UPP, this means adhering to operational practices that minimize the impact of our activities as set out in our **Organizational Sustainability Strategy. See below how we do this.**

Introducing UPP's Organizational Sustainability Strategy

UPP believes that organizations are better able to achieve their strategic objectives when they prepare for and act on issues transforming our world. In addition to investing responsibly, UPP is committed to acting responsibly, which means advancing sustainable operational practices that reduce the impact of our activities and create long-term value for our members, people, and partners.

In 2023, we took a major step forward in bringing this commitment to life by creating UPP's Organizational Sustainability Strategy. First, we asked employees, select vendors, participating organizations, and members[5] to identify the sustainability topics they prioritize and identified key topics that offer opportunities for our employees to engage in sustainability action. Then, each sustainability topic was assessed by its potential impact severity (scale, scope, irremediability) and likelihood criteria based on guidance from the Global Reporting Initiative and the Organisation for Economic Co-operation and Development's Due Diligence Guidance for Responsible Business Conduct.

Our strategy describes the sustainability topics that are of greatest importance to UPP and how these topics are managed. It supports our efforts to:

- provide stable retirement benefits at a reasonable cost for members by focusing resources on sustainability risks and opportunities that are material to the organization,
- demonstrate our own efforts to adopt sound business practices that contribute to positive outcomes, in the same way we are asking our investee companies, and
- build sustainability into our intentional culture, improving sustainability knowledge and awareness across our organization.

Six priority topics were identified based on potential impacts to UPP's organizational objectives and our ability to impact the topic.

- Business ethics
- Procurement and vendors
- Equity, diversity, inclusion, and reconciliation
- Cybersecurity
- Public policy
- Employment

Staying accountable to our strategy

We identified accountable and responsible roles for each priority topic, including applicable Board roles, management-level positions, and management committees, and described the approach to managing, monitoring, and reporting on the topics. In addition, UPP's 2023 organizational scorecard included objectives related to all six priority sustainability topics.

Learn more about our Organizational Sustainability Strategy.

"UPP's Organizational Sustainability Strategy demonstrates how we not only consider material ESG factors in our investing approach, but also embed sustainability across our operations in a measured and thoughtful way, creating long-term value at a reasonable cost for members."

Leah Young
Manager, Sustainability and Responsible Investing

[5] Engagement with participating organizations and Plan members relied primarily on a review of existing sustainability strategies, plans, or priorities and interviews with sustainability leads/coordinators. Participating organizations and members shared insights about which sustainability topics are prioritized at universities, which topics are priorities for our Plan members, and specific areas they would like to see UPP act on.

Promoting diverse and inclusive cultures for better results

UPP's achievements to date would not have been possible without the dedication and drive of UPP's team. As Plan members ourselves, we have a deep-rooted connection to our purpose to bring retirement peace of mind to the university sector.

As an organization responsible for delivering dependable pensions to over 40,000 members, we rely on attracting and retaining talented employees in a competitive environment. We are firm believers that diverse teams, perspectives, and life experiences enrich decision-making and foster a more dynamic workplace, which ultimately enhance our overall performance. This is why we strive to cultivate an intentional and inclusive culture that inspires everyone to perform at their peak. To this end, we implemented a roadmap for enhancing equity, diversity, inclusion, and reconciliation (EDI & Reconciliation) within our organization and a sound compensation structure that rewards performance and helps us attract key talent from our target markets.

Read about our EDI & Reconciliation highlights in 2023.

Our commitment to EDI & Reconciliation goes beyond our employees and UPP operations. We see it as our duty to leverage our influence to promote diverse, equitable, and inclusive financial markets. By actively engaging and advocating for these values among our external investment managers, companies, regulators, and industries, we can drive progress on these key issues, leading to better outcomes for the Plan.

See how UPP collaborated, discussed, and advocated for these EDI & Reconciliation values in 2023.

A pension plan for the university sector

A proven model for sustainable value

UPP was designed to deliver the hallmark features of Ontario's world-renowned jointly sponsored pension plans[6] (JSPP) to the university sector, and we have made significant advances toward this goal.

In what is known as the Canadian pension model, JSPPs combine independent governance, professional in-house investment management, significant scale advantages, and extensive geographic and asset class diversification, shown to yield:

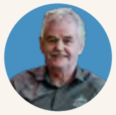
- superior long-term investment performance and value creation,
- efficiencies and economies of scale,
- stable and predictable contributions, costs, and lifetime benefit levels,
- financial certainty brought by independence from any one employer,
- advanced risk management and ESG capabilities, and
- member service excellence.

UPP is home to a diverse team of cross-functional experts, including those with experience establishing Canada's largest pension plans.

UPP was designed to deliver these advantages plus additional benefits tailored to the university community. Both employers and employees benefit from the simplicity and security of a large, expertly run pension plan wholly focused on delivering a dependable pension promise. See more on what the Plan offers.

[6] Beath, Alexander/Betermier, Sebastien et. al. The Canadian Pension Fund Model: A Quantitative Portrait, Global Risk Institute, 2020; "Maple Revolutionaries," The Economist, March 3, 2012;Ambachtsheer 2016, Bédard-Pagé et. al. 2016

"At Trent University, we are thankful for UPP's work to establish sustainable defined benefit pensions for the university sector. UPP's team has a deep understanding of our concerns, values, and expectations and a genuine commitment to the financial peace of mind of our faculty association, members, and faculty retirees. We appreciate our working relationship with them and their diligent work, which will help keep us on a path toward a secure retirement future. Following our positive experiences moving our faculty pension to UPP, we look forward to Trent's staff plan joining in 2025."



Dr. Leo Groarke
President and Vice-Chancellor,
Trent University

Welcoming new plans and engaging with sector participants

We were pleased to welcome the Association of Professors of the University of Ottawa and, non-unionized staff from the Ontario Confederation of University Faculty Associations in 2024 and look forward to welcoming Trent University staff and Victoria University staff and faculty to UPP in 2025. These new participants further expand our participation from a wide range of employers across the university sector, including unions, faculty members, faculty association staff, and others, such as academic publishers and research groups.

As a sector-wide Plan, we are actively engaging with groups across the university sector about their pension experiences and needs. These discussions help us effectively serve those needs—and, by extension, best serve our current members. As organizations consider their pension options, our expert team is dedicated to providing the information needed to make well-informed decisions, along with the support needed to make a smooth transition to the Plan.

All universities and sector organizations, with any past and present plan types—including those currently without a plan—are welcome to join UPP.

UPP's team is available to discuss Plan features, answer questions, provide calculations and estimates, and deliver presentations about what joining UPP would look like for your organization.

To get started, contact:

Andrew Naples
Managing Director
University Sector and Stakeholder Engagement
andrew.naples@universitypensionplan.ca

PART TWO

Creating value for generations to come

As a complement to the financial statements, UPP's management discussion and analysis provides commentary on Plan activities and performance.

Plan funding

A pension promise spanning generations

A sustainable plan is one where all current and future members receive secure, stable retirement benefits at a reasonable and predictable cost. That is UPP's commitment.

2023 Plan funding highlights

102%
funded status[7]

5.45%
discount rate

$0.2B
funding surplus[7]

$559M
in pension benefits paid to members

[7] On a smoothed asset basis

Delivering Plan sustainability

Plan sustainability requires a careful balance between the liabilities (cost of current and future pensions) and assets (member and employer contributions plus investment returns), which can vary with economic conditions and Plan demographics. The **funded status** (or funded ratio) is a key indicator of the balance between these aspects at any one time. It indicates whether the Plan as a whole has enough assets to fund all current and future pension obligations. Funded status is one of the most important measures of the Plan's current and long-term financial health.

We apply a number of measures and tools to maintain Plan sustainability with stable benefits and contributions over time.

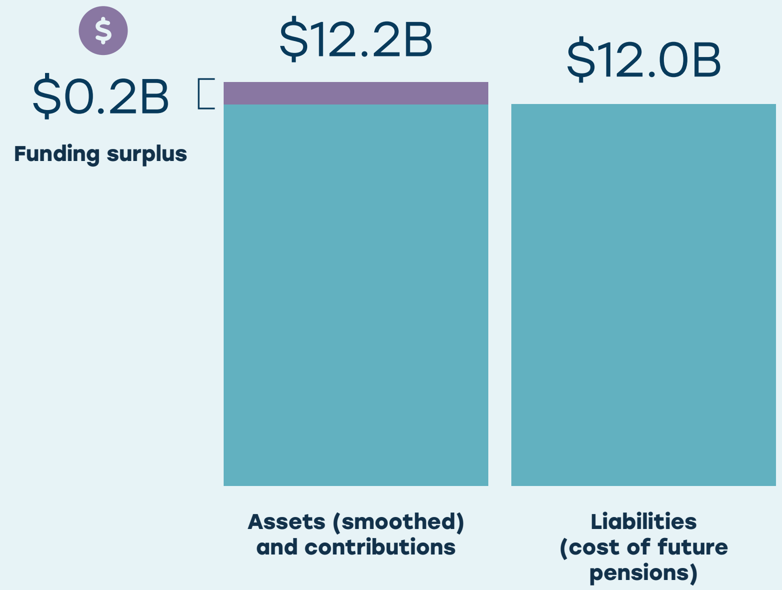
Actuarial valuations – a steady view of Plan health

Regular actuarial valuations provide point-in-time assessment of the Plan's financial health, based on a range of assumptions and in line with the Canadian Institute of Actuaries' standards about future trends and events.

Every three years, at a minimum, UPP must file a funding valuation with regulators showing the Plan's funded status and contribution requirements. Whether or not a valuation is filed in a year, UPP produces an annual funding valuation to maintain a line of sight to the Plan's financial health and discloses this information in our annual report. Valuations are considered preliminary until filed with pension regulators. View UPP's latest filed valuation at January 1, 2023.

FUNDED STATUS AT DECEMBER 31, 2023[8]

Valuation results for year-end 2023 show that the Plan remains fully funded on a smoothed basis. The decision on whether to file the January 1, 2024 valuation rests with the Joint Sponsors.



[8] Based on the January 1, 2024 valuation

Funding valuations use a variety of economic and demographic assumptions, which are sensitive to changes in the Plan and external environment and must be reviewed each year. In consultation with UPP's Plan Actuary, we conducted a comprehensive review of the assumptions for the January 1, 2024 valuation (on which the December 31, 2023 funded status is based) to ensure their continued appropriateness in the current environment. This analysis focused on a review of indexation, inflation, and salary increase assumptions, which are reflected in 2023 liability and assumption changes (see table below).

The primary economic valuation assumption, the discount rate, is set annually by the Board of Trustees. It reflects the long-term expected rate of return on investments net of expenses and a provision for risk. Given continued market uncertainty and a desire to maintain stability, the Board held the discount rate steady at 5.45% for 2024. See UPP's filed valuation at January 1, 2023 for more detail.

The following provides a reconciliation of the Plan's funded status, on a smoothed asset basis, over 2023. UPP reported strong investment results in 2023 relative to the beginning and year-end market value of assets, increasing net assets by $956 million. UPP's funding valuation uses a smoothed return rather than an annual market return, where results are averaged over five years (the length of a typical economic cycle) to neutralize or "smooth out" market fluctuations. On a smoothed basis, given the challenging market experience in 2022, there was an investment loss. Notwithstanding the offset, the Plan remained fully funded at 102%.

Changes in surplus (preliminary, $millions on a smoothed asset basis)	**2023**
Opening surplus (Jan 1, 2023)	**378.9** 103% funded ratio
Interest on surplus	20.7
Investment losses (relative to 5.45% on a smoothed basis)	(155.0)
Liability and assumption changes	4.7
Ending surplus (Jan 1, 2024)	**249.3** 102% funded ratio

Asset-liability analysis

UPP uses comprehensive asset-liability (AL) modelling to identify challenges and develop strategies to manage the Plan's long-term investment and funding dynamics. These AL studies bring together all important aspects of the Plan to simulate possible funding outcomes under thousands of economic scenarios.

Unlike the typical three-to five-year cycle followed by similar-sized organizations, UPP conducts comprehensive AL modelling internally whenever necessary. Regular AL modelling allows us to stay ahead of potential challenges that could impact our sustainability. It also helps us closely align the investment portfolio with the pension commitments it is built to fund and to project and manage the Plan's long-term contribution requirements, funded conditional indexing, and benefits. All of these aspects help maintain a stable Plan experience over time.

AL modelling is also a critical tool for UPP's investment strategy. Read more about how our Investment team is using it for portfolio analysis.

Joint Sponsors' Funding Policy

Delivering a strong and stable Plan in a changing world requires prudent governance. In the event of a funding shortfall related to UPP benefits, the Funding Policy guides the Joint Sponsors in bringing the Plan back to a fully funded status using two primary levers: increasing contribution rates and modifying inflation protection levels on a prospective basis. Decisions regarding these elements are subject to consensus among the Joint Sponsors.

The Funding Policy is based on sound actuarial and economic principles and contains specific provisions to promote Plan sustainability and maintain stable contributions and benefit levels.

Contributions

We strive to keep UPP contribution rates stable. Rates have not changed since UPP's inception and will remain at the current level until at least 2026.[9]

Funded conditional indexation

Indexation is an adjustment to a pension in pay to account for the increase in the cost of living over time, based on the key economic indicator, the Canadian Consumer Price Index (CPI). UPP's target is to provide inflation protection for at least 75% of the annual increases in CPI over the long term for UPP service, conditional on the Plan's financial health. Our funding is structured to deliver this benefit over the long term, and, as such, indexation at 75% of CPI is assumed for the full horizon of our valuations.

According to UPP's Plan Terms, cost-of-living adjustments at 75% of CPI are guaranteed for UPP pensions (applying to service rendered after joining UPP) until January 1, 2028. After that date, decisions on changes to the indexation level rest with the Joint Sponsors. When indexation increases are made, pension payments already in pay never decrease, but there could be future periods where annual indexation increases are less than 75% of CPI.

Initial deficit funding and transitioned risk sharing are key design elements of the Plan and sustainability provisions in the Funding Policy. All new plans joining UPP must be fully funded or establish a payment schedule to become fully funded over an agreed-upon initial period, subject to pension legislation. Deficits at the time of conversion must generally be amortized over a period of 15 years from the Conversion Date, although any past service gains may be used to reduce the length of this period.

Unfunded liabilities related to pre-conversion service that emerge in the first 10 years of participation in UPP remain the responsibility of the originating organization. Following this period, risk for pre-conversion service gradually transitions to be shared equally between Plan members and employers. These provisions are designed specifically to insulate Plan members from risk related to past service deficits brought into UPP by participating employers joining the Plan, including the founding universities.

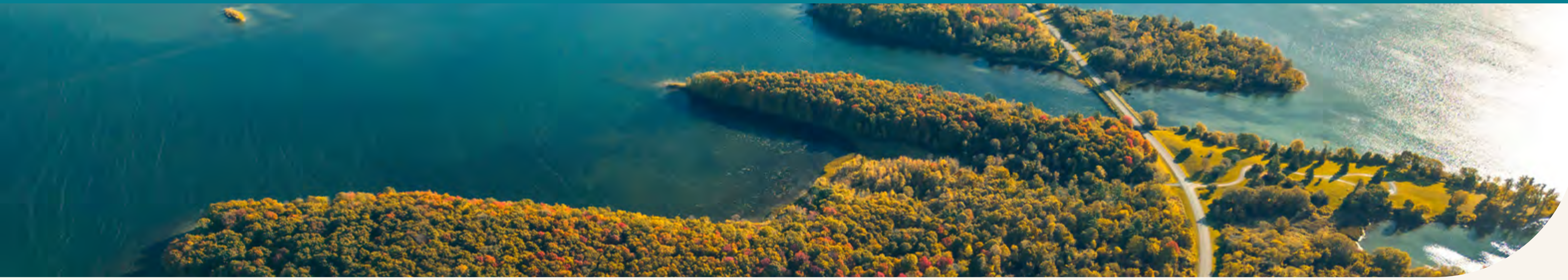
COST-OF-LIVING ADJUSTMENTS

In 2024, pensions in pay for UPP's retired members, survivors, and dependents are indexed at the full 75% for UPP service accrued on and after July 1, 2021, meaning a 3.54% increase to the post-conversion portion of their pensions.

3.54%
Inflation protection increase

[9] Contribution rates will not change unless the Joint Sponsors decide to file a valuation with the regulator that includes provision for a contribution rate change before 2026.

Investment performance



Investing for the future

Results that members can count on

Our investment program has one goal: to earn sufficient long-term returns, at an appropriate level of risk, that will deliver stable retirement income to our members today and tomorrow.

Our focus remains to generate sustainable, long-term returns and build on the financial foundation that UPP members can count on.

2023 investment highlights

$11.7B
net assets

10.2%
annual net rate of return

Increased net assets by
$956M
since 2022

$1.1B
net investment income

Q&A with our CIO
Aaron Bennett, Chief Investment Officer

In another year marked by an uncertain and volatile market environment, our Chief Investment Officer, Aaron Bennett, explains how our Investment team navigated challenges and leveraged opportunities to achieve a positive return and build up our investment portfolio for the long term.

How did UPP perform in 2023?

In UPP's second full reporting year, our portfolio had a positive performance, with an annual rate of return of 10.2%. Returns were driven primarily by our return-enhancing asset class, where we were well positioned to benefit from a rebound in public equity, which brought global financial markets back above pre-pandemic levels. In addition, our interest rate–sensitive assets benefited from a significant bond rally in the last quarter of the year. In a year where infrastructure and real estate were negatively impacted by rising interest rates, we held a slightly positive return in our inflation-sensitive asset class.

Despite challenging market conditions, we've maintained a strong funding and liquidity position since inception. This allows us to face market challenges with confidence and pursue opportunities that support our mission to pay pensions in the long term.

How did UPP manage continued financial market volatility?

In 2023, a volatile interest rate environment pressured asset owners and borrowers, and lingering inflation negatively impacted the value of certain assets. While our portfolio is not immune to these conditions, our Investment team operated with agility, seeking ways to mitigate impacts and reinvest in emerging opportunities.

Bonds play a dual role in UPP's portfolio: they can provide a lower-risk stream of returns, and when it comes to the interest rate sensitivity of our liabilities, they have important risk-reducing characteristics. Long-dated government bonds typically offer a stable source of long-term returns. However, as interest rates rose and market expectations became highly volatile, pricing for even the lower-risk government bonds fluctuated dramatically, particularly Canadian longer-term bonds, where we are highly concentrated. While we continued to build our position in these for the first half of the year, we shifted to capture gains during a fourth-quarter rally by modestly reducing our exposure. This led to UPP generating a return on a government-guaranteed bond portfolio—in other words, returns with much lower risk.

Our team also recognized that the pricing pressure on real estate and infrastructure assets caused by high interest rates provided a good opportunity to build out our inflation-sensitive portfolio. In the last two years, we significantly increased our exposure with high-quality, long-term assets at very favourable terms, committing more than $820 million in new capital. We also formed new sector partnerships that can rapidly transform our portfolio's outlook. These measures allow us to progress toward our target asset mix, which is designed to resiliently fund our pension liabilities.

Aaron Bennett
Chief Investment Officer

How do responsible investing practices help UPP achieve returns?

We know that ESG factors will fundamentally influence the health and long-term sustainability of the financial markets on which our returns rely. By factoring in ESG risks and opportunities at every stage of our investment process, we become better positioned to derive and protect value for members, in line with our fiduciary duty to pay pensions.

Since launching UPP, and in partnership with our Board, we've instituted strong frameworks to address material ESG risks such as climate change and to support better equity, diversity, inclusion, and reconciliation measures within our portfolio companies. Beyond this, we work with our external investment partners and industry peers to improve performance and disclosure on ESG factors. We're grateful to our partners across the university sector, including UPP's Joint Sponsors, participating universities, sector organizations, unions, and faculty associations, for their support in this endeavour. In a changing world, these measures help us build enduring value within and beyond our portfolio.

What do you see happening in financial markets in 2024?

While there is no way to predict future outcomes of markets—we remain humble about our ability to do so—we are watching a few trends. We believe inflation, economic growth, and interest rates will moderate relative to current levels. However, the chance of all three happening in a way that achieves a "soft landing" across major economies may be lower than many expect, which could lead to a more serious disruption in the investing and economic environment.

As market expectations normalize and investors adjust to the new outlook, we will likely have higher-than-average volatility. We also expect to see some asset types experience increased demand and rising prices, while others will see sell-offs and declines relative to the new outlook. Medium term, we see potential risk of periods of above-target inflation due to structural factors such as declining workforces, fiscal dominance, and infrastructure needs.

While we may see challenging markets year over year, UPP is designed to withstand short-term volatility while continuing to build value and secure pensions into the future. These challenges can present opportunities for investors like UPP, who possess long-term views, in-house investment capabilities, and sufficient liquidity. Our Investment team will actively seek those opportunities directly in the market and through our many partners, taking advantage of key moments to make long-term investments that will increase our ability to resiliently and sustainably fund pensions.

What does the future of UPP's investment program look like?

UPP will continue to proactively take steps to protect our portfolio against market uncertainty and volatility, unlock unique market opportunities, and build a well-balanced portfolio that aligns with our long-term strategy and funding needs. Our focus will be on three key factors:

Resilience: Build a portfolio that can provide the returns we need at a reasonable risk. We will continue to move toward our target asset mix while carefully managing the portfolio around changing conditions to minimize risk. Read more about our progress toward our target asset mix.

Benefits of scale: Use UPP's scale to access more types of investments and co-investment opportunities, have a greater sustainability impact related to our buying power, and build internal capacity that lowers costs and allows us to holistically evaluate and manage risk.

Ingenuity: Economically execute investment programs similar to some of our larger peers, such as direct allocations to private market investments and deeper ESG integration into the investment process. Meanwhile, be nimble and consider opportunities that may be too small for larger investors yet offer significant positive impact to our portfolio.

"While we may see challenging markets year over year, UPP is designed to withstand short-term volatility while continuing to build value and secure pensions into the future. We will continue seeking opportunities to make investments that will increase our ability to resiliently and sustainably fund pensions for generations to come."

Aaron Bennett
Chief Investment Officer

Our transition toward a fit-for-purpose pension fund

When UPP began assuming management for the pension assets of participating organizations in July 2021[10], we identified opportunities within the combined portfolio to enhance long-term performance. As a result of our findings, we developed a multi-year transition plan toward one unified and cost-effective portfolio tailored to UPP's funding objectives and investment beliefs.

Target asset mix and multi-year transition plan

UPP's target asset mix is specifically designed to fund our pension benefits for the long term. It will help us maintain a healthy funding and liquidity position, stay well equipped to pay members' pensions, and remain agile to investment opportunities as markets evolve. The pace at which UPP can shift toward our target asset mix depends on both structural and transitionary elements, including market movement, liquidity, available investment opportunities, and the duration of investment commitments within the original portfolios.

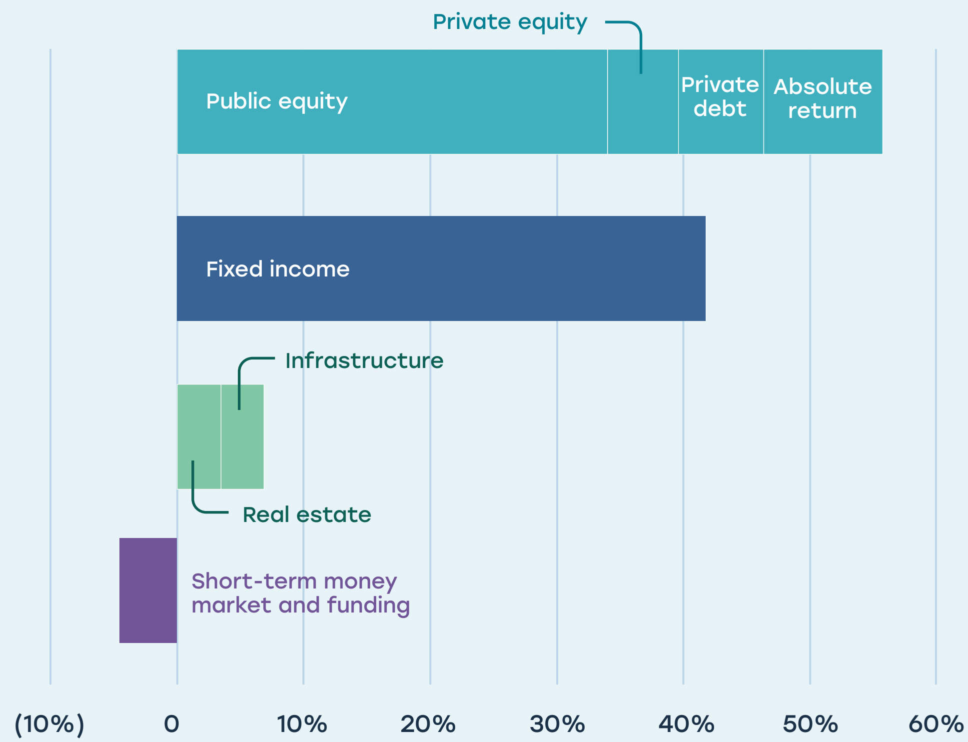
UPP's exposure evolution

In line with our target asset mix, we explore new investments with a focus on enhanced cost efficiency and control, alignment with our members' needs, and long-term value. Since starting our portfolio transition, UPP's Investment team has made significant progress in shifting our exposure to certain asset classes, particularly by adding new private assets in our inflation-sensitive asset class and building and maintaining a robust liquidity position.

See more on UPP's portfolio transition and target mix ranges.

Asset mix (%)	2023	Inception July 1, 2021
Return enhancing	55.8%	71.9%
Interest rate sensitive	41.8%	29.2%
Inflation sensitive	6.9%	4.6%
Short-term money market and funding	(4.5%)	(5.7%)

2023 asset mix



[10] The transition of the University of Toronto's pension assets to UPP was completed on April 1, 2022.

In the short to medium term, UPP will continue to transition the portfolio with these goals in mind:

- balance risk and return within the Plan's unique context
- selectively internalize aspects of our strategy to save costs and enhance control
- further diversify the fund in line with our investment beliefs, including growing our exposure to private markets and other assets that respond well to inflation
- continue our path toward a net-zero portfolio by 2040 or sooner
- harness our structure and growing scale to yield enhanced value for members

Streamlining our public equities portfolio

When UPP created a unified portfolio, we assumed all the assets in pre-existing fund investments, which, without intervention, can lead to strategy inefficiencies, additional costs, and challenging risk oversight. Since then, we have made strong progress in streamlining UPP's portfolio in the following ways:

- consolidated our partnerships and mandates to better meet our long-term needs
- transitioned some of our pooled funds to segregated fund vehicles, which offer greater transparency and investment control and help us better apply our ESG lens
- decreased our public equity holdings and redeployed capital into lower-risk assets, including interest rate–sensitive and inflation-sensitive assets, which are better aligned with our strategy and pension liability

SPOTLIGHT

Supporting long-term investment returns with inflation-hedging private assets

Beyond the risks associated with wage inflation and ultimate benefit payments, UPP also provides conditional indexing benefits to our members, which requires funding across a diverse range of inflation scenarios. A strategic focus on our journey toward our target asset mix has been to expand our exposure to inflation-sensitive assets, which enhance our ability to offer our members pension security while navigating inflation challenges.

Private infrastructure and real estate assets offer multiple advantages, notably risk mitigation in the face of macroeconomic challenges such as inflation. This is why UPP has committed over $820 million to private assets since founding the Plan in July 2021, primarily increasing our exposure through private fund investments. As one example, our €150 million fund commitment to Copenhagen Infrastructure Partners (CIP) in 2023 provides inflation risk reduction, steady cash flows, and increased portfolio diversification. Since the fund focuses on renewable energy infrastructure, it also supports our sustainability focus.

Collaborating with like-minded investors such as CIP supports value creation by opening doors to additional investment opportunities. UPP will continue expanding our portfolio of inflation-hedging private assets through strategic fund selections and co-investments in 2024 and beyond.

"Energy transition infrastructure provides an opportunity to capture attractive and stable long-term returns for our members while also promoting a sustainable future beyond our own portfolio."

Peter Martin Larsen
Senior Managing Director,
Head of Private Markets Investments

New benchmarks to help build a liability-driven portfolio

UPP operationalized investment benchmarks in 2023, which provide guidance to our Investment team on expected asset-level risk and return in line with our investment beliefs and strategy. As we work toward our target asset mix, seeking opportunities that support UPP's long-term investment approach, these benchmarks will serve as a tool to maintain alignment and accountability to our objectives and to measure our team's performance and resulting compensation.

For example, UPP's value-add–the standard measure of outperformance relative to benchmarks–is mostly driven by positions in return-enhancing and inflation-sensitive assets. As a result, our value-add benchmarks include both an illiquidity premium for private asset classes and an additional return hurdle to ensure UPP considers unique risks in our assessments of these types of mandates.

Our benchmarks are meant to help maintain alignment to our long-term objectives, and thus reflect the characteristics of our target asset mix. As we continue our portfolio transition in the short to medium term, we expect to see annual results that deviate from our target benchmarks. The pace at which our portfolio aligns with our benchmarks will vary by asset class and depend on both structural and transitionary elements, including market movement and liquidity, available investment opportunities, and the duration of investment commitments within the original portfolios.

Once we achieve our target asset mix, we will evaluate UPP's benchmark performance on a multi-year time frame, as is typical, to avoid investment decisions based on short-term market fluctuations.

A look at the portfolio

The total fund delivered a net return of 10.2% in 2023,[11] driven primarily by strong performance in public equity, absolute return, and fixed income. Gains were slightly offset by losses in private equity and real estate, both of which have been broadly impacted by higher interest rates.

Asset mix and returns by asset class

	Year-end 2023		Year-end 2022	
Assets	**Asset mix %**	**Net return %**	**Asset mix %**	**Net return %**
Return enhancing	**55.8**	**13.1**	**62.7**	**(7.9)**
Public equity	34.0	19.5	38.8	(14.1)
Private equity	5.6	(2.1)	6.3	(3.0)
Private debt	6.8	6.1	8.7	3.9
Absolute return	9.4	8.8	8.9	16.0
Interest rate sensitive	**41.8**	**7.2**	**40.0**	**(12.2)**
Fixed income	41.8	7.2	40.0	(12.2)
Inflation-sensitive bonds	-	-	-	-
Inflation sensitive	**6.9**	**0.6**	**6.2**	**10.6**
Infrastructure	3.5	6.7	2.5	6.8
Real estate	3.4	(4.6)	3.7	12.5
Short-term money market and funding	**(4.5)**	**5.7**	**(8.9)**	**2.2**
	100.0	**10.2**	**100.0**	**(9.1)**

[11] Net returns are net of investment management and performance fees.

Asset class overview

The Plan's asset mix is diversified across a broad range of asset classes, organized in three categories: return enhancing, interest rate sensitive, and inflation sensitive. Under this structure, we divide our total fund assets based on their exposure to key economic drivers as well as their risk-return characteristics and roles in funding the pension.

Each year, we review the mandate and strategies in each asset class across a number of dimensions, including investment performance, evolving market outlook, value-add and risk profile, and capital efficiency. The findings from these reviews inform the next stages of our portfolio evolution.

Active strategies to manage short-term volatility

A thoughtful mix of passive and active strategies helps us capture opportunity and spread investment risk across factors such as geography, currencies, sector, duration, and asset classes. UPP employs active management strategies to enhance returns, provide diversification, and create better alignment with our assets and liabilities. We use these strategies when there is demonstrable benefit to the fund's long-term stability and we can capture much higher value for our members. Where we see less opportunity, we focus on lower-cost passive alternatives to provide diversification and exposure at the total portfolio level. UPP's benchmarks provide guidance for our active strategies on expected risk and return on a long-term basis.

As of December 31, 2023, UPP's portfolio employed $5.6 billion in active strategies and $6.1 billion in passive strategies. Our active portfolio includes strategies in public equity, private equity, private debt, absolute return, infrastructure, and real estate. Over two years, these programs generated a 1.96% net return above the active portfolio benchmark return of 1.95%.

RETURN-ENHANCING ASSETS

Asset mix weight: 55.8% ($6.5B)
One-year return: 13.1%

Return-enhancing assets–which include public and private equities, 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. Active investors can capitalize on volatility to better manage risk and improve returns over longer periods.

Aside from private equity, the two-year performance for all active programs in our return-enhancing asset class has outperformed benchmarks, particularly in private debt and absolute return strategies. In the short to medium term, the transitional state of UPP's portfolio will likely continue to impact benchmark performance for this portfolio.

The portfolio's strong one-year performance was driven primarily by public equities. Following steep losses in 2022, markets rose in 2023 in response to a rise in economic growth and expectations for stable or lower interest rates and for lower inflation. A highly concentrated rally in U.S. tech stocks, which are underrepresented in our current portfolio, led to minor underperformance relative to the broader markets. The portfolio performed slightly above our benchmark on a two-year basis.

For 2023, our diversified portfolio of absolute return strategies provided good returns due to dynamic allocations across liquid asset classes and markets. On a two-year basis, the portfolio outperformed our benchmark.

One-year returns for private debt lagged slightly behind broader market performance due to significant pre-existing investments in growth and emerging market strategies but performed well on a two-year basis, benefiting from higher interest rates and a broadening opportunity set in the market.

Private equity, which was also impacted by similar trends on pre-existing assets seen in private debt, was the only asset class with negative benchmark performance for the second year in a row.

Impact of illiquid asset classes on our portfolio

Private equity and private debt are illiquid asset classes, which cannot be easily bought or sold and typically have longer holding periods. These investments were at varying stages of the investment lifecycle when UPP created the unified portfolio. Both the challenges in buying and selling and the longer holding periods limit the speed at which we can transition the portfolios to achieve performance relative to our benchmarks that is reflective of our investment strategy. We anticipate stronger results as we become able to redeploy the distributions from these positions and transition the portfolios toward our long-term strategy.

INTEREST RATE–SENSITIVE ASSETS

Asset mix weight: 41.8% ($4.9B)
One-year return: 7.2%

Allocations to assets such as fixed income generally reduce funding risk over the long term by helping offset the effects of changing interest rates on liabilities. This includes long-dated government bonds, which are a stable source of long-term returns and help align our fixed income portfolio with the interest rate sensitivity of our liabilities.

UPP's interest rate–sensitive portfolio, consisting mainly of passively managed, longer-term Canadian federal and provincial government bonds, performed well over one year following a boost in bond values in the last quarter of 2023.

As we transition toward our target asset mix, we will continue building our core position in longer-term government bonds and aligning the duration (or interest rate sensitivity) of the Plan's assets and liabilities. Additionally, we will continue to look at strategies related to inflation-linked bonds to better manage our risk to higher-than-expected inflation and the inherent sensitivity of our (conditionally) inflation-linked benefits.

INFLATION-SENSITIVE ASSETS

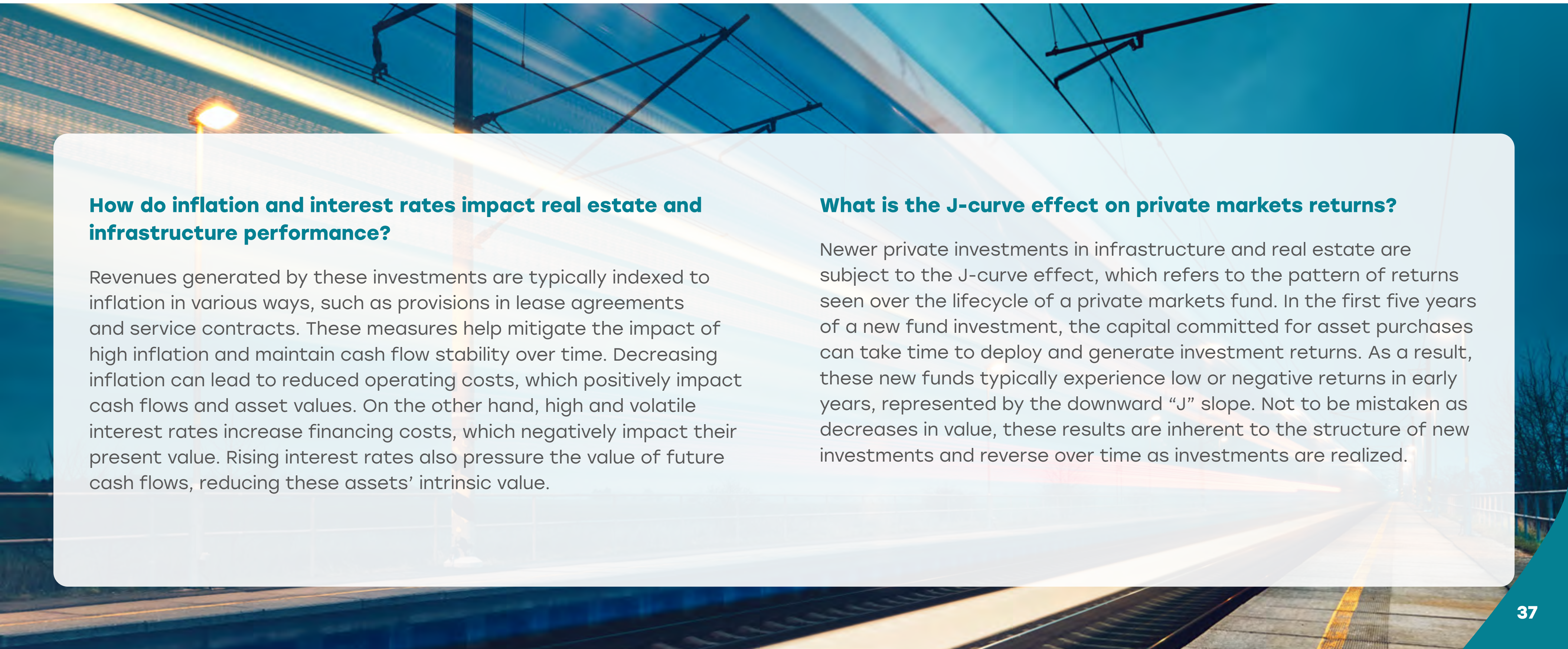
Asset mix weight: 6.9% ($0.8B)
One-year return: 0.6%

Real assets such as real estate and infrastructure provide stable long-term returns while helping mitigate the impact of inflation on the long-term value of the Plan's liabilities, which are linked to salary levels and partially indexed to changes in inflation.

Over two years, UPP's infrastructure portfolio has slightly outperformed its benchmark, with moderate underperformance in real estate. In the short to medium term, the transitional state of UPP's portfolio will likely continue to impact our benchmark performance for both categories.

Despite a rapid decline in inflation and rise in interest rates, our inflation-sensitive assets produced positive one-year returns. While infrastructure assets exhibited reliable cashflows and other positive fundamentals, a significant number of our newer investments were subject to the typical J-curve effect in private markets, resulting in a minor lag in returns that will dissipate as the investments mature.

As seen in the broader market, high interest rates and illiquid exposures to office real estate led to negative performance for real estate investments overall. While our current portfolio has some exposure to office real estate, it is not a prominent feature of our forward strategy. Overall, we will continue growing UPP's infrastructure and real estate exposure over time in areas aligned with our strategies.



How do inflation and interest rates impact real estate and infrastructure performance?

Revenues generated by these investments are typically indexed to inflation in various ways, such as provisions in lease agreements and service contracts. These measures help mitigate the impact of high inflation and maintain cash flow stability over time. Decreasing inflation can lead to reduced operating costs, which positively impact cash flows and asset values. On the other hand, high and volatile interest rates increase financing costs, which negatively impact their present value. Rising interest rates also pressure the value of future cash flows, reducing these assets' intrinsic value.

What is the J-curve effect on private markets returns?

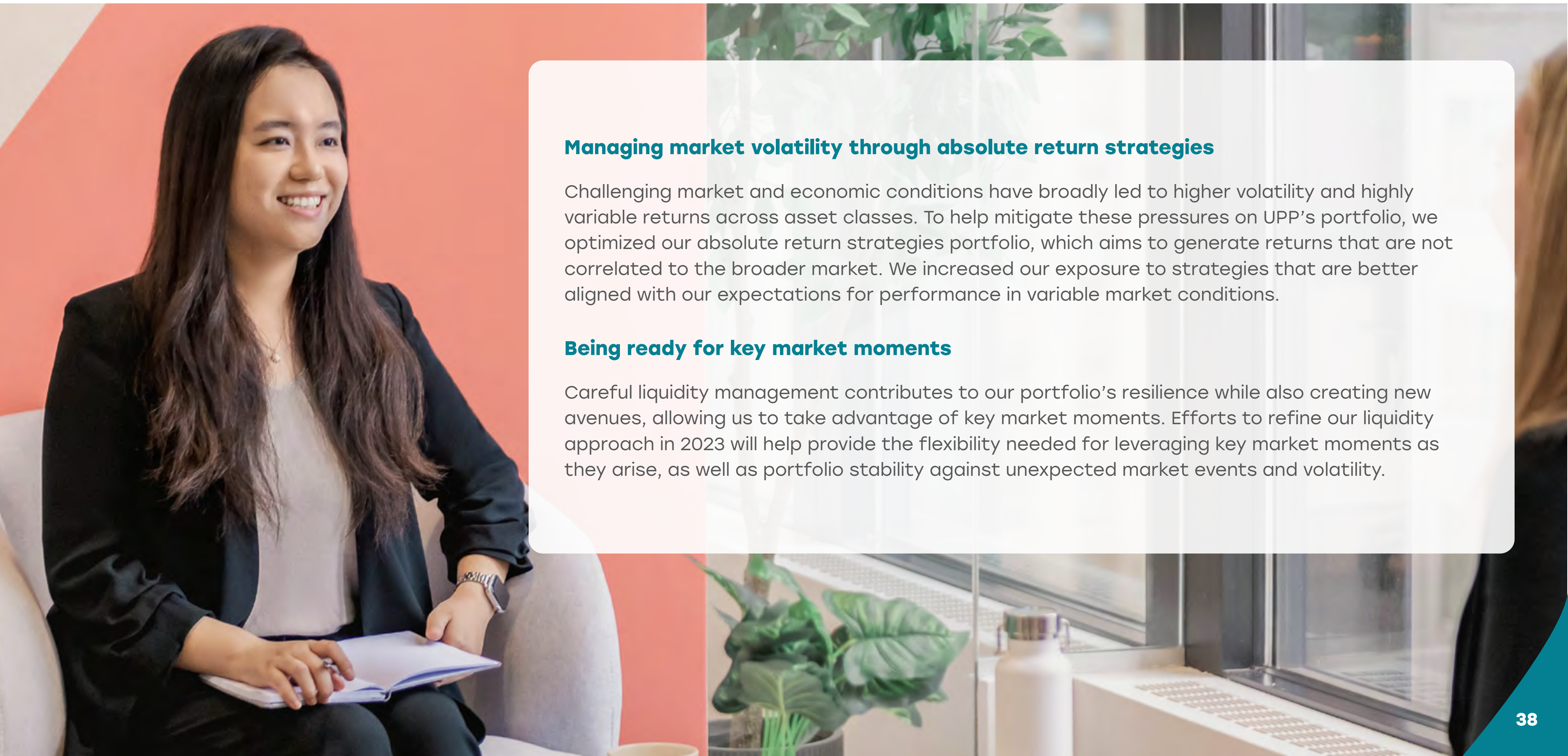
Newer private investments in infrastructure and real estate are subject to the J-curve effect, which refers to the pattern of returns seen over the lifecycle of a private markets fund. In the first five years of a new fund investment, the capital committed for asset purchases can take time to deploy and generate investment returns. As a result, these new funds typically experience low or negative returns in early years, represented by the downward "J" slope. Not to be mistaken as decreases in value, these results are inherent to the structure of new investments and reverse over time as investments are realized.

SHORT-TERM MONEY MARKET AND FUNDING

Asset mix weight: -4.5% (-$0.5B)
One-year return: 5.7%

The ability to dynamically change our exposures in a fast-moving market is an important part of our strategy. Proactive liquidity planning helps us maintain our desired asset mix and meet our liability obligations while remaining a reliable source for markets when liquidity is scarce.

At the end of 2023, UPP lowered our leverage by holding more assets in our short-term money market portfolio. The prudent use of leverage will provide portfolio resilience and increase our ability to take advantage of opportunities linked to potential higher volatility in 2024.



Managing market volatility through absolute return strategies

Challenging market and economic conditions have broadly led to higher volatility and highly variable returns across asset classes. To help mitigate these pressures on UPP's portfolio, we optimized our absolute return strategies portfolio, which aims to generate returns that are not correlated to the broader market. We increased our exposure to strategies that are better aligned with our expectations for performance in variable market conditions.

Being ready for key market moments

Careful liquidity management contributes to our portfolio's resilience while also creating new avenues, allowing us to take advantage of key market moments. Efforts to refine our liquidity approach in 2023 will help provide the flexibility needed for leveraging key market moments as they arise, as well as portfolio stability against unexpected market events and volatility.

How we invest

In-house, professional investment management

UPP's Investment team deploys and manages investments through a mix of external manager relationships and private market fund investments. Our approach combines focused active and passive investment strategies at the asset class level with comprehensive asset allocation, risk, liquidity, and ESG management at the total fund level.

Our team seeks long-term risk-adjusted returns by:

- resizing, repositioning, and proposing strategies in line with our target asset mix and within defined mandates and authorities;
- identifying and analyzing new investment opportunities and partnerships;
- selectively introducing and managing active strategies;
- constructing portfolios by investing in strategies managed by external partners while selectively growing internal ones;
- embedding ESG considerations in investment analysis, portfolio management, and stewardship activities across our portfolio; and
- executing timely and cost-effective transactions, with a keen focus on total fund liquidity.

Applying a focused risk lens

We understand how important pension security is for our members. UPP's Portfolio Construction and Investment Risk team helps ensure Plan assets are invested prudently and sustainably by measuring, monitoring, and understanding risk at the total fund level and gaining deep portfolio insight to effectively manage risk. To gain deeper insight into the material risk exposures in our portfolio and those of our investment managers, we evaluate many dimensions of risk, including market, concentration, ESG, liquidity, and regulatory risk, across various time horizons. These insights help us avoid undue risk concentrations, optimize return on risk, and inform strategy decisions and discussions.

Bringing aspects of asset-liability (AL) modelling in-house

AL modelling is an essential and ongoing input to UPP's portfolio analysis to ensure the portfolio of assets can perform its primary role: fund members' pensions. AL studies require extensive knowledge and custom modelling of both assets and liabilities, to understand how each could respond—together and independently—to changes in our external environment. In 2023, we brought more elements of the AL modelling process in-house, allowing our teams to simulate and study the Plan's sensitivities to a broad variety of economic scenarios, including those involving market shocks. This enables a better understanding of where key risks for the Plan exist and what changes may be required to our target asset mix over time.

Embracing smart risk-taking in investments

Our Investment team is committed to embracing a smart risk-taking culture by proactively balancing risks and opportunities to meet UPP's long-term pension obligations. Since launching the Plan, we have taken steps to establish a portfolio where investment risk—which is necessary to achieve adequate returns—is well understood, managed, and optimized. In 2023, we started implementing a scalable, fund-wide investment risk solution to help achieve this.

"We're on an exciting journey to integrate a robust investment risk framework into portfolio construction and our everyday investment activities. By gaining new insights, we can act quickly and with precision to protect our portfolio and evaluate future opportunities our members can benefit from."

Joyce Chen
Senior Director, Investment Risk

Enhancing performance and impact through trusted partnerships

Our partnerships with external investment managers play an essential role in implementing our investment strategy, so alignment on our vision and values is crucial.

When evaluating current and prospective partners, we consider a broad range of operational, investment, and ESG factors reflected in an organization's structure and practices. UPP selectively works with investment managers who:

- are aligned with our investment beliefs and responsible investing approach and ambitions;
- can generate long-term performance;
- support strong risk management;
- have the capacity to provide portfolio transparency and lower fees;
- offer reasonable investor rights and protections, allowing us to exercise our stewardship priorities through the portfolio; and
- seek a collaborative and mutually beneficial relationship based on exchanging strategic insights and best practices.

Disciplined due diligence and dialogue help us understand the investment commitments, capabilities, and goals of our current and prospective partners.

See Appendix 4 for a list of our investment partners with $50 million or more of our assets under management and view our top single-name public equity holdings.

Building sustainable value through stewardship

UPP seeks to use our influence as an institutional investor and our partnerships to catalyze positive change in both our investment portfolio and the broader economy. We firmly believe in the power of stewardship as a lever for value creation, risk management, and improved corporate practices.

What is stewardship?

"Also known as 'active ownership', stewardship is the use of influence by investors to maximise overall long-term value including the value of common economic, social and environmental assets, on which returns and clients' and beneficiaries' interests depend."

–Principles for Responsible Investment

Effecting change in multiple ways

As stated in our investment beliefs, creating value and managing risk involve exercising UPP's voice to influence outcomes related to material issues, including environmental, social, and governance (ESG) factors. Given the potential impact of our stewardship activities, we approach them with the same intention and rigour as selecting and allocating investments. We use active ownership, policy advocacy, and collaboration with other investors and stakeholders to drive positive shifts in corporate behaviour while maintaining autonomy in our investment and proxy voting decisions.

UPP's stewardship levers

Advocacy
Promote market-wide sustainable standards and practices

Direct engagement
Engage in direct dialogue with companies to influence corporate behaviour

Collaborative initiatives
Collaborate with other investors or market actors to engage in dialogue with companies

Third-party engagement
Leverage our engagement service provider and external managers to participate in engagement activities

Proxy voting
Use our public company votes to drive change among companies and corporate directors

When we see the potential for material negative financial impact and when engagement or other activities have not influenced positive change, we will consider excluding investments from our portfolio. Generally, we see exclusions as a tool to mitigate investment risk rather than for changing behaviours on systemic issues. Read more about this in our Investment Exclusion Policy.

Exercising our influence with portfolio companies

At UPP, we use direct and collaborative dialogue to engage with management teams and boards from our portfolio companies and with our external investment managers. Whether we are leading engagement activities or supporting broader efforts through collaborative work, generating measurable progress on material ESG issues drives our activities.

Our engagement efforts are focused on the adoption of best practices that support risk management, long-term value creation, and enhanced disclosure, enabling better investment decision-making. In 2023, these efforts led to tangible progress from Canadian and global companies on key ESG topics.

Working with like-minded investors and partners enhances access to global tools, data, and best practices while delivering a strong, unified voice to companies about material matters.

2023 stewardship highlights

Engaged public companies on important ESG issues
Partnering with Shareholder Association for Research and Education (SHARE) helps expand UPP's engagement reach within our public company portfolio. As a result of efforts SHARE undertook on our behalf, **close to a third of nearly 100 companies** made progress against one or more objectives related to climate change, decent work, human rights, or reconciliation. For example, SHARE secured commitments from five Canadian banks to undertake racial equity audits to identify any inequitable impacts of their employment and business practices. See our full list of partners and associations.

Directly engaged companies to drive credible climate plans and disclosures
Direct engagement allows us to better understand companies' unique circumstances so we can meet them where they are on their journeys in adopting better business practices concerning climate change. As a founding participant of Climate Engagement Canada (CEC), a finance-led initiative that voices the need for Canadian companies to accelerate climate action, UPP is actively engaging with high-emitting Canadian companies to increase their climate ambitions and strengthen related business and disclosure practices.

UPP's participation and the CEC's targeted efforts contributed to key outcomes in 2023, including a Canadian oil and gas company announcing a target to reduce absolute methane emissions in its upstream operations by **80% from a 2019 baseline** by year-end 2028.

Encouraged enhanced disclosures with the Canadian Coalition for Good Governance
As a member of the Canadian Coalition for Good Governance (CCGG), UPP contributes to efforts that encourage the boards of Canadian issuers to improve governance practices and enhance disclosures. Since 2019, **over 80%** of companies the CCGG has engaged with are making material, positive changes to their governance-related policies, practices, or disclosures.

Promoted science-based climate targets
Alongside institutional investors globally representing **close to $37 trillion in assets**, UPP joined the CDP Science-Based Targets Campaign, asking high-climate-impact companies to commit to setting science-based climate targets through the Science Based Targets Initiative (SBTi). The SBTi's work helps companies set credible pathways to net zero through a target validation process and focuses on increasing climate accountability through public disclosure.

In 2023, **close to 100 new companies** with a combined market cap of **over $3.5 trillion** committed to setting a science-based target to be validated by the SBTi, and financial sector support for the CDP campaign increased by 30%. As part of our work on SBTi and in line with our Climate Stewardship Plan, UPP asked three companies in the materials and industrials sectors to adopt science-based targets, which would be assessed by the SBTi. By the end of year, one company had proceeded to do so.

Advocating for sustainable public policy and market standards

We selectively communicate with regulators and policymakers—either independently or with like-minded peers—to encourage fair and efficient public policy, government regulations, and market systems that support the Plan's objectives.

For example, in 2023, UPP partnered with Canadian pension peers to advocate for Canadian adoption of the sustainability and climate disclosure standards issued by the International Sustainability Standards Board (ISSB). Reporting that follows the ISSB's new global standards would provide UPP, our investment partners and corporate boards and management teams with decision-useful and comparable information to support investment activities and management practices. Global standards would also result in more efficient reporting processes for the companies we invest in and foster a healthier financial system over the long-term. See the statements supporting the ISSB standards.

Supporting responsible ESG practices through proxy voting

As a company shareholder, we exercise our voting rights to clearly communicate our expectations and hold publicly traded companies accountable for implementing responsible ESG practices. Priorities that influence our voting decisions include supporting sound corporate governance practices, encouraging meaningful progress on equity, diversity, inclusion, and reconciliation, and driving climate transparency and accountability.

Our Proxy Voting Policy states our positions and expectations on an array of issues focused on enhancing shareholders' long-term economic interests. These guidelines are publicly available and applied across our public equity holdings when we have voting rights.

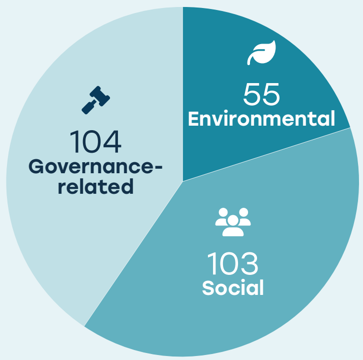
Using our votes to influence key corporate issues

UPP publicly discloses all votes cast on our website, along with rationale for votes against board or management recommendations, votes on shareholder resolutions, and votes that deviate from our Proxy Voting Policy.

To amplify the impact of our votes, we discuss our vote rationales with the boards and management teams of select companies. This also gives us the opportunity to share information and expertise that may help shift perspectives and produce positive change.

When UPP began creating a unified portfolio in July 2021, one of our priorities was migrating our voting rights in-house to increase our ability to influence key issues in our portfolio. Since then, the proportion of the public companies in our portfolio for which we exercised voting rights has increased to over 40%. The shareholder proposals we vote on will help drive stronger practices and accountability on important ESG topics that can impact our returns.

UPP's shareholder proposal votes in 2023



In 2023, at over 2,000 meetings and for nearly 1,200 companies, UPP submitted roughly 3,000 votes against director elections due to insufficient board independence, lack of climate oversight, or lack of gender and/or racial diversity. For more detail, see our Proxy Voting Reports.

SPOTLIGHT

Leveraging stewardship to advance equity, diversity, inclusion, and reconciliation

At UPP, we treat equity, diversity, inclusion, and reconciliation as an essential driver for success. We firmly believe that diverse teams, perspectives, and lived experiences enhance decision-making and create more effective and adaptable environments, ultimately benefiting overall performance.

UPP generally supports shareholder proposals that seek:

- greater diversity and participation of underrepresented groups on boards, in management, and across organizations;
- a minimum of 30% representation of women on a board and at least one member of a traditionally underrepresented group; and
- defined Indigenous rights and reconciliation policies and practices with measurable targets and timely, comprehensive disclosure consistent with the United Nations Declaration on the Rights of Indigenous Peoples and the Truth and Reconciliation Commission of Canada's Calls to Action.

In 2023, we actively engaged with our portfolio companies, external managers, regulators, and industries to drive progress on key issues. Our engagement activities included:

- **Direct discussions on board diversity:** We engaged directly with Canadian companies, emphasizing the importance of board diversity. In cases where diversity considerations were not met, we exercised our voting rights against directors.
- **Set expectations and collaborated with external managers:** We clarified our expectations and collaborated closely with our external managers to integrate equity, diversity, inclusion, and reconciliation principles into investment decisions and firm-level practices.
- **Advocated for enhanced disclosure:** We joined forces with other investors to advocate for improvements in diversity disclosure requirements for publicly traded companies. Our submission to the Canadian Securities Administrators highlighted the need for transparent reporting on diversity initiatives. Read the full statement.
- **Supported shareholder proposals focused on equity, diversity, and inclusion (EDI):** We actively supported shareholder proposals calling for EDI policies and disclosures, including on pay equity and specifically addressing gender, race, or ethnicity.

Our commitment to these initiatives reflects our belief that diverse perspectives drive better outcomes and contribute to a more resilient and successful investment landscape.

"We consider it our responsibility to use our voice to foster an equitable, diverse, and inclusive market. We assess how our partners embrace EDI within their investment processes and how it impacts their firm-level commitments and team composition. Through active engagement and advocacy, we hope to advance these values across all sectors and industries."

Maria Clara Rendon
Senior Director, Responsible Investing

Progress on our Climate Action Plan

First launched in July 2022, UPP's Climate Action Plan speaks to two deeply connected objectives: growing a strong, resilient fund that secures retirement benefits for our members today and far into the future and investing in a stable, healthy world for our members to retire into. We established a bold and clear set of climate-related commitments that seek to align our investment portfolio to net-zero GHG emissions by 2040 or sooner, with an emphasis on decarbonizing the real economy.

UPP will transition our investment portfolio to

net-zero GHG emissions by 2040 or sooner

With interim carbon footprint reduction targets from a 2021 baseline (tCO2-eq/$M invested):

16.5% by 2025 60% by 2030

"Clear and concerted efforts across our economy are needed to achieve a sustainable future. Our intention is to work with companies to build credible decarbonization strategies and to transition to net-zero-compatible business models."

Delaney Greig
Director of Investment Stewardship

2023 Climate Action Plan highlights

Last year's progress is key to both managing the impacts of climate change on fund performance and capitalizing on opportunities to enhance our ability to create long-term value.

- Achieved a 14% reduction in our portfolio carbon footprint in 2023 and a total 17% reduction against our 2021 baseline, exceeding our 2025 interim target.
- Our emissions reduction targets were reviewed and accepted by the Net-Zero Asset Owner Alliance (NZAOA).
- Published a target to commit at least $1.2 billion to climate solutions by 2030 and committed over $400 million toward this target.
- Participated in the Bank of Canada's project to assess the systemic implications of climate transition risk to the Canadian financial system. The project provided a detailed analysis of both UPP's and the overall financial system's credit and market risk exposure in four distinct climate scenarios.
- Supported Climate Engagement Canada in the design and implementation of a net-zero benchmark that assesses climate action and disclosures of the highest-emitting Canadian companies.
- Implemented and published our Climate Stewardship Plan, which sets out how we engage with portfolio companies and market actors to encourage the net-zero transition and climate-related disclosure.
- Published our Climate Transition Investment Framework, which helps us systematically evaluate the transition alignment and readiness of our current portfolio and new investment opportunities. The Framework defines climate-related expectations for new investments and establishes monitoring for climate transition risks and opportunities.

Read the full update on our 2023 Climate Action Plan progress.

Target to commit capital to climate solutions

The ongoing transition to a low-carbon economy requires significant amounts of capital, which presents opportunities for investors. In 2023, UPP announced we will commit $1.2 billion to climate solutions by 2030. Over time, these commitments–which we will make through private market funds, co-investments, and direct investments, as well as net-new allocations in public market or fixed income funds–will be deployed into qualifying investments. These include companies, assets, and technologies that can help mitigate the impacts of climate change and adapt to a changing climate. UPP will annually report on the value of commitments and actual investments in climate solutions to monitor our progress.

Setting a climate solutions target enables us to capitalize on opportunities related to the climate transition while enhancing our ability to provide long-term retirement benefits. Learn more about our target in our Climate Transition Investment Framework.

To monitor progress against our target, UPP will disclose new dollars committed to climate solutions investments annually. In addition, we will disclose actual dollars invested to monitor how the dollars committed are translating into climate solution assets across the portfolio over time.

2030 TARGET

$1.2B

total climate solution commitments

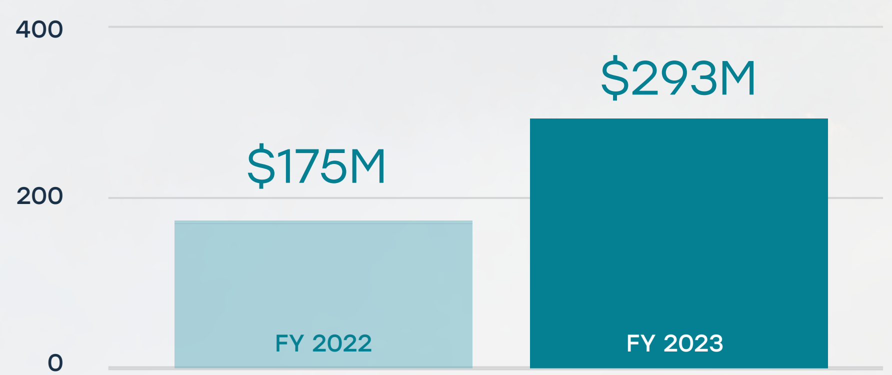
COMMITTED

$400M

to climate solutions in 2023

In 2023, UPP also had over $290 million in qualifying investments in our portfolio, up from nearly $175 million in 2022.

Climate solution investments
Year-end market value ($)



2023 portfolio carbon footprint

To track our progress against our net-zero commitment, we annually calculate and report the emissions associated with our investments. Much like investment returns, carbon footprints are driven by several factors, such as market volatility, that can lead to short-term fluctuations. This is why we maintain a dual focus on decarbonizing both our portfolio and the real economy, providing transparency along the way.

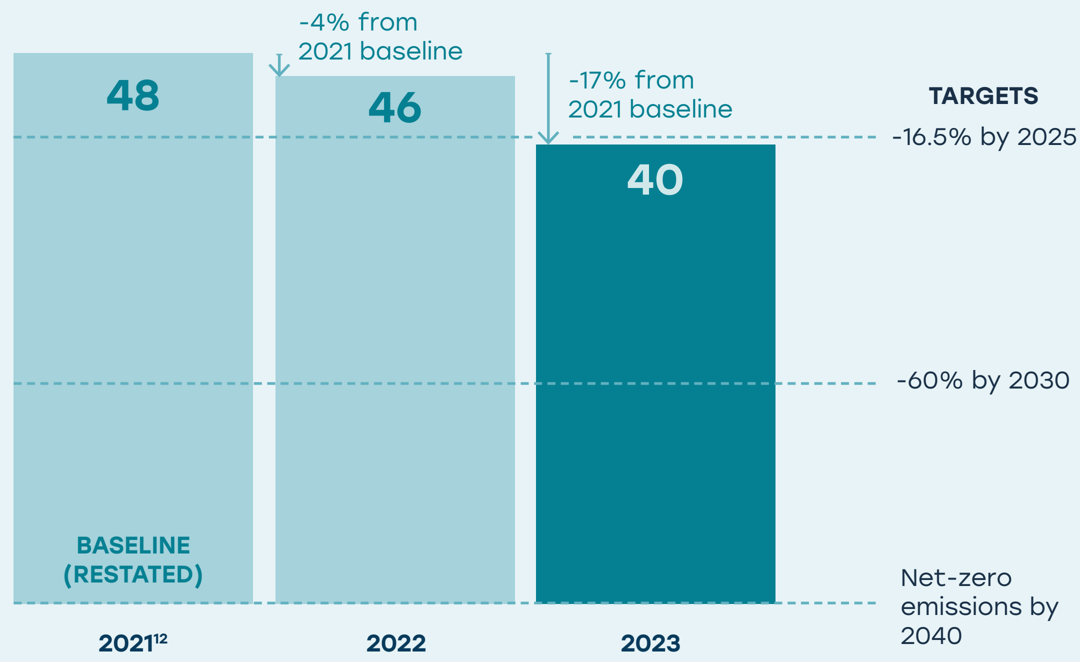
Our portfolio carbon footprint decreased by 14% in 2023, driven primarily by a reduction in emissions intensity within many of our asset subclasses, particularly in public equity, and a reduced exposure to corporate fixed income. As a result, we achieved a total 17% reduction against our 2021 baseline, exceeding our 2025 interim target. We will continue to strive for further reductions toward our next threshold: achieving a 60% reduction by 2030 against our 2021 baseline.

2023 operational carbon footprint

We assess our operational GHG emissions with calculations based on the Greenhouse Gas Protocol Corporate Accounting and Reporting Standard [Corporate Standard | GHG Protocol], the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard [Corporate Value Chain (Scope 3) Standard | GHG Protocol], and associated guidance.

See Appendix 2 for an overview of UPP's portfolio and operational carbon footprints and our methodologies for both.

UPP'S 2023 carbon footprint and targets
Metric tonnes CO2-eq/$M invested



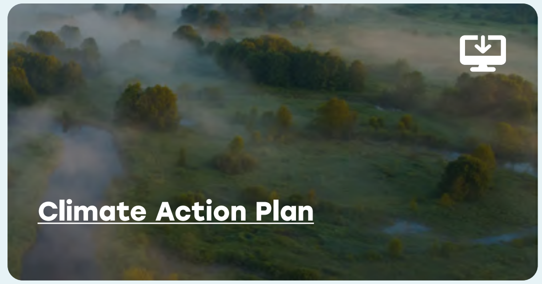
[12] To maintain comparability in our year-over-year reporting and the integrity of our targets, we restated our 2021 footprint under a revised methodology. This methodology, which we have been using since 2022, allows us to estimate GHG emissions of investee companies with greater accuracy.

Committed to transparency and leading reporting practices

UPP annually publishes our progress on our Climate Action Plan. Currently, our reporting is aligned with the recommendations provided by the Task Force on Climate-related Financial Disclosures (TCFD). Moving forward, we will start aligning our disclosure with the new global standards published by the International Sustainability Standards Board (ISSB). These standards consolidate existing disclosure guidance on the consideration of sustainability-related risks and opportunities. We will also report on our net-zero progress in line with the Net-Zero Asset Owner Alliance requirements.

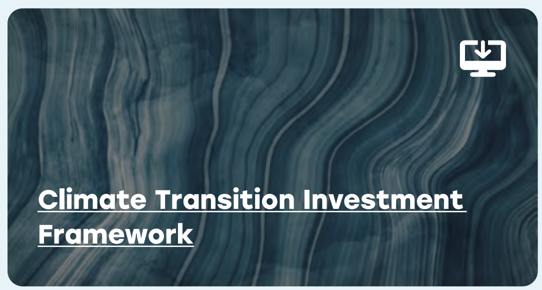
Learn more about our approach to responsible investing.

Explore more responsible investing content on myupp.ca

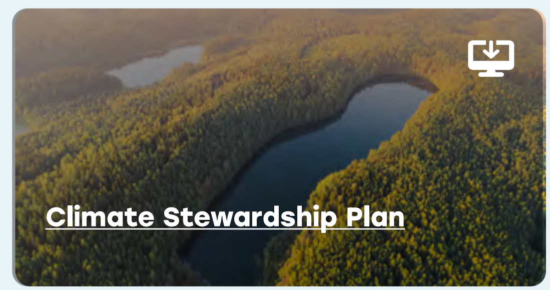


Part of being a responsible investor is advancing climate readiness across our portfolio. Our Climate Action Plan details UPP's commitment and path to net-zero portfolio emissions by 2040 or sooner, with an emphasis on decarbonizing the real economy.

We believe that disclosing our public company votes is an important step that supports transparency with our members and increases the impact of our votes. Proxy voting activity for UPP's segregated fund mandates is publicly searchable in our real-time database.



The Climate Transition Investment Framework was created to support the commitments outlined in UPP's Climate Action Plan. It supports our ability to manage the impacts of climate-related risks on fund performance and capitalize on opportunities for long-term value creation.



This Climate Stewardship Plan sets out the steps UPP is taking from 2023 to 2025 to realize the stewardship commitments of our Climate Action Plan and address the risks associated with climate change and encourage the transition to a more resilient world with net-zero GHG emissions.

Strong investment and risk accountability

With Board oversight, UPP's Investment team sets the total fund strategy and manages the asset mix with clear principles, limits, and thresholds codified in our investment policies. Since investing and investment risk are intrinsically linked, these aspects are governed and managed together.

Together, our Statement of Investment Policies and Procedures (SIPP) and Asset Mix and Investment Risk (AMIR) Policy set out the principles and Board-defined guardrails within which UPP invests and manages assets. These guiding policies establish acceptable ranges of asset class and subclass exposures, risk principles and limits, and guidance on ESG integration to:

- generate sufficient returns to meet UPP's current and future pension obligations,
- create a resilient portfolio that will perform through a variety of future environments, and
- allow for an efficient asset mix transition.

Underpinning these total fund policies are an array of frameworks that set out clear boundaries and responsibilities for aspects such as counterparty, risk, liquidity risk, portfolio rebalancing, and currency hedging.

UPP's responsible investing policies reinforce the SIPP and AMIR with specific guidance on how we will consistently and comprehensively incorporate ESG factors in our investment management and stewardship activities. Learn more about our approach to responsible investing.

Proactive reporting and oversight

The Management Investment Committee (MIC) is our central forum for overseeing the development and execution of UPP's asset class strategies, including responsible investing, and operational infrastructure. It includes senior leaders across investments, finance, risk, and legal. It is chaired by the Chief Investment Officer, who reports to the CEO and the Board's Investment Committee.

The Investment Committee of the Board oversees UPP's investment policies, asset mix decisions, and significant new investments and monitors UPP's overall investment risk exposure, responsible investing integration, and progress against our Climate Action Plan.

Climate and ESG risk oversight

Our oversight of climate and ESG risk at the Management and Board levels reflects our belief that these complex factors carry the potential to materially impact our investments, operations, and ability to deliver long-term value to members. UPP's Senior Managing Director of Responsible Investing regularly reports on ESG strategies and developments to UPP's MIC and Board.

Serving our members

Delivering dependable, lifelong pension security

UPP was founded with a promise of a dependable and secure lifetime pension income for our members while delivering service excellence and giving members a voice in their plan.

Continued to provide predictable contribution rates and lifetime benefit levels since 2021.

40,358
total members

21,594
active members

12,676
members receiving a pension

6,088
deferred vested members

$47,909
average annual pension for newly retired in 2023[13]

2,471
new members in 2023[13]

568
new retirees in 2023[13]

1.7
ratio of working to retired

65
average retirement age

38
retired members over 100

[13] Based on data at October 31, 2023

Pensions indexed at the full 75% for 2024

Effective January 1, 2024, retired members, survivors, and dependents in pay will receive an increase of 3.54% to their pensions accrued under UPP provisions. Learn more about UPP's 2024 inflation protection increase.

What is inflation protection?

Inflation protection is a valuable benefit designed to increase the amount of a member's monthly pension in pay through a cost-of-living adjustment based on the increase in the Canadian Consumer Price Index. The cost-of-living adjustment is also sometimes referred to as indexation.

Q&A with our CPSO

Joanna Lohrenz, Chief Pension Services Officer

In 2023, we focused on building UPP's new member service experience to directly support our 40,000+ members today and new members in the future. Our Chief Pension Services Officer, Joanna Lohrenz, shares more about our transition to providing a full range of pension services to UPP members, the Plan's funding status, and what members can expect from UPP moving forward.

With all the news about market volatility, rising interest rates, and inflation, are members' pensions secure?

UPP proudly provides a predictable, secure retirement income for life to our members in Ontario's university sector. A key feature of defined benefit plans like UPP is knowing exactly what you'll get at retirement. That security is so important, especially during these periods of economic stress.

Our investment strategy is purposefully designed for long-term results, which means we are positioned to navigate market and economic uncertainty now and in the future. In 2023, despite continuously challenging market conditions, we ended the year in a strong position. Our 10.2% annual rate of return and a 102% funding ratio help strengthen the Plan's long-term financial health and sustainability.

How would you describe UPP's service philosophy? What can members expect when joining UPP?

UPP's service philosophy is member-driven: it's all about understanding our members' needs and leveraging our people and expertise to serve them better. In developing our service model, we directly consulted members through listening sessions, discussion forums, and surveys. The perspectives and feedback we received remain essential inputs in shaping our path forward, and we view ongoing engagement with members as integral to our growth and success on their behalf.

With that, we are truly excited to launch our new member service experience, which was configured using direct member insights. In fall 2024, UPP members will receive pension services and support directly from UPP's Member Services team. We'll be offering a variety of self-serve options, giving members access to their pensions in real time.

Joanna Lohrenz
Chief Pension Services Officer

A core feature of our new offering will be the myUPP Member Portal, which will replace third-party service providers from the founding plans. This is a secure, digital platform designed to guide and inform in all pension matters—everything from asking a question to accessing pension information or estimating a future pension. For pensioners, the portal provides easy access to pension documents, hassle-free banking updates, and quick answers to pension-related questions.

Providing easily understood information that helps our members make informed decisions and demystifies their pensions will be key to our service approach. We're updating our website to become every member's first stop for general Plan information and learning opportunities, and our Member Services team will be reachable in a few ways: secure messages in the myUPP Member Portal and by phone or mail. Members can expect our team to be there for the moments that matter—whether that's for coordinating a life event like a parental leave or applying for their pension—or even a quick question about completing a form.

What are UPP's plans for the future?

Right now, we're focused on establishing a full range of pension services to our members, including a team of pension experts and the myUPP Member and Employer Portals. Our priority is ensuring a smooth transition to the portal for all Plan members this coming fall. As part of these efforts, we're also developing new resources for members to learn about their pension, such as on-demand webinars and other educational materials.

I'm deeply appreciative of the time and efforts that my team at UPP, UPP's Joint Sponsors, and our partners across our member universities and organizations have invested in bringing our member service model to life. It has been a massive endeavour, and we should all be proud of the incredible work that's been done up to now.

Will you continue adding new universities to the Plan?

Yes, we will be welcoming more members in the future. Growth in our capabilities and in our membership is an integral part of UPP's path forward. The last couple of years have shown us that UPP has a role to play in increasing access to pensions and serving the university community. More plans have committed to join, and we're having ongoing discussions with other Ontario universities and sector organizations.

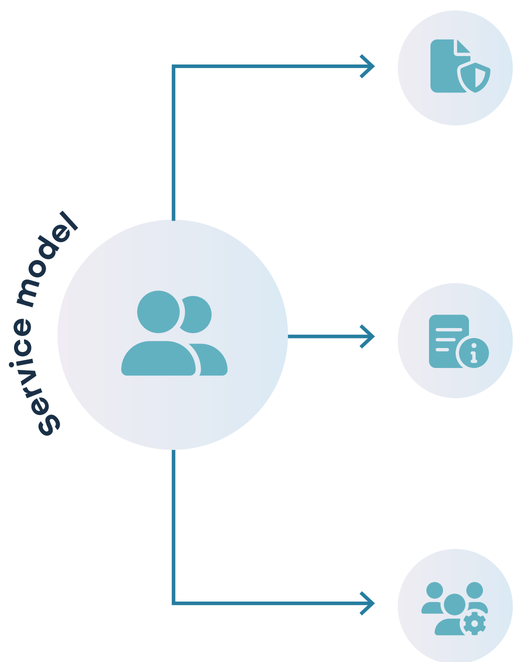
All Ontario universities and sector organizations, with any past and present plan types, including those without a plan, are welcome to join UPP. Learn more about joining UPP.

"With our new member experience launching in fall 2024, members can expect our team to be there for the moments that matter, big or small. Providing easily understood information that helps our members make informed decisions and demystifies their pensions will be key to our service approach."

Joanna Lohrenz
Chief Pension Services Officer

Our modern, member-driven service model

Central to our organizational strategy is a commitment to provide proactive, personalized service to members and participant organizations through state-of-the-art systems, tools, and techniques. Our service model's **three core pillars** reflect our members' expectations, values, and priorities.



Data: Secure, agile data capabilities to deliver proactive service

Information: Useful, accessible information, resources, and planning tools based directly on members' evolving preferences and needs

Personalization: Personalized support and information to help inform members' important life decisions

Member insights

By surveying our members, we learned they want access to information in a variety of modes and options to ask questions and update pension-related information.

NEARLY
60%
prefer online, self-serve options to update their information.

OVER
70%
want access to advice while having autonomy to make their own decisions.

OVER
75%
want to learn more about their pension.

What UPP members can expect

In fall 2024, all UPP members will begin receiving pension-related service and support from UPP's Member Services team instead of their employers, as most do today.

UPP's dedicated team of pension experts will provide personalized and proactive pension-related support through several communication channels.

The **myUPP Member Portal** will offer a secure digital environment where members can collect and update information and interact with UPP's Member Services team. Tasks that can be conducted through the portal include:

- planning for the future by running pension estimates for various ages, work statuses, and key dates;
- communicating securely with UPP Member Services;
- receiving and returning electronic documents securely;
- updating personal, spousal, and beneficiary information;
- viewing member information, including recent service and pensionable earnings;
- submitting pension application request online; and
- updating banking information and viewing payment history.

In line with member feedback, our website will deliver an accessible, user-driven digital experience and serve as a resource hub, featuring intuitive content about Plan features and developments and opportunities to learn about the Plan. Feedback surveys embedded throughout our website will help us continue to capture and respond to members' needs. Learn more about these features.

Pension experts for moments that matter, big or small

In 2023, we welcomed several new pension specialists to support our members from early career through retirement. For questions about changing employers, starting a family, preparing for retirement, or quick pension-related questions, UPP's Member Services team will be there every step of the way.

"Our team's top priority is fostering a positive member experience. Being a member myself, I'm excited to bring my 15 years of pension experience to build strong relationships with our members and support them through every event in their pension journeys."

Aveena Murray
Specialist, Pension Services

Member feedback is critical

We are grateful for the important contributions our members have made in shaping our service approach. When our new service experience and updated website launch in fall 2024, we look forward to hearing members' thoughts through online feedback forms, by email, or by phone.

For any pension-related comments or questions, UPP members can contact our Member Services team:

Tel: 1 (833) 627-7877
Email: memberservices@universitypensionplan.ca

Managing costs

Managing costs in our transition from build to business as usual

UPP was created to bring the advantages of Ontario's world-renowned jointly sponsored pension plans to the university sector, and we have made significant progress toward this goal.At every step, we have pursued our foundational work with unwavering focus, oversight, and precision.

As we started building the Plan in 2021, UPP's Board of Trustees and staff were tasked with developing every operational aspect of a defined benefit pension plan from the ground up. That foundational build has encompassed the comprehensive investment capabilities and partnering functions needed to expertly manage the fund. It has also meant creating in-house pension administration and member services to securely administer the Plan for an ever-growing number of members and securing the specialized requirements and capabilities of a sector-wide solution designed for scale.

Building a cost-efficient and scalable Plan has required investments in core structures, talent, and tools, including multidisciplinary expertise in a range of areas across the organization. UPP's expense profile to date largely reflects those initial costs. As we move toward a business-as-usual operating state, while growing the Plan through new entrants and investment returns, UPP's expenses relative to our assets will normalize to levels similar to more mature pension peers.

Read more about our build journey and milestones to date.

"UPP's cost management starts at the strategic level and extends throughout our organization, serving as an anchor as we operate and grow UPP. We apply rigour in our annual budgeting and robust processes to balance diligent cost management today with prudent scalability in the future. All along, we ensure that the foundations built today will prime UPP for economies of scale and long-term cost efficiency, bringing enhanced, long-term value to our members."

Karen Rowe,
Chief Financial Officer,
Corporate Finance

2023 cost profile

Total costs ($millions)	**2023**	**2022**
Investment costs	110.8	104.9
Pension costs	37.3	19.7
Total	**$148.1**	**$124.6**

As we have moved through our foundational build, we have begun to see costs stabilize in areas of the Plan moving to a mature operating state, with continued development in other areas for the next two to three years.

The primary driver of our cost increase in 2023 is the work to complete UPP's pension service infrastructure and team, which will administer pension benefits directly to our more than 40,000 members in fall 2024 and offer a full-service suite to current and future employers. This multi-year project marks the final phase of our core build and sets the foundation to serve members today with care, and onboard future participants and their members with ease.

Meanwhile, investment-related expenses relative to assets are beginning to normalize and will continue to decrease as UPP grows. We are starting to experience cost efficiencies in line with our strategy, particularly as we optimize our investment portfolio and relationships with external managers.

UPP's investment and pension cost segments

Run the business

Costs reflecting UPP's ongoing day-to-day business operations, including people, technology, and corporate functions. As a multi-employer plan designed for growth, UPP incurs costs not typically seen in a traditional single-employer pension plan, such as specialized systems and teams to onboard new participants and accommodate increasing Plan scale and administrative complexity. While it requires economies of scale to offset the multi-employer plan's inherent cost, UPP was designed to deliver that cost efficiency while bringing the benefits of scale to members, such as easy pension portability between participating employers. We have plotted a path to a "business as usual" operating state where expenses relative to assets will normalize to a level more comparable to other mature peers as we bring on more members and assets.

While the 'run the business' cost segment typically captures the talent requirements to run UPP's core functions and drive UPP's long-term strategy, in the medium term, the portion of UPP resources involved in remaining 'build and transition' projects are allocated to that cost segment (see below) and will move to ongoing business execution once the foundational build is complete.

Build and transition

Costs to establish the core structures, systems and tools to confidently assume pension and investment responsibilities from the founding universities and deliver sustainable financial security to members. This segment includes one-time, specialized resources to partner with UPP's core team on system implementation and the development of UPP's operating structures. Once the 'build and transition' phase is complete, these temporary resource costs will phase out and all long-term talent costs will be captured under the run the business cost segment.

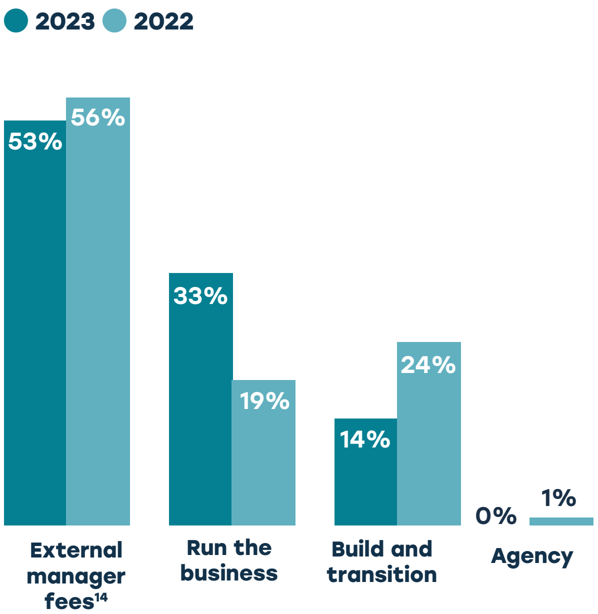
Agency

Costs 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 the pension services and investment administration infrastructure and systems. Investment administration agency costs ended in 2022.

Investment costs

$110.8M

2023 investment costs



$58.7M External manager fees

In 2023, we continued to transition our portfolio toward our strategic target asset mix, which included reducing public equities and increasing private assets in infrastructure and real estate. Compared to public or passively managed assets, private assets usually incur higher investment manager fees while also delivering higher overall returns and contributing to our value-add performance.

UPP's in-house teams negotiated significant fee savings on our new private market investments and renegotiated or transitioned out of higher fee strategies across our public markets portfolio in 2023. Our strategic partnerships with best-in-class general partners provide UPP with opportunities to co-invest on a no-fee basis, further reducing the total investment cost.

> **Leveraging scale, repositioning mandates, and optimizing exposures to reduce costs**
> UPP will continue to leverage our 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 strong value relative to their fees through persistent outperformance and alignment on critical areas such as risk and responsible investing.

$36.6M Run the business

2023 was UPP's first full year administering all investments and incurring related costs to build our investment expertise and support our in-house functions, as well as managing research, investment technologies and data, and custody fees to enable our investment strategies and administration. With the investment division and support functions now fully operational, these costs have begun to stabilize.

$15.5M Build and transition

In 2023, our shift from foundational build to investment administration resulted in decreased build and transition costs, with the remaining sum related to the implementation of key investment systems and technology.

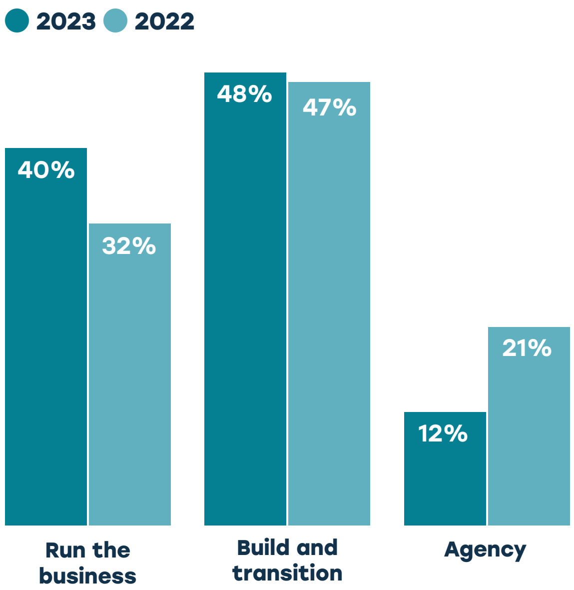
$- Agency

This cost was eliminated when the investment agency agreement with the University of Toronto ended on March 31, 2022, and UPP began administering investments for the entire portfolio in 2023.

[14] Reported in Net Investment Income in the Statement of Changes in Net Assets Available for Benefits.

Pension costs

$37.3M
2023 pension costs



$14.9M Run the business

In 2023, operating costs increased in support of launching UPP's full member and employer service offering come fall 2024. These costs primarily relate to longer-term talent requirements to finalize and execute UPP's end-to-end services offering and to onboard and support new incoming Plan participants, including associated support functions and roles in technology, legal, communications, and finance.

In 2023, a small allocation of these resource costs are included in build and transition reflecting core UPP team members involved in directing the final design of the pension services system and foundational operating model.

$17.9M Build and transition

Costs to implement UPP's pension administration system in 2023 in anticipation of the 2024 launch, including specialized resource requirements in data integration and system design. Once this work is complete and the business is operationalized, the specialized personnel costs will decrease and core talent will transition fully to the run the business segment.

$4.5M Agency

These costs, which are passed through to UPP on a cost-recovery basis, are related to oversight and to the continued pension administration services provided by the founding universities (and their respective service providers) as agents of UPP. In 2023, related costs decreased significantly as UPP and our founding universities prepared to wind down the agency agreements established at UPP's inception and transition all member service functions to UPP.

Managing risk

A risk-smart organization

Risk governance

Disciplined risk management at UPP began from day one and is a responsibility shared by all. Together, UPP's Executive Leadership team and Board help ensure that our risk management and compliance systems meet our evolving needs and that our risk culture remains strong.

Our approach to managing risk

As we implement our strategy and run UPP's operations, 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.

UPP's **Enterprise Risk Management Framework** defines how we manage risk, including roles and responsibilities, risk appetite guidance, risk taxonomy (types of risk), risk management process, and risk governance. As UPP evolves, we remain focused on enhancing our risk management capacities.

UPP's enterprise risk categories

Investment and funding risk
The inability to secure total fund returns or manage pension plan risks in order to pay benefits when they come due

Strategic risk
Associated with UPP's strategic choices, ability to implement our strategic decisions, or response to changes in the external environment

Operational risk
Risk of loss or other adverse impact resulting from people, inadequate or failed internal processes and systems, or external events

Legal and regulatory risk
Failure to implement, manage changes to, or otherwise abide by laws, regulations, and legal requirements, including our fiduciary duties

Reputational risk
Negative change in perception of UPP or our public image as a result of any event, behaviour, action, or inaction by UPP, our employees, or those with whom we associate

UPP's risk lines of defence

Our risk governance model is a key resource that defines how we manage risk, including roles and responsibilities. In partnership with our functional leads, and with direct oversight from the Board and CEO, investment risk and enterprise risk are overseen by dedicated risk leaders across three lines of defence.

1 First line of defence: Functional leaders

The leaders of our organizational functions are our primary risk owners, responsible for managing risks within their area of responsibility through effective internal controls.

2 Second line of defence: Risk partners

Focused risk partners–including investment risk, enterprise and operational risks, compliance, legal, actuary, and tax–and compliance provide controls and independent oversight of the first line of risk defence.

3 Third line of defence: Audit

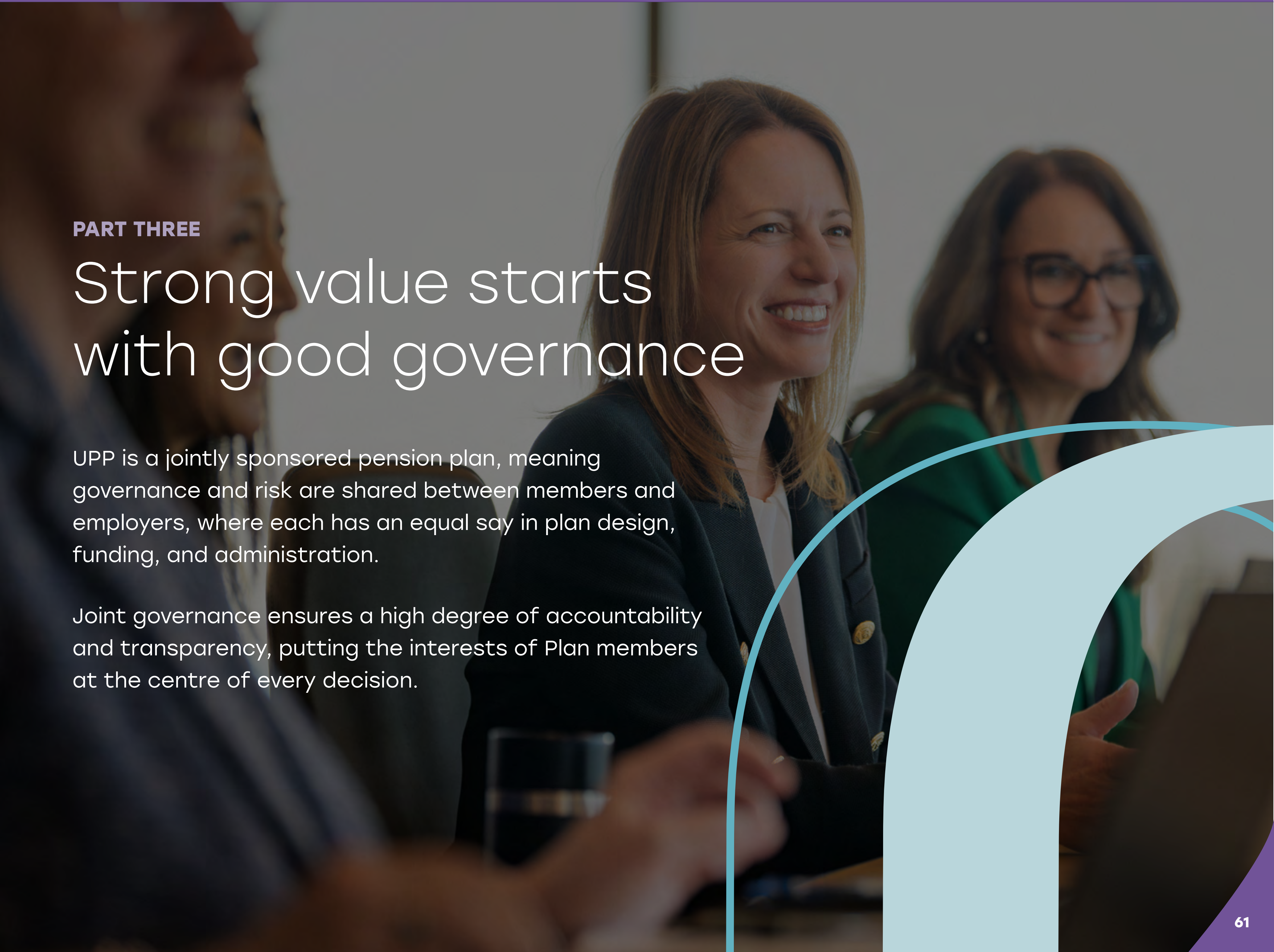
UPP's internal audit function provides independent assurance to the Board on risk, governance, and internal controls.

Internal controls and compliance

UPP has a comprehensive framework of policies, procedures, controls, and reporting structures to maintain compliance with applicable regulations, standards, and internal policies. These include our Code of Conduct, Conflict of Interest Policy, Related Party Transactions, and Whistleblowing Policy and reporting platform. To date, there have been no incidents reported through our whistleblowing hotline. All UPP employees are trained on these policies and procedures in our onboarding process and must formally acknowledge they comply with the Code of Conduct on an annual basis.

"At UPP, we foster a robust risk culture where each of us assumes responsibility for identifying and escalating risks. Our three-lines-of-defence model not only holds individuals accountable for risk-taking, but also ensures independent risk oversight. As we grow and evolve, we will continue to advance our three lines of defence through functions dedicated to enterprise risk, operational risk, and audit."

Amy Jackson
Managing Director, Enterprise & Operational Risk Management



PART THREE

Strong value starts with good governance

UPP is a jointly sponsored pension plan, meaning governance and risk are shared between members and employers, where each has an equal say in plan design, funding, and administration.

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

Governance

How it works at UPP

Guided by clearly defined mandates, UPP's Joint Sponsors, Board of Trustees, and Management 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 associations and unions, as set out in a Labour Sponsor Agreement). Each Sponsor Committee has an established advisory structure as one of many mechanisms to exchange information and views among UPP's growing membership.

Together, the Joint Sponsors are responsible for all decisions about the terms and conditions of UPP, such as:

- amending Plan design, including benefit, contribution, and indexation levels

> **The Joint Sponsors' Funding Policy guides decisions on Plan design and risk sharing. It was designed specifically to maintain contribution stability, protect benefit security, manage intergenerational integrity, and achieve long-term Plan sustainability.**

- determining when to file funding valuations and how to address any funding shortfalls and surpluses, per the Funding Policy
- appointing the Plan's Administrator

> **The Joint Sponsors appoint 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.**

- setting terms for and approving new participating organizations

Meet our Joint Sponsors

EMPLOYER SPONSOR COMMITTEE

Donna Janiec, Queen's University

Steven Millan, Queen's University

Vacant position, University of Guelph

Sharmilla Rasheed, University of Guelph

Trevor Rodgers, University of Toronto

Kelly Hannah-Moffat, University of Toronto

EMPLOYEE SPONSOR COMMITTEE

Kelly Sedore, Canadian Union of Public Employees

Robert Hickey, Queen's University Faculty Association

Herb Kunze, University of Guelph Faculty Association

John Tartt, United Steelworkers

Colleen Burke, United Steelworkers

Lisa Kramer, University of Toronto Faculty Association

Role of the Board of Trustees

UPP's independent Board of Trustees (the Board) is responsible for directing and overseeing the day-to-day administration of UPP and the investment of our assets—as delegated to Management—with Plan members' best interests at the heart of every decision. This includes (but is not limited to) oversight of UPP's strategy implementation, investment approach and policies, annual budgets, risk profile, benefits administration, and executive compensation.

The Board also approves the audited financial statements and oversees annual preliminary funding valuations to monitor the Plan's long-term financial health, which are reviewed each year with the Joint Sponsors. The actuarial assumptions for these valuations, including the discount rate, are set by the Board, in line with the Canadian Institute of Actuaries Standards of Practice.

The Board governs the Plan in accordance with the Pension Benefits Act (Ontario) and the Income Tax Act (Canada), as well as UPP's Trust Agreement, Plan Text, and common law.

Standing committees of the Board

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

Committee compositions and mandates are reviewed annually and periodically refreshed to reflect the needs of UPP's evolving strategy, accommodate new Trustees, and bring new perspectives and diversity to each committee.

Board Code of Conduct and related policies

The Board of Trustees places the utmost importance on sound ethical conduct and business practices. All Trustees provide an annual Code of Conduct and related policies attestation, which includes a declaration of any real or potential conflicts of interest, related parties, outside interests, and business courtesies. Trustees are prohibited from knowingly allowing their own interests to conflict with their UPP duties and powers and must always act in the sole interest of UPP's members and beneficiaries.

Meet our Board of Trustees

Our Trustees bring a range of relevant experience and expertise across sectors and disciplines.[15]

Read our Trustees' full biographies and committee mandates.

Gale Rubenstein, Independent Chair, Joint Sponsor–appointed in 2020, ex officio member of all Board committees

Alan Jette, Employer Sponsor–reappointed in 2023, Investment Committee (Chair)

Alex D. McKinnon, Employee Sponsor–reappointed in 2023, Pension Services Committee (Chair), Audit and Finance Committee

Hazel Claxton, Employer Sponsor–reappointed in 2023, Audit and Finance Committee (Chair), Human Capital Committee

Hugh Mackenzie, Employee Sponsor–reappointed in 2023, Investment Committee, Human Capital Committee

Janet Ecker, Employer Sponsor–reappointed in 2023, Pension Services Committee, Governance Committee

Kathy Bardswick, Employer Sponsor–appointed in 2020, Governance Committee, Human Capital Committee

Kelly Bertrand, Non-unionized Employee Sponsor–appointed in 2024, Audit and Finance Committee

Laura Brownell, Employee Sponsor–appointed in 2022, Audit and Finance Committee, Governance Committee

Leanne MacMillan, Employee Sponsor–reappointed in 2023, Human Capital Committee, Pension Services Committee

Pierre G. Piché, Employer Sponsor–appointed in 2023, Audit and Finance Committee, Pension Services Committee

Ranjini Jha, Employee Sponsor–appointed in 2024, Investment Committee

Ron Mock, Employer Sponsor–appointed in 2020, Human Capital Committee (Chair), Investment Committee

Sue Wurtele, Employee Sponsor–appointed in 2020, Governance Committee (Chair), Investment Committee

[15] Reflects Board composition and committee representation as of June 2024

Board effectiveness

UPP's Board of Trustees is committed to high governance standards in its oversight role and conducts regular evaluations and reviews to uphold good governance practices. We continuously enhance our Board evaluation practices, ensuring we remain aligned with best practices.

Consistent with our focus on governance, UPP periodically assesses our Board governance structures, mandates, and policies to ensure they continue to promote governance excellence and leverage the Board's inherent strengths. In addition, UPP annually conducts an independent assessment at the Board, committee, and periodically the Trustee level, which covers topics such as UPP's governance approach and culture, meeting efficiency, transparency, and fostering and developing relationships between groups. Results from this assessment help ensure that UPP's delegated authority between the Board, its committees, and the Management team remains appropriate and efficient, and that UPP maintains a strong governance culture grounded in open communication and clear accountabilities.

Trustee self-assessments

To understand the evolving breadth and depth of the Board's skills and expertise, each Trustee periodically performs a confidential self-assessment against a matrix of skills relevant to the Plan. Assessments are used to inform education and development opportunities and committee composition and to determine where the Board would benefit from independent advice in the review of major projects and initiatives.

Self-assessment criteria include directorship experience, investment and asset management, risk, accounting and finance, legal/governance and regulatory, stakeholder and labour relations, communications and media relations, talent management and compensation, culture, technology and data, actuarial and funding, sustainability (including climate change), social responsibility, governance, pension administration and finance, and strategy.

2023 BOARD HIGHLIGHTS

Welcomed two new Trustees

In 2023, **Kelly Bertrand** and **Ranjini Jha** were appointed to the Board of Trustees as of January 1, 2024, replacing Horatio Bot and Jonathan Ferris. The Employee Sponsor reappointed Leanne MacMillan, and the Employer Sponsor reappointed Alan Jette and Hazel Claxton, all for a three-year term. UPP's Board of Trustees thanks Horatio and Jonathan for their invaluable contributions and dedication and welcomes UPP's newest Trustees.

Held 41 Board and committee meetings

The Board meets no less than once each quarter, with committee meetings occurring on a more frequent basis.

	Meetings in 2023	Average attendance
Full Board of Trustees	6	94%
Audit and Finance Committee	5	94%
Governance Committee	8	88%
Human Capital Committee	6	94%
Investment Committee	11	98%
Pension Services Committee	5	100%

Conducted six focused education sessions

As UPP evolves as an organization, shared understanding and mission clarity help us move together toward a common goal. Throughout the year, the Board and Management team engaged in deep discussion, focused education, and consultation with internal and external experts to form an aligned vision, coalesce on critical strategic objectives, and set a unified knowledge baseline.

In-house education topics in 2023 included:

- Actuarial methodologies
- Enterprise risk management—emerging risks and trends
- Artificial intelligence
- Business continuity management

In addition, individual Trustees completed further educational development on key topics, including oversight on climate change, strategy, and risk.

Role of Management

Accountability for UPP's day-to-day operational, strategic, and risk matters is delegated by the Board to the President and CEO and her Executive Leadership team through formal Board resolutions. The Board reviews and approves delegation at least annually.

UPP's Executive Leadership team houses the leads of each internal division, serving as an advisory body to the President and CEO. This team, in tandem with UPP's broader leadership team, brings a wide range of global experience and expertise to the organization and is responsible for building the Plan's foundations, establishing our overall strategic direction, and ensuring UPP delivers on our long-term investment, service, risk, and growth strategies. Our leadership teams also serve as models for our values-based culture. Learn more about UPP's executive and senior leadership teams.

UPP's Executive Leadership team (ELT) regularly meets with the Joint Sponsors to inform and consult on Plan matters and provide updates on our organizational build. The ELT shares educational materials with them to help inform their decisions and build a common information foundation.

Barbara Zvan
President and Chief Executive Officer

Aaron Bennett
Chief Investment Officer

Brian Gill
Chief Technology Officer

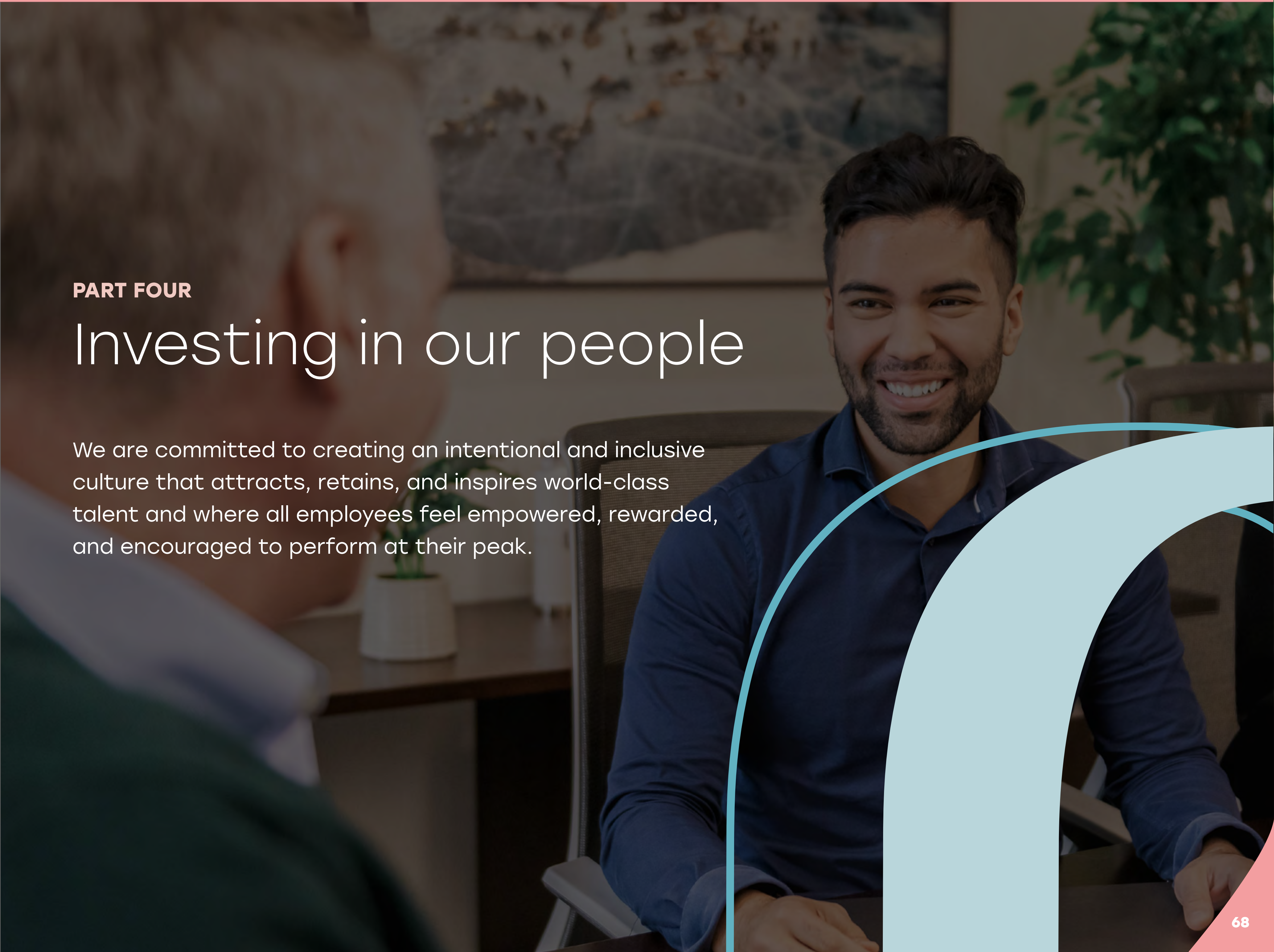
Christine Chen
General Counsel

Joanna Lohrenz
Chief Pension Services Officer

Karen Rowe
Chief Financial Officer

Kathy Johnson
Chief Engagement and Strategy Officer

Omo Akintan
Chief People Officer



PART FOUR

Investing in our people

We are committed to creating an intentional and inclusive culture that attracts, retains, and inspires world-class talent and where all employees feel empowered, rewarded, and encouraged to perform at their peak.

People

Life at UPP

UPP's purpose is to bring greater pension peace of mind to the university sector. Our shared commitment to this unites and motivates our team, creating the foundation for a thriving and inclusive culture. Learn more about what UPP has to offer and view our career opportunities.

What we do

We do work that matters

We help ensure our members have a bright future to retire into.

We grow every day

Every day is different at UPP. Our cross-functional approach encourages our people to share information, approaches, and perspectives.

We are stronger together

We believe in bringing smart and capable people together to create, solve, and grow with a clear shared vision, without ego or judgment.

We prioritize wellness

We ensure our people are cared for in ways that matter to them.

Supporting our people

We believe that supporting people to do their best work benefits everyone. This is why we offer our employees comprehensive, competitive, and inclusive benefits.

Enhanced benefits

- Defined benefit pension plan
- Comprehensive group benefits
- Extended paramedical and mental health service coverage

Flexibility

- Hybrid work model
- Work from anywhere program
- Flexible health-care and lifestyle spending accounts

Support at every life stage

- Educational assistance
- Fertility treatments, paid parental leave, and top-up benefits
- Gender affirmation coverage

Our employee experience and workplace culture

Each person at UPP contributes their experiences, knowledge, and skills to our vision, working together to help bring pension peace of mind to current members and those to come. In partnership with our people, we are intentionally shaping our employee experience and workplace culture to help everyone do their best work.

As a part of our ongoing commitment to building our intentional culture and making UPP a great place to work, we launched an integrated Intentional Culture & Employee Engagement Pulse Survey in 2023, which assessed two main topics: Intentional Culture, or our organization's core values and behaviours today and those we believe are important for future success, and Employee Engagement, which provides insights about working at UPP and a forum where employees can share their experiences.

Our survey insights help us continually adapt to the evolving needs of our workplace and the people within it. We encourage employees to voice their opinions and provide candid feedback since it will ultimately help shape UPP's employee experience.

2023 employee experience highlights

97% of employees participated in our integrated survey. High participation rates improve the accuracy of our metrics and help us confidently move forward with our plans.

Survey results indicate that UPP continues to have a healthy and high-performing culture of engaged individuals.

Based on their feedback:

- Employees believe UPP has a positive work environment and culture with strong values and engaging leadership.
- Employees are proud to work for UPP and appreciate opportunities to make a significant impact while working with people who are engaged, positive, and open.
- Employees believe UPP is taking positive and deliberate steps in building an intentional culture and having a prominent focus on EDI & Reconciliation, as well as ESG.

Employee reflections

"What I do every day matters. Combined with interesting and engaging work, my job is very fulfilling."

"I enjoy being surrounded by a team of experts. UPP has brought together an amazing team with diverse backgrounds."

"UPP has established a work culture that is very welcoming, allowing me to bring my whole self to work."

"From all levels of the organization, especially at the executive level, UPP reflects diversity, friendliness, and openness."

Building an inclusive workforce

UPP recognizes the value of each person's differences, experiences, knowledge, and talents and the contribution they make to UPP. Together, we are shaping an inclusive workplace built on collaboration and respect for one another and our broader community, and we are continuously learning and evolving on our path forward.

Our EDI & Reconciliation 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. They are rooted in our belief that diverse teams, perspectives, and lived experiences spark better decisions and outcomes, new thinking, and a thriving work environment–all essential foundations to strong performance. Read more about EDI & Reconciliation at UPP.

2023 EDI & RECONCILIATION HIGHLIGHTS

Focused on increasing team diversity

86% of employees participated in our Self-Identification Survey, up from 72% in 2022. Increasing survey participation improves the accuracy of our metrics, which helps to strengthen our plans to pursue and support diversity at UPP.

To support our commitment to target 50% diverse candidates for first-round interviews, we partnered with Women in Asset Management, Black Professionals in Tech Network, Indigenous Works, and student groups to help us further diversify our candidate pool.

87% of employees and 71% of our Trustees identified as members of at least one of the following groups: Indigenous, Black, People of Colour, 2SLGBTQ+, Persons with Disabilities, or Women+.[16]

60% of employees and 7% of Trustees self-identified as East and South Asian, Black, Middle Eastern, Latin American, and other races or people of racial backgrounds.

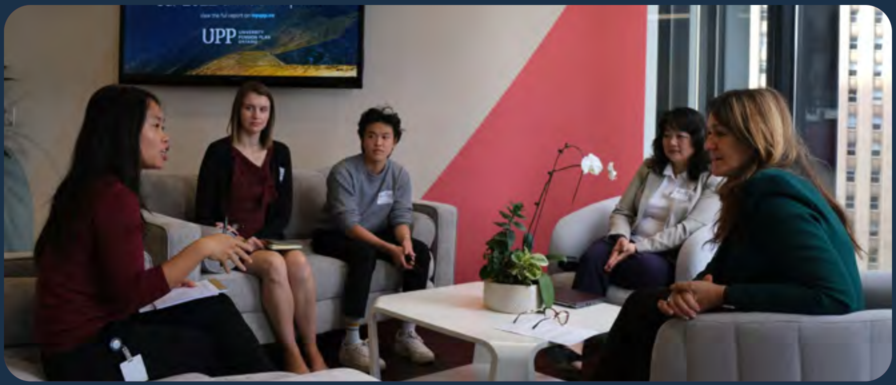
58% of employees at all levels (75% of executive leadership, 35% of the investment division), and 57% of Trustees identified as Women+.

[16] Includes women (cisgender and transgender) and non-binary individuals

Created a safe space for Women+

We formed our second Employee Resource Group, Women+, for all cisgender and transgender women, non-binary individuals, and allies who are comfortable in a space that centres on women. To support organization-wide learning, Women+ events in 2023 included a speed mentoring session with members of our Executive Leadership team and a personal goal-setting workshop.

Employee-led resource groups help foster an inclusive workplace by providing opportunities for people with common identities to come together and share knowledge and experiences.

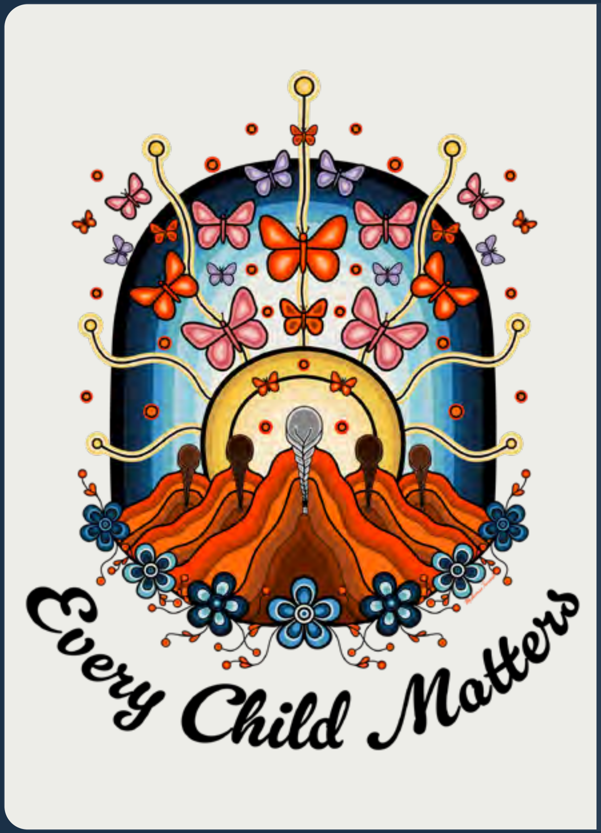


Celebrated diversity at work

Throughout the year, we honour and celebrate occasions and events that reflect our team's diversity, using these opportunities to focus on intersectionality, education, building awareness, and fostering inclusion.

A few examples:

- For Asian and South Asian Heritage Month, we hosted Zabeen Hirji, a trailblazer, changemaker, and "woman of firsts" in the corporate world, for a fireside chat.
- On Indigenous Peoples Day, we attended the City of Toronto's annual Sunrise Ceremony, which honours Indigenous traditions and culture and summer solstice.
- We participated in our first Toronto Pride Parade to demonstrate our support for 2SLGBTQ+ inclusion.



For UPP's National Day for Truth and Reconciliation campaign, we commissioned an image from Indigenous artist Miskomin Twenish and used an Indigenous printer, Diamond Phoenix Creations, to produce orange T-shirts for all employees.

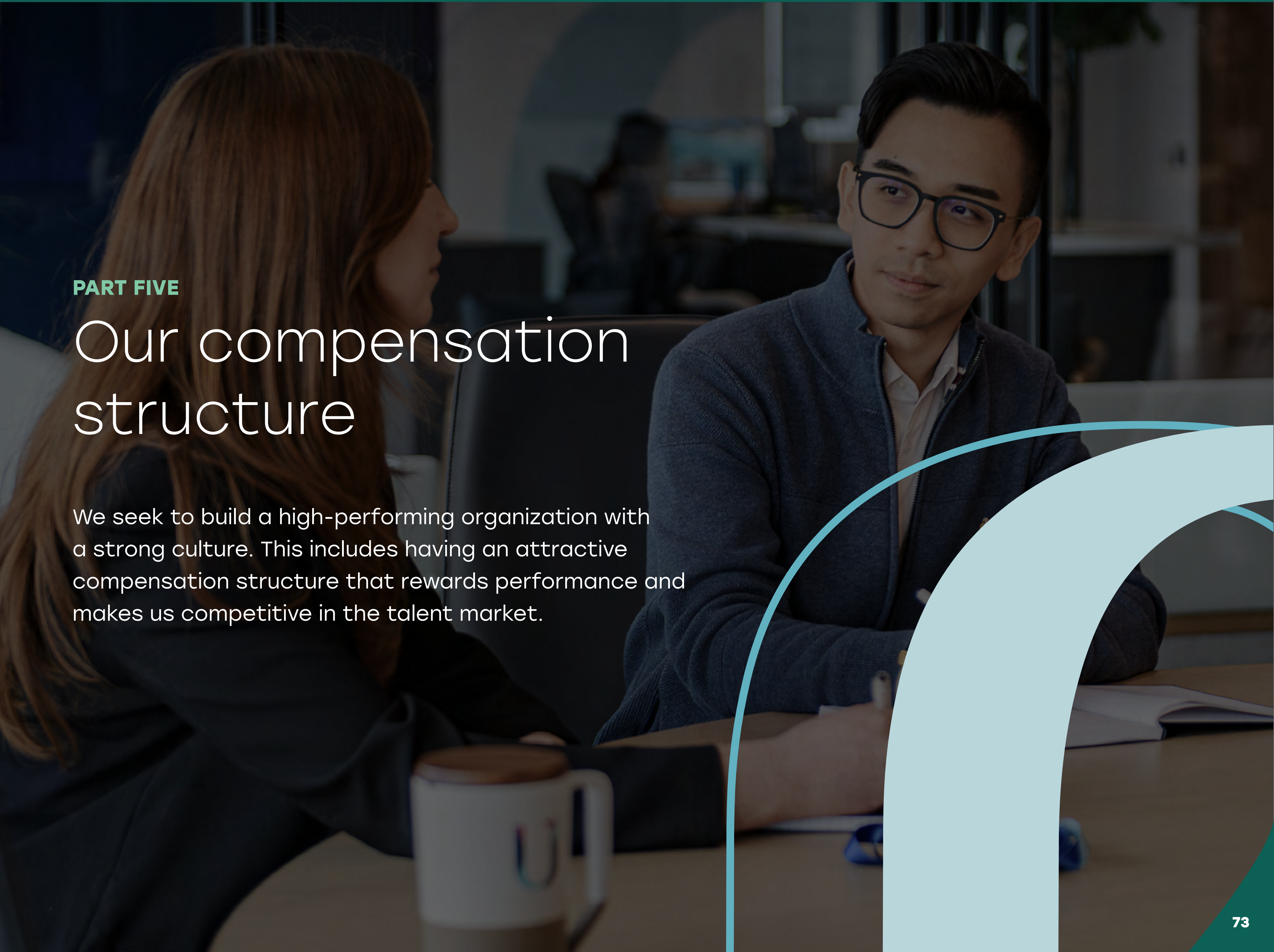
Educated ourselves and learned together

Employee learning and development are key ways in which we encourage equity and inclusion at work. In addition to offering our employees EDI & Reconciliation training programs, learning materials, and resource guides, we launched UPP Reads, a book club that enables us to educate ourselves and learn together.

For National Day for Truth and Reconciliation, we read and discussed *21 Things You May Not Know About the Indian Act* by Bob Joseph. This activity established a baseline of knowledge and awareness of the historical and current realities that make reconciliation so critical.

> **Nearly 80% of employees participated in our inaugural UPP Reads event, and 100% reported they gained new knowledge about reconciliation through the event.**

From left to right: Mark Sevestre and UPP's Delaney Greig, Matavea Francis, and Sonam Ringpa. Mark is a founding member of and Senior Advisor to National Aboriginal Trust Officers Association (NATOA). He joined UPP for a fireside chat exploring the relationship between reconciliation and responsible investing.



PART FIVE

Our compensation structure

We seek to build a high-performing organization with a strong culture. This includes having an attractive compensation structure that rewards performance and makes us competitive in the talent market.

Compensation analysis

UPP's total rewards philosophy

As an organization responsible for delivering dependable pension income to over 40,000 members and investing assets of over $11 billion, we depend on attracting and retaining talented employees in a competitive environment. We believe that building a high-performing organization and providing lifelong pension security to the university sector is attractive to employees, and we pay particular attention to creating a culture that makes UPP a place where people want to work. This includes a compensation structure that makes us competitive in our target market for specialized talent and rewards performance fairly and appropriately.

A holistic approach to employee engagement and satisfaction

Our Total Rewards strategy, which includes compensation, benefits, wellness, professional development, recognition, and work-life balance, plays an important part in achieving our long-term objectives. It ensures that our commitment to excellence and care for our members is reflected in the way we support our employees.

"My experience has shown me the critical role that a well-considered rewards program plays in attracting, motivating, and retaining incredible talent. It is about creating an environment where employees feel valued and cared for and part of a larger purpose. This approach drives our current success and positions us for a future where both our employees and our members can continue to thrive."

Jeffrey Li
Senior Director, Total Rewards

Our Total Rewards program and Strive and Thrive, our performance management framework, closely align with our organizational strategy to create clarity of purpose and alignment across all levels. The objectives of this dual approach are to:

Align the organization

Reinforce and reflect our organization's vision and values, ensuring our employees act with integrity, inclusivity, ingenuity, and impact.

Drive our strategy

Encourage prudent decision-making and informed judgment in line with our long-term strategy by rewarding successes on both annual and long-term objectives.

Promote desired behaviours and accountability

Encourage a collaborative culture, a one-UPP mindset, with a focus on both what we achieve and how we achieve it and accountability for the short- and long-term impacts of our decisions on both the organization and communities around us.

Stay competitive to attract and retain top talent

Position UPP to be market-aligned and externally competitive in our compensation approach, to engage qualified talent in executing our vision.

Fairly reward strong performance

Apply equitable and fair employee practices, ensuring all employees at each job level have appropriate development and reward opportunities.

Strive and Thrive performance management

UPP recognizes performance and differentiates rewards based on successful contributions to goals encompassing financial, non-financial, and cultural aspects. Through our Strive and Thrive framework, employee performance is assessed and managed against strategic objectives, divisional scorecards, individual goals, and intentions for living our core values.

To maintain focus on our purpose of bringing greater pension peace of mind to our members and serving them with care, we implemented an annual organizational scorecard and are phasing in divisional scorecards.[17] The scorecards, which are approved by the Board, include organizational and divisional goals, respectively, with corresponding measures and objectives aligning to the pillars of our organizational strategy. They ensure a balanced focus between key short-, medium-, and long-term objectives. Individual goals are set each year against scorecard and cultural objectives, which cascade from the CEO and Executive Leadership team to each UPP employee.

[17] Starting with the Investment team in 2023, divisional scorecards are being phased in until 2026.

A phased build for structure and flexibility

As a new plan in 2021, UPP's Board of Trustees and staff were tasked with building every operational aspect of a defined benefit pension plan from the ground up. That foundational build has encompassed the comprehensive investment capabilities and partnering functions needed to expertly manage the fund. It has also meant creating in-house pension administration and member services to securely administer the Plan for an ever-growing number of members and securing the specialized requirements and capabilities of a sector-wide solution designed for scale.

Core to our success was attracting multidisciplinary expertise in a range of areas across the organization, including specialized talent with the leadership and skills to build each aspect of the Plan with precision and at pace, then transition to long-term operational execution and oversight.

To that end, great rigour has been applied in setting UPP's compensation structure to align with our long-term objectives and with evolving market practices. In 2023, we implemented a new variable, weighted incentive structure with a deferred component (learn more) to further align leadership compensation with long-term performance and with industry best practices.

Total rewards elements

UPP offers total rewards (base salary, incentive pay, benefits, and our defined benefit pension plan) that are market-competitive and support our organizational objectives and purpose. Compensation elements in 2023 reflect UPP's phased program design, guided by defined principles approved by the Board. The Human Capital Committee (HCC) of the Board has overseen all aspects of the development of UPP's Total Rewards program.

Compensation components

Base salary

Each UPP employee is assigned a job level with a corresponding salary band providing market-competitive pay for the responsibilities, skills, knowledge, and experience required for a particular role. Salaries are reviewed upon hire, annually, and with material changes in role or responsibilities.

Performance incentives

UPP employees have an incentive target set consistent with market levels. Incentives are designed to reward individuals for performance against specified organizational, divisional, and individual objectives (financial and non-financial). Annual performance evaluations are calibrated into Board-approved organizational, divisional, and individual performance multipliers, which are used to determine individual incentive allocations.

The compensation mix between fixed and variable compensation is designed such that, generally speaking, employees with more influence over organizational performance have a larger share of their compensation as variable incentives, or pay at risk. For example, for members of the Executive Leadership team, the target incentive component exceeds base salary. Those incentives are also proportionately linked to organizational and divisional performance so that employees with higher influence over performance have their incentives more closely linked to organizational and divisional scorecard objectives.

In 2023, UPP introduced a weighted incentive pay structure wherein the total incentives awarded to employees with significant influence on organizational and divisional performance consist of a mix of annual and deferred incentive pay. The annual incentive is paid out in the year it is allocated, while the deferred incentive is retained and paid in three parts over the subsequent three years.

Deferred incentives further align compensation with UPP's long term performance and with our members' interests. The payable deferred incentive amount in a given year is adjusted such that it increases or decreases at the rate of UPP's long term investment performance. In addition, the deferred incentive payment will be adjusted based on UPP's performance against key metrics related to the quality of member services delivered, the robustness of UPP's risk management practices and delivery on UPP's ambitious ESG goals. This ensures that short-term decisions align with long-term impacts on UPP performance and promote prudent risk-taking among our organization's senior leaders all in our members' interest.

As our deferred incentive program phases in over the next three years, UPP's senior leaders will see a larger portion of their total variable incentive mix deferred. Deferred incentive awards for the 2023 calendar year will be granted in 2024 and vest in three parts, adjusted as described above, beginning in 2025. The first payment will be disclosed in our 2025 annual report, which will be published in 2026.

Benefits and other rewards

UPP offers a comprehensive, wellness-focused insurance and benefits program that includes health and dental benefits (with extended coverage for paramedical services, mental health, fertility, gender affirmation, and travel), life insurance, disability, vacation, leave policies (including an eight-week "work from anywhere" program), a family assistance program, and an education assistance framework. Employees also receive a defined benefit pension under the UPP Plan.

Market benchmarking

UPP's Total Rewards team oversees external benchmarking activities and brings a focused and consistent market lens to our recruitment and talent strategies. The team monitors market data to ensure that roles are consistently benchmarked and evaluated and that UPP's compensation remains competitive and in line with our principled pay practices. In addition, as part of the development of UPP's Variable Incentive Plan, UPP's HCC and Board retained an independent compensation consulting practice with deep expertise in the pension sector, for advice on the Plan's market competitiveness.

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 for Board approval. Where appropriate, the HCC engages independent compensation advisors to support its review of Management's recommendations.

UPP's CEO and Chief People Officer oversee the implementation of the compensation program and make recommendations to the HCC and Board on program design, base salary budgets, incentive compensation awards, and executive pay. The Board determines total compensation for the CEO and Executive Leadership team and approves the CEO's recommendation on aggregate annual incentives for all other employees.

As our program evolves, we remain committed to building a rewarding and fulfilling environment for our people and delivering long-term value for all Plan members.

Executive compensation

As described previously, executive compensation at UPP is determined by the Board of Trustees. Refer to the table below for 2023 compensation for UPP's Named Executive Officers: the President and CEO, Chief Financial Officer, and the three other highest-paid executive officers.

Total incentives consider an array of financial and non-financial performance dimensions reflecting UPP's strategic objectives, as discussed throughout this annual report. With the introduction of UPP's deferred incentive program in 2023, gradually over the next three years, a larger portion of UPP's executives' total variable incentive mix will be deferred.

2023 executive compensation

	Base salary	Annual incentive	Deferred incentive allocation	Total direct compensation	Benefits	Pension contribution[18]
($thousands, annualized)	A	B	C	A+B+C	E	F
Barbara Zvan President and Chief Executive Officer	530.0	849.0	283.0	1,662.0	8.7	21.0
Aaron Bennett Chief Investment Officer	365.8	698.7	232.9	1,297.4	8.7	21.0
Karen Rowe Chief Financial Officer and Head of Operations[19]	343.0	319.2	106.4	768.6	6.3	12.2
Christine Chen General Counsel	339.7	518.1	172.7	1,030.5	9.0	21.0
Joanna Lohrenz Chief Pension Services Officer	294.0	456.1	152.0	902.1	8.9	21.0

[18] Changes in pension values are not included in total compensation.
[19] Karen Rowe joined UPP in May 2023.

2023 Board of Trustee remuneration

Generally, in addition to their remuneration, Trustees are reimbursed for reasonable and necessary expenses incurred in carrying out the business of UPP. These reimbursements relate primarily to travel, meals, and accommodations related to in-person attendance at UPP Board, committee, or similar meetings or to relevant training and development programs or designations. For 2023, these expenses totalled $59,775 (2022: $32,600). Trustee remuneration has remained unchanged since 2020.

($thousands)	
Chair	150
Trustee	50

PART SIX

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 under this Act. For accounting policies that do not relate to UPP's investments or pension obligations, the financial statements follow the requirements of Accounting Standards, as issued by the International Accounting Standards Board. To the extent that IFRS Accounting Standards in Part 1 is inconsistent with Section 4600, Section 4600 takes precedence. Where deemed appropriate, the financial statements include certain amounts based on Management's judgments and best estimates.

Systems of internal controls and procedures over financial reporting and disclosure controls have been designed and established to maintain proper records and safeguard the assets. These controls include appropriate segregation of responsibilities, an organizational Code of Conduct, and accountability policies and framework that outline delegated authorities at UPP. Management reports 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 the External Auditor to discuss the scope and findings of audits and to satisfy itself that the Board's responsibilities have been properly discharged.

The Committee reviews the annual financial statements and recommends them to the Board of Trustees for approval. UPP's External Auditor, PricewaterhouseCoopers LLP (the "External Auditor"), has 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 independent auditor's report. The External Auditor has 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.

Barbara Zvan
President and Chief Executive Officer

Karen Rowe

Karen Rowe
Chief Financial Officer

June 6, 2024

Actuarial opinion

Eckler Ltd. (Eckler) was retained by the University Pension Plan Ontario Board of Trustees (the "Board"), as legal administrator of the plan, to perform an actuarial valuation of the going concern liabilities of University Pension Plan Ontario ("UPP") as at January 1, 2024 for inclusion in UPP's financial statements covering the period from January 1, 2023 to December 31, 2023 in accordance with Section 4600 of Part IV of the Chartered Professional Accountants of Canada (CPA Canada) Handbook.

The valuation of UPP's actuarial liabilities was based on:

- UPP provisions in effect at December 31, 2023;
- membership data provided by UPP with effective dates between November 1, 2023 and January 1, 2024, all appropriately extrapolated to January 1, 2024 and reflecting member movement and payouts to December 31, 2023;
- methods prescribed by Section 4600 of the CPA Canada Handbook for pension plan financial statements; and
- assumptions regarding future investment returns, inflation, salary growth and demographic experience, etc., as approved by the Board, in consultation with Eckler.

This valuation was undertaken for purposes of the Plan's financial statements under Section 4600 of the CPA Canada Handbook and it might not be suitable for other purposes. Any party reviewing these valuation results for other purposes should have their own actuary or other qualified professional assist in their review to ensure that the party understands the assumptions, results and uncertainties inherent in our estimates. It is our opinion that the assumptions and the methods employed in the valuation are appropriate for the purpose of the valuation.

We have reviewed the data used for the valuation and have performed tests of reasonableness and consistency. It is our opinion that the membership data on which the valuation are based are sufficient and reliable for the purpose of the valuation.

The actuarial value of assets used for plan funding purposes was determined based on the financial information provided by UPP Management and the actuarial asset valuation methodology adopted by the Board.

Notwithstanding the foregoing opinion, emerging experience differing from the assumptions will result in gains or losses which will be revealed in future valuations.

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

Jill Wagman
Fellow, Canadian Institute of Actuaries

Jasenka Brcic
Fellow, Canadian Institute of Actuaries

June 6, 2024

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, 2023 and 2022 and the changes in its net assets available for benefits and changes in its pension obligations for the years then ended in accordance with Canadian accounting standards for pension plans.

What we have audited

The Plan's financial statements comprise:

- the statements of financial position as at December 31, 2023 and 2022;
- the statements of changes in net assets available for benefits for the years then ended;
- the statements of changes in pension obligations for the years 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.

Other information

Management is responsible for the other information. The other information comprises the information, other than the financial statements and our auditor's report thereon, included in the Annual Report.

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

PricewaterhouseCoopers LLP
Chartered Professional Accountants, Licensed Public Accountants
Toronto, Ontario

June 6, 2024

Statement of financial position

As at December 31 (Canadian $ in thousands)	**2023**	**2022**
Net Assets Available for Benefits		
Assets		
Investments (Note 4)	$ 11,578,315	$ 10,818,524
Investment-related assets (Note 4)	132,347	9,335
Contributions receivable:		
Employee	601	532
Employer	1,248	1,764
Prepaid benefits	24,033	25,075
Other assets	27,208	6,726
Total Assets	11,763,752	10,861,956
Liabilities		
Accounts payable and accrued liabilities	43,140	17,517
Investment-related liabilities (Note 4)	1,178	81,480
Total Liabilities	44,318	98,997
Net Assets Available for Benefits	11,719,434	10,762,959
Accrued Pension Obligations and Deficit		
Accrued pension obligations (Note 7)	11,966,492	11,412,569
Deficit:		
Funding surplus	249,277	378,929
Actuarial value adjustment (Note 7)	(496,335)	(1,028,539)
Total Deficit	(247,058)	(649,610)
Accrued Pension Obligations and Deficit	$ 11,719,434	$ 10,762,959

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)		2023		2022
Changes due to Investment Activities				
Net investment income (loss) (Note 6)	$	**1,084,245**	$	(1,113,268)
Investment administrative expenses (Note 10)		**(52,185)**		(45,400)
Total Changes due to Investment Activities		**1,032,060**		(1,158,668)
Changes due to Pension Activities				
Transfer from predecessor plans (Note 3)		**-**		277,236
Contributions (Note 8)		**520,229**		419,910
Benefit payments (Note 9)		**(558,501)**		(550,557)
Pension administrative expenses (Note 10)		**(37,313)**		(19,717)
Total Changes due to Pension Activities		**(75,585)**		126,872
Total increase (decrease) in Net Assets Available for Benefits		**956,475**		(1,031,796)
Net Assets Available for Benefits, Beginning of Year		**10,762,959**		11,794,755
Net Assets Available for Benefits, End of Year	$	**11,719,434**	$	10,762,959

See accompanying notes to financial statements.

Statement of Changes in Pension Obligations

Years ended December 31 (Canadian $ in thousands)	2023	2022
Increase in Pension Obligations:		
Transfer from predecessor plans (Note 3)	$ -	$ 271,393
Current service costs	442,472	410,249
Interest on accrued benefits	619,177	589,052
Changes in actuarial assumptions	12,180	29,355
Past service buybacks	14,395	8,440
Net experience losses	24,200	51,809
Total Increase	1,112,424	1,360,298
Decrease in Pension Obligations		
Benefit payments (Note 9)	558,501	550,557
Total Decrease	558,501	550,557
Net increase in Pension Obligations	553,923	809,741
Pension Obligations, Beginning of Year	11,412,569	10,602,828
Pension Obligations, End of Year	$ 11,966,492	$ 11,412,569

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, UPP must act through its Board of Trustees, who take all actions and enter all contracts in their capacity as Trustees. The 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.

Member universities transitioning their existing single employer pension plans (collectively the Predecessor Plans) to UPP include the following (see Note 3):

- 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 were transferred to UPP.
- On January 1, 2022, the net assets and pension obligations of the Contributory Pension Plan of Trent University Faculty Association were transferred to UPP.
- On January 1, 2022, the staff of the University of Guelph and University of Toronto faculty associations and eligible UPP employees joined UPP. These are new pension plans with no net assets and pension obligations transferred.

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 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 Plan 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, 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 the transfer date. The pre-conversion service does not change going forward; however, the pre-conversion pensions can increase as members' future earnings increase.

The second part is for service on and after transfer date, which is called post-conversion service or UPP service. All active members from any prior plan can only earn UPP service on and after the transfer date. UPP pensions are determined in accordance with the Plan text using a formula that considers a member's best average earnings as the highest 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 for Canada. The funded conditional indexing is subject to the Plan's funded status and 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 a member is 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 PBA.

For accounting policies that do not relate to its investments or pension obligations, the financial statements follow the requirements of IFRS Accounting Standards, as issued by the International Accounting Standards Board. To the extent that IFRS Accounting Standards 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.

The recent rapid increases in interest rates and inflation contribute to heightened uncertainty related to estimates and assumptions for these valuations. 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 3 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 Plan's Level 3 investments, where the valuation inputs for assets and liabilities are not based on observable market data, 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 3 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 recorded in changes in actuarial assumptions, 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 amounts ultimately realized for investments are included in net investment income 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 Net investment Income (Loss).

(e) Net Investment Income (Loss)

Investment income (loss) 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 on the fair value of investments are recognized in net investment income (loss).

(f) Management Fee

Management fees for external investment managers are recognized in external manager fees reported in net investment income (loss) as incurred in Note 6 – Net Investment Income (Loss). For certain investments, including pooled funds and for 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 Net Investment Income (Loss).

(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. Certain investments are invested through master trusts, that are 100% owned by UPP.

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 (loss) 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 as a net realized gain or loss on sale of investments included in Net investment income (loss) in the Statement of Changes in Net Assets Available for Benefits.

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 values 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 (loss) in the Statement of Changes in Net Assets Available for Benefits.

iv) Securities Lending

The Plan may enter into securities lending transactions. These securities lending activities are fully collateralized by securities. Securities on loan continue to be recognized as investments in UPP's Statement of Financial Position. Collateral received in the form of securities is not recognized as the risk and rewards of ownership do not transfer. Lending fees earned by the Plan on these transactions are included in Net investment Income (Loss).

The securities loaned and related collateral received by the Plan for the current and comparative period is disclosed in Note 5 – Financial Risk Management section c) Credit Risk and section d) Collateral Pledged and Received.

v) 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 Chartered Professional Accountants of 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 Net investment income (loss).

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, bonds and publicly traded equities are valued based on closing quoted market prices.
- 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 hedge fund managers.
- 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.

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) Actuarial Value Adjustment

Beginning in January 2022, the actuarial value of net assets for the Plan is used to assess the funded position of the Plan. The actuarial value adjustment is applied to the fair value of net assets available for benefits to arrive at the actuarial values of net assets. The actuarial adjustment represents a portion of the pension plan's unrecognized cumulative investment gains or losses (above or below the actuarial smoothing rate) over a five-year period. The actuarial value adjustment cannot exceed 15% of the fair value of net assets.

j) Contributions

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

k) 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.

l) Future Changes to Accounting Disclosure

During 2023, amendments were issued to Section 4600 that are effective for annual periods beginning on or after January 1, 2024. These amendments have not been adopted early by UPP and are not expected to have a significant impact on the financial statements.

m) Accounting Policy Change

For the period ended December 31, 2023, UPP retrospectively adopted a voluntary change in accounting policy in accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates, and Errors. This change relates to the fair value levelling classification requirements of IFRS 13 – Fair Value Measurement.

UPP has enhanced the accounting policy for determining the fair value classification of investments to further include reviewing the underlying investments within fund investments to determine the fair value level classification of the fund.

The retrospective impact of this change on the December 31, 2022 financial statements resulted in the reclassification of previously reported amounts of $1,828,329 from Fair Value Level 3 to Fair Value Level 2 in Note 4(b) - Investment Fair Value Hierarchy.

3. Transfer from Predecessor Plans

There were no transfers from Predecessor Plan's in the year ended December 31, 2023.

On November 3, 2021, FSRA consented to the conversion of the Contributory Pension Plan of Trent University Faculty Association to a jointly sponsored pension plan, through the transfer of assets and liabilities of the plan to UPP, pursuant to s. 80.4 of the Pension Benefits Act (Ontario) and Conversions and Transfers, regulation 311/15. Pension benefits are accrued in accordance with the Plan's text.

($ thousands)		January 1, 2022
Net Assets Transferred from Predecessor Plans		
Contributory Pension Plan of Trent University Faculty Association	$	277,236
Total Net Assets Available for Benefits		277,236
Total Pension Obligation[1]	$	271,393

1. The Total Pension Obligation for all plans was measured using a 5.6% discount rate when the net assets of the predecessor plans transferred to UPP. At January 1, 2022, the Contributory Pension Plan of Trent University Faculty Association was immediately remeasured on UPPs funding basis using a 5.45% discount rate, along with all UPP pension obligations.

4. Investments

(a) Investments by Fair Value and Cost:

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

($ thousands)	2023 Fair Value[1]	2023 Cost[1]	2022 Fair Value[1]	2022 Cost[1]
Cash and Short-Term Money Market	$ 1,220,445	$ 1,214,473	$ 1,802,225	$ 1,797,282
Interest Rate Sensitive Assets				
Fixed Income				
Canadian bonds	3,205,146	3,110,251	1,801,898	1,883,415
Bond funds	-	-	858,445	1,030,120
Return Enhancing Assets				
Private Debt				
Bond funds	96,910	103,812	142,404	160,040
Private debt	609,135	476,428	664,504	547,765
Mortgages	87,575	89,579	130,502	136,421
Absolute Return				
Hedge funds	1,002,136	590,051	853,281	467,954
Public Equity				
Canadian equity	289,730	267,590	258,487	259,577
Non-Canadian equity	339,917	295,489	149,484	148,847
Hedge funds	-	-	24,071	22,256
Equity funds	3,265,849	2,848,667	2,789,840	2,736,409
Private Equity	652,498	514,194	676,078	520,715
Inflation Sensitive Assets				
Infrastructure	393,040	359,573	264,437	252,162
Real estate	415,934	415,344	402,868	375,074
Total Investments not including Investment-related Assets and Liabilities	11,578,315	10,285,451	10,818,524	10,338,037
Investment-related Assets				
Derivatives (Note 4d)	132,347	-	9,335	-
Investment-related Liabilities				
Derivatives (Note 4d)	(1,178)	-	(81,480)	-
Total Investments including Investment-related Assets and Liabilities	$ 11,709,484	$ 10,285,451	$ 10,746,379	$ 10,338,037

[1] The fair value of assets held within master trust structures are $3,979,029 (2022: $4,865,115) and the unit values of the master trusts have a cost of $3,655,779 (2022: $4,809,816).

(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 and 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:

2023 ($ thousands)	Fair Value Level 1	Fair Value Level 2	Fair Value Level 3	Total
Cash and Short-Term Money Market	$ 113,609	$ 1,106,836	$ -	$ 1,220,445
Interest Rate Risk Sensitive Assets				
Fixed Income				
Canadian bonds	-	3,205,146	-	3,205,146
Bond funds	-	-	-	-
Return Enhancing Assets				
Private Debt				
Bond funds	-	89,578	7,332	96,910
Private debt	-	-	609,135	609,135
Mortgages	-	87,575	-	87,575
Absolute Return				
Hedge funds	-	1,001,871	265	1,002,136
Public Equity				
Canadian equity	289,730	-	-	289,730
Non-Canadian equity	339,917	-	-	339,917
Equity funds	-	3,243,631	22,218	3,265,849
Private Equity	-	-	652,498	652,498
Inflation Sensitive Assets				
Infrastructure	-	-	393,040	393,040
Real estate	-	-	415,934	415,934
Total Investments not including Investment-related Assets and Liabilities	743,256	8,734,637	2,100,422	11,578,315
Investment-related Assets				
Derivatives	-	132,347	-	132,347
Investment-related Liabilities				
Derivatives	-	(1,178)	-	(1,178)
Total Investments including Investment-related Assets and Liabilities	$ 743,256	$ 8,865,806	$ 2,100,422	$ 11,709,484

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

				2022
($ thousands)	**Fair Value Level 1**	**Fair Value Level 2**	**Fair Value Level 3**	**Total**
Cash and Short-Term Money Market	$ 450,247	$ 1,351,978	$ -	$ 1,802,225
Interest Rate Risk Sensitive Assets				
Fixed Income				
Canadian bonds	-	1,801,898	-	1,801,898
Bond funds	-	562,451	295,994	858,445
Return Enhancing Assets				
Private Debt				
Bond funds[1]	-	129,648	12,756	142,404
Private debt	-	-	664,504	664,504
Mortgages	-	130,502	-	130,502
Absolute Return				
Hedge funds[1]	-	726,989	126,292	853,281
Public Equity				
Canadian equity	258,487	-	-	258,487
Non-Canadian equity	149,484	-	-	149,484
Hedge funds	-	-	24,071	24,071
Equity funds[1]	-	2,524,034	265,806	2,789,840
Private Equity	-	-	676,078	676,078
Inflation Sensitive Assets				
Infrastructure	-	-	264,437	264,437
Real estate	-	-	402,868	402,868
Total Investments not including Investment-related Assets and Liabilities	858,218	7,227,500	2,732,806	10,818,524
Investment-related Assets				
Derivatives	9,335	-	-	9,335
Investment-related Liabilities				
Derivatives	(15,175)	(66,305)	-	(81,480)
Total Investments including Investment-related Assets and Liabilities	$ 852,378	$ 7,161,195	$ 2,732,806	$ 10,746,379

[1] The 2022 previously reported amounts for Bond fund investments with a fair value of $129,648, Hedge fund investments with a fair value of $588,986 and Equity fund investments with a fair value of $1,109,695 were reclassified from Level 3 to Level 2 (refer to Note 2).

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

($ thousands)		Fair Value December 31, 2022		Gain (Loss) included in Net Investment Income (Loss)[1]		Purchases		Sales and Return of Capital		Fair Value December 31, 2023
Bond, equity and hedge funds	$	**724,919**	$	**27,173**	$	**5,288**	$	**(727,565)**	$	**29,815**
Private debt		**664,504**		**15,968**		**146,696**		**(218,033)**		**609,135**
Private equity		**676,078**		**(20,049)**		**27,120**		**(30,651)**		**652,498**
Infrastructure		**264,437**		**21,193**		**178,783**		**(71,373)**		**393,040**
Real estate		**402,868**		**(27,204)**		**42,098**		**(1,828)**		**415,934**
Total	$	**2,732,806**	$	**17,081**	$	**399,985**	$	**(1,049,450)**	$	**2,100,422**

($ thousands)		Fair Value December 31, 2021		Gain (Loss) included in Net Investment Income (Loss)[1]		Purchases		Sales and Return of Capital		Fair Value December 31, 2022
Bond, equity and hedge funds[2]	$	1,745,212	$	(210,890)	$	28,024	$	(837,427)	$	724,919
Private debt		525,971		62,408		182,263		(106,138)		664,504
Private equity		717,788		(8,708)		61,467		(94,469)		676,078
Infrastructure		194,352		5,423		68,946		(4,284)		264,437
Real estate		379,846		10,269		89,273		(76,520)		402,868
Total	$	3,563,169	$	(141,498)	$	429,973	$	(1,118,838)	$	2,732,806

[1] Includes net realized gain of $238 (2022: gain $260,476) and net unrealized gain of $16,843 (2022: loss of $401,974) in 2022.

[2] The 2022 previously reported amounts for Bond fund investments with a fair value of $129,648, Hedge fund investments with a fair value of $588,986 and Equity fund investments with a fair value of $1,109,695 were reclassified from Level 3 to Level 2 (refer to Note 2).

For the years ended December 31, 2023 and 2022 there were no transfers in nor out of Level 3.

The fair values 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:

($ thousands)	2023 Number of Investments	2023 Fair Value	2023 Cost	2022 Number of Investments	2022 Fair Value	2022 Cost
Short-Term Money Market	3	$ 319,468	$ 318,435	-	$ -	$ -
Canadian bonds	4	513,866	502,047	2	391,274	418,920
Bond funds and Mortgages	-	-	-	6	1,118,596	1,313,648
Hedge funds	3	538,463	251,871	2	266,757	103,003
Equity funds	10	3,005,078	2,589,557	10	2,305,525	2,278,118
Real estate and Infrastructure	3	379,229	344,496	2	265,130	230,158

Short-term money market – Government of Canada

Canadian bonds – Government of Canada

Hedge funds – AQR Alternative Trends Fund, Arrowstreet Capital Global Equity Long/Short Fund Limited, MW TOPS Composite 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, MW World TOPS 150-50 Fund, Orbis Institutional Global Equity LP, State Street Global Advisors Multi-Currency, TD Emerald Canadian Market Capped Pooled Fund Trust, Two Sigma International Core Fund, LP, WindWise MSCI EAFE Index NL Fund

Real Estate and Infrastructure – DigitalBridge Strategic Assets Fund, LP, OIM B5 2014 LP and OIM O2 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 in the over-the-counter market directly between two counterparties include:

i) Forwards:
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.

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 fixed 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, the Plan had the following derivative contracts outstanding. The notional amounts represent the 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.

2023

($ thousands)	Notional Value	Fair Value Assets	Fair Value Liabilities
Interest Rate Contracts			
Bond swap contracts	$ 1,818,748	$ 60,351	$ (35)
Equity Contracts			
Equity swap contracts	105,636	3,175	-
Foreign Exchange Forward Contracts	2,100,940	68,821	(1,143)
Total	$ 4,025,324	$ 132,347	$ (1,178)

2022

($ thousands)	Notional Value	Fair Value Assets	Fair Value Liabilities
Interest Rate Contracts			
Bond swap contracts	$ 1,691,182	$ -	$ (65,406)
Equity Contracts			
Equity swap contracts	946,928	-	(3,798)
Foreign Exchange Forward Contracts	2,369,372	9,335	(12,276)
Total	$ 5,007,482	$ 9,335	$ (81,480)

5. Financial Risk Management

The Plan is exposed to a variety of financial risks from the significant challenges of rapidly increasing interest rates, geopolitical tensions, high inflation, and stress in the financial markets. As a result, the Plan's investment activities have formal policies and procedures that govern the management of market, credit, foreign currency, and liquidity risk.

(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, changes in market prices such as foreign exchange rates interest rates, equity prices, commodity prices, credit spreads and other price inputs 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 increase (decrease) of 10% in equity values will impact the Plan's equity investments by an approximate unrealized gain (loss) of $409,276 (2022 : $416,881).

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 are as follows:

	2023	2022
($ thousands)	**Net Exposure**	**Net Exposure**
Canadian Dollar	**$ 9,191,262**	$ 8,324,428
Foreign Currency Exposure		
United States dollar	**2,396,631**	2,389,020
Other	**121,591**	32,931
Total	**$ 11,709,484**	$ 10,746,379

The impact of a 5% absolute change in the Canadian dollar against the United States dollar currency exposure, holding all other variables constant would have resulted in a $119,832 (2022: $119,451) change in net assets available for benefits.

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. The rapid increases in rates and inflation contribute to heightened uncertainty. This risk arises from changes in floating interest rate risk impacting investment income (loss) or changes in fixed income securities held directly by the Plan that increase or decrease unrealized gains or losses.

As at December 31, 2023, 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 $(708,832) (2022: $ (506,892)) and $883,657 (2022: $617,593), respectively.

The following table outlines UPP's derivative and non-derivative exposures to IBOR – Interbank Offered Rate reform that have yet to transition to alternative benchmark rates as at December 31:

	2023		2022	
($ thousands)	**CAD CDOR**	**USD LIBOR**	**CAD CDOR**	**USD LIBOR**
Non-derivative financial assets	$ -	$ -	$ 330,712	$ -
Derivative notional amounts	-	-	407,565	-
Total	$ -	$ -	$ 738,277	$ -

CAD CDOR – Canadian Dollar Offered Rate has transitioned to CORRA – Canadian Overnight Repo Rate Average, and USD LIBOR – London Interbank Offered Rate has transitioned 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 statement of financial position 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 at December 31, 2023, UPP maintained $1,220,445 (2022: $1,802,225) 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 are presented in the table below.

				2023
($ thousands)	**Within 1 year**	**1-5 years**	**Over 5 years**	**Total**
Accounts payable and accrued liabilities	**$ 31,350**	**$ 5,334**	**$ 10,579**	**$ 47,263**
Derivatives	**1,178**	**-**	**-**	**1,178**
Total	**$ 32,528**	**$ 5,334**	**$ 10,579**	**$ 48,441**

				2022
($ thousands)	**Within 1 year**	**1-5 years**	**Over 5 years**	**Total**
Accounts payable and accrued liabilities	$ 17,517	$ -	$ -	$ 17,517
Derivative contracts	81,480	-	-	81,480
Total	$ 98,997	$ -	$ -	$ 98,997

(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 2023 or 2022.

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

		2023		2022
($ thousands)	**Fair Value**	**Percentage of Portfolio**	**Fair Value**	**Percentage of Portfolio**
AAA	**$ 1,063,605**	**32%**	$ 24,255	2%
AA	**1,418,608**	**42**	1,278,947	74
A	**854,102**	**26**	423,106	24
BBB	**-**	**-**	3,445	-
Total	**$ 3,336,315**	**100%**	$ 1,729,753	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. Similar arrangements include securities lending and any related rights to financial collateral.

In the following table, the net amount presents the effect of the amounts that are subject to conditional netting arrangements or similar arrangements as at December 31, 2023 and 2022:

2023

($ thousands)	Gross Amounts of Recognized Financial Instruments	Amounts Available for Offset in Financial Statements	Net Amounts before Collateral	Financial Collateral Pledged	Net Amount
Derivative assets	$ 132,347	$ (30)	$ 132,317	$ -	$ 132,317
Derivative liabilities	(1,178)	30	(1,148)	-	(1,148)
Securities lending	1,503,212	-	1,503,212	(1,503,212)	-

2022

($ thousands)	Gross Amounts of Recognized Financial Instruments	Amounts Available for Offset in Financial Statements	Net Amounts before Collateral	Financial Collateral Pledged	Net Amount
Derivative assets	$ 9,335	$ (146)	$ 9,189	$ -	$ 9,189
Derivative liabilities	(81,480)	146	(81,334)	14,774	(66,560)
Securities Lending	650,051	-	650,051	(650,051)	-

(d) Collateral Pledged and Received:

UPP's collateral arrangements that support certain investment activities are as follows:

i) Derivatives

In the case of certain OTC derivatives, collateral can be pledged to counterparties to manage credit risk in accordance with the Credit Support Annex (CSA), which forms part of the International Swaps and Derivatives Association (ISDA) Master Agreements. All uncleared derivatives are subject to global regulatory requirements requiring a CSA in conjunction with ISDA.

ii) Securities lending

UPP may engage in securities lending pursuant to the terms of an agreement with a lending agent. The Plan will receive collateral of at least 102% of the value of securities on loan. Collateral will generally be comprised of obligations of or guarantee by the Government of Canada or a province thereof, or by the United States government or its agencies, but it may include obligations of other governments with appropriate credit ratings. Further, the program entered into provides for 100% indemnification by the lending agent and parties related to the Plan's custodian, to the Plan for any defaults by borrowers.

The fair value of collateral pledged and received for derivatives as well as securities loaned as at December 31, 2023 and 2022 is as follows:

($ thousands)	2023	2022
Derivatives		
Collateral pledged	$ -	$ 14,774
Securities Lending Program		
Securities loaned	1,503,212	650,051
Collateral received	1,615,257	708,363

6. Net Investment Income (Loss)

The Plan's net investment income (loss) for the years ended December 31, 2023 and 2022 is presented in the table below.

2023			
($ thousands)	Investment Income (Loss)[1]	Net Gain (Loss) on Investments[2]	Net Investment Income (Loss)[3]
Cash and Short-Term Money Market	$ 61,512	$ 4,518	$ 66,030
Interest Rate Risk Sensitive Assets			
Fixed Income			
Canadian bonds	97,620	121,714	219,334
Non-Canadian bonds	-	(3)	(3)
Bond funds	5,756	23,765	29,521
Private debt	-	-	-
Return Enhancing Assets			
Private Debt			
Bond funds	4,921	5,645	10,566
Private debt	11,077	15,993	27,070
Mortgages	4,903	2,170	7,073
Absolute Return			
Hedge funds	2,197	63,244	65,441
Public Equity			
Canadian equity	9,418	17,719	27,137
Non-Canadian equity	4,071	40,099	44,170
Hedge funds	-	-	-
Equity funds	55,424	408,014	463,438
Private Equity	9,423	(19,494)	(10,071)
Inflation Sensitive Assets			
Infrastructure	4,501	21,193	25,694
Real estate	10,393	(27,203)	(16,810)
Derivative Instruments	7,197	147,571	154,768
Total Investment Income	288,413	824,945	1,113,358
Investment Management Expenses			
External manager fees	(29,113)	-	(29,113)
Net Investment Income (Loss)	$ 259,300	$ 824,945	$ 1,084,245

($ thousands)		Investment Income (Loss)[1]		Net Gain (Loss) on Investments[2]		Net Investment Income (Loss)[3]
						2022
Cash and Short-Term Money Market	$	9,963	$	19,581	$	29,544
Interest Rate Risk Sensitive Assets						
Fixed Income						
Canadian bonds		71,108		(136,866)		(65,758)
Non-Canadian bonds		10		(335)		(325)
Bond funds		46,133		(215,159)		(169,026)
Private debt		-		(3,443)		(3,443)
Return Enhancing Assets						
Private Debt						
Bond funds		6,130		(17,307)		(11,177)
Private debt		10,995		62,408		73,403
Mortgages		4,736		(6,051)		(1,315)
Absolute Return						
Hedge funds		-		128,938		128,938
Public Equity						
Canadian equity		6,594		(20,855)		(14,261)
Non-Canadian equity		5,069		(21,697)		(16,628)
Hedge funds		-		(4,827)		(4,827)
Equity funds		142,855		(523,590)		(380,735)
Private Equity		13,422		(8,708)		4,714
Inflation Sensitive Assets						
Infrastructure		11,350		5,423		16,773
Real estate		25,154		10,269		35,423
Derivative Instruments		(8,755)		(702,941)		(711,696)
Total Investment Income		344,764		(1,435,160)		(1,090,396)
Investment Management Expenses						
External manager fees		(22,872)		-		(22,872)
Net Investment Income	$	321,892	$	(1,435,160)	$	(1,113,268)

[1] Investment income (loss) is net of transaction costs of $680 (2022: Nil).

[2] Includes net realized loss of $(178,065) (2022: loss $(353,013)) and net unrealized gain of $1,003,010 (2022: loss $(1,082,146)) in 2023.

[3] 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 obligation at December 31, 2023 was prepared using the discount rate approved by the Board of Trustees for the January 1, 2024 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 January 1, 2023 period-end.

The pension obligation at December 31, 2023 was prepared using the discount rate approved by the Board of Trustees for the January 1, 2024 actuarial valuation.

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

	2023	2022
Discount rate[1]	**5.45%**	5.45%
Inflation rate[2]	**2.00%**	2.00%
Cost-of-living adjustments	**1.50%**	1.50%
YMPE and ITA maximum pension	**2.75%**	2.75%
Pensionable earnings	**4.00%**	4.00%
Mortality table	**95% of 2014 Canadian Public Sector Pensioners' Mortality Table, with mortality improvement scale MI-2017 from 2014**	95% of 2014 Canadian Public Sector Pensioners' Mortality Table, with mortality improvement scale MI-2017 from 2014
Retirement rates	**Age-related table[3]**	Age-related table[3]

[1] The pension obligation as at December 31, 2023 was prepared using the discount rate approved by the Board of Trustees for the January 1, 2024 actuarial valuation. This reflects the revised long-term asset mix return estimates for the purposes of the actuarial valuation.

[2] For University of Guelph members, the Cost-of-living adjustment assumptions has changed for pre-conversion service from 0.6% p.a. to 25% of inflation. The Inflation assumptions used in the actuarial valuation will change from 2.00% to 2.25% for 2024 and 2.00% for 2025 and beyond.

[3] 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 ages 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.

Actuarial Value Adjustment

For funding purposes, the Plan adopted an actuarial asset value basis for measurement of plan assets effective January 1, 2023. Under this method, the actuarial value of assets has been determined using a smoothing method that recognizes excess investment gains and losses over that year's discount rate occurring during a calendar year on a straight-line basis over five years (three years at December 31, 2022 and phasing into five years at December 31, 2024 once five years of data is available). Excess gains and losses are determined by reference to the discount rate assumption for the going concern valuation. The actuarial value of assets cannot exceed or be lower than 15% of the fair value of net assets. The impact of the Actuarial value adjustment reduces the funding deficit in the Statement of Financial Position by $496,335 as at December 31, 2023 (2022: $1,028,539).

8. Contributions

Contributions received or receivable for the years ended December 31, 2023 and 2022 were comprised of the following:

($ thousands)	2023	2022
Member Contributions		
Current service contributions[1]	$ 218,228	$ 202,994
Total Member Contributions	218,228	202,994
Employers		
Current service contributions[1]	226,444	208,476
Past service contributions[2]	61,162	-
Total Employer Contributions	287,606	208,476
Transfers in from Other Plans	14,395	8,440
Total Defined Benefit Contributions	$ 520,229	$ 419,910

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

[2] Past service contributions include both required and voluntary contributions.

9. Benefit Payments

Benefit payments for the years ended December 31, 2023 and 2022 were comprised of the following:

($ thousands)		2023		2022
Retirement benefits	$	(483,067)	$	(459,243)
Termination/death benefits		(68,480)		(88,861)
Transfers to other pension plans		(6,954)		(2,453)
Total Benefit Payments	$	(558,501)	$	(550,557)

10. Investment Administrative and Pension Administrative Expenses

(a) Investment Administrative Expenses:

($ thousands)		2023		2022
Salaries and benefits	$	32,994	$	24,251
Professional, agency, and consulting fees[1]		11,550		13,527
Technology and communications		3,840		5,406
Premise		1,411		1,175
Other		2,390		1,041
Total Investment Administrative Expenses	$	52,185	$	45,400

(b) Pension Administrative Expenses:

($ thousands)		2023		2022
Salaries and benefits	$	14,076	$	7,531
Professional, agency, and consulting fees[1]		18,673		10,333
Technology and communications		1,957		946
Premise		1,411		525
Other		1,196		382
Total Pension Administrative Expenses	$	37,313	$	19,717

[1] Total professional fees include $1,762 (2022: $1,624) in actuarial fees and $836 (2022: $351) in external audit fees.

11. Related party transactions

Related party transactions include the following:

(a) an agency agreement with each of University of Toronto, University of Guelph and Queen's University to provide pension administrative services in 2023, and an agency agreement with University of Toronto to provide investment management services that completed in March 31, 2022. In 2023, $4,321 in fees were expensed for pension administrative services ($6,419 for the year ended December 31, 2022, inclusive of investment management services); and

(b) compensation to key management personnel, which includes the Board of Trustees of the Plan and members of the 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)		2023		2022
Salaries and short-term employee benefits	$	**7,597**	$	7,174
Other long-term benefits		**1,348**		-
Total	$	**8,945**	$	7,174

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, including a significant infrastructure asset. UPP also has future lease commitments for office premises. As at December 31, these commitments totalled $1,281,950 (2022: $992,067).

14. Subsequent Events

On April 30, 2024, the Association of Professors of the University of Ottawa and non-unionized staff from the Ontario Confederation of University Faculty Associations joined UPP for future service only. Trent University staff and Victoria University staff and faculty will be joining UPP on January 1, 2025.

Appendix

Appendix 1. Actuarial assumptions used in the funding valuation

Plan net assets are measured at fair market value and on a smoothed asset basis, where investment gains and losses are averaged over a period of years to smooth out market fluctuations. 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*. The going-concern basis assumes the Plan will continue to exist over a very long time horizon as to seem indefinite—in a sense, until the last pension payment is made to existing members, which could be 75 to 100 years from now.

To estimate our benefit funding needs, economic assumptions reflect the external market environment and Plan experience. These assumptions include expected investment returns, inflation and salary trends, and other regulatory elements, such as growth in the Year's Maximum Pensionable Earnings limit (the maximum annual earnings amount on which individuals are required to contribute to the CPP).

The discount rate is the most important economic assumption in any pension valuation. It is used to "discount" future pension payments and contributions into a present value, or value in today's dollars. It considers what the pension fund can earn over the long term, net of costs and provisions for risk, and how conservative to be today to ensure sufficient future funding.

Changing the discount rate is an important decision made by UPP's Board of Trustees, which must be made judiciously, taking many factors into account. Its timing will impact "who pays and when" and is a vital tool in managing a fair Plan experience between current, retired, and future members.

Demographic assumptions help forecast when and for how long contributions will be made by Plan members and 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 being 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.[20] This table is commonly used by all large public sector plans across the country.

UPP's active-to-retiree ratio is 1.7, meaning over one-and-a-half active members for every retiree. This common measure of plan maturity and plan sustainability indicates how many active contributing members UPP has relative to retired members receiving pension payments in the Plan.

Both the retirement and mortality scales are recommended by UPP's external actuary, regularly reviewed with UPP Management, and approved by UPP's Board of Trustees.

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

Appendix 2: 2023 carbon footprint and methodology

Global greenhouse gas (GHG) emissions have risen quickly in past decades and now need to drop even more quickly to limit global warming to 1.5°C, with no or limited overshoot. Longer term, GHG emissions need to approach, and likely be lower than, zero to stabilize our climate.

UPP seeks to do our part by committing to achieve net-zero GHG emissions in our investment portfolio by 2040 or sooner. This commitment is consistent with the objectives of the Paris Agreement to limit the average global temperature increase to 1.5°C above pre-industrial temperatures.

Tracking our GHG emissions

To track our progress, we annually calculate and report our portfolio carbon footprint, which is an analysis of the emissions associated with our investments. Calculating and disclosing carbon footprint metrics meets one aspect of the Task Force on Climate-related Financial Disclosures (TCFD) recommendation to disclose Scope 1, Scope 2, and, if appropriate, Scope 3 GHG emissions and the related risks.

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. For example, emissions associated with products from a supplier and emissions from its products when customers use them.

We report the Scope 1, 2, and 3 emissions of our portfolio companies (direct and indirect GHG emissions) since they are the basis of UPP's Scope 3 emissions (for us, indirect GHG emissions associated with our portfolio are Scope 3 emissions under Category 15: Investments of the GHG Protocol) in the table on page 96. We separately report Scope 1 and Scope 2 emissions for sovereign bonds and the estimated Scope 3 emissions of our portfolio companies.

Carbon footprint methodology

UPP's carbon footprint method employs carbon dioxide equivalent (CO2-eq) for GHG emissions. It includes the GHG emissions included in the Greenhouse Gas Protocol: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), hydrofluorcarbons (HFCs), perfluorcarbons (PFCs), sulphur hexafluoride (SF6), and nitrogen trifluoride (NF3). Our calculations are informed by the *Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, Revised Edition* and the *Global GHG Accounting and Reporting Standard Part A: Financed Emissions, Second Edition* developed by the Partnership for Carbon Accounting Financials (PCAF Standard).

Our methodology is intended to help UPP prepare a true and fair inventory of our financed GHG emissions and is based on the principles of relevance, completeness, consistency, transparency, and accuracy. GHG emissions from our investments are attributed to us based on the proportion of the investment we own. For example, if UPP owns 1% of a portfolio company's enterprise value, including cash, we include 1% of its GHG emissions in our carbon footprint.

Reporting scope

UPP's current portfolio footprint includes the GHG emissions associated with our long investment exposures in equities and fixed income (publicly traded and privately held), including total return swaps. Short exposures are not included and we have excluded cash, cash equivalents, derivatives funding, absolute return assets, and investments for which it is not possible to determine GHG emissions. As a result of these exclusions, the value of analyzed exposures in our carbon footprint will not always match UPP's total asset exposure reported on page 33.

Carbon footprint (tonnes CO2-eq/$M invested)

40 tonnes CO2-eq/$M invested

17% reduction since the base year

The carbon footprint of UPP's portfolio for 2023 was 40 tonnes CO2-eq/$M CAD invested, a 17% reduction from the 2021 base year. Again, changes to the portfolio are the primary reason for the reduction.

UPP's financed greenhouse gas emissions

PricewaterhouseCoopers LLP conducted an independent, third-party limited assurance engagement on the public equity portion of our 2023 carbon footprint metrics, as noted by the check marks (☑) below. Its limited assurance covers 34% of our net investment exposures as of December 31, 2023. See the assurance report.

	Value of exposure analyzed ($M)		Total carbon emissions (tonnes CO2-eq)		Carbon footprint (tonnes CO2-eq/$M invested)		Weighted average carbon intensity (tonnes CO2-eq/$M revenue)		Emission-weighted data quality score	
	2023	2022	2023	2022	2023	2022	2023	2022	2023	2022
Public equity	3,975	4,185	181,066☑	240,784	46☑	58	94	128	1.9	2.0
Private equity	712	691	21,879	12,955	31	19	69	44	5.0	4.9
Private debt	791	1,008	16,760	20,157	21	20	48	63	5.0	5.0
Infrastructure	393	264	29,099	26,480	74	100	266	326	5.0	5.0
Real estate	415	407	1,464	3,522	4	9	31	62	5.0	5.0
Corporate fixed income	0	884	0	41,371	N/A[22]	47	74	155	5.0	3.7
Total	6,287	7,439	250,267[22]	345,269	40	46	92	118	2.7	2.8

[21] UPP's exposure to corporate fixed income as a sub-asset class was negligible in 2023. The intensity of the small remaining value was 46 tonnes CO2-eq/$M CAD invested.
[22] Figures do not add up due to rounding.

Emissions associated with sovereign debt investments

To align with PCAF Standard and the expectations of Net-Zero Asset Owner Alliance members, we also calculate the emissions associated with our sovereign debt investments. However, these emissions cannot be included with the carbon footprint calculations from other investments due to variances in methodology and inherent double counting.

	Carbon footprint (tonnes CO2-eq/$M invested)		Total carbon emissions (tonnes CO2-eq)	
	2023	**2022 (Restated)**	**2023**	**2022 (Restated)**
Scope 1 including land use, land-use change, and forestry	**360**	453	**987,677**	693,698
Scope 1 excluding land use, land-use change, and forestry	**370**	457	**1,013,842**	700,744
Scope 2	**66**	82	**181,309**	124,958

Note: UPP updated the methodology for calculating greenhouse gas emissions associated with sovereign bond investments, resulting in restated total carbon emissions and carbon footprint for 2022.

Scope 3 emissions associated with our portfolio companies

Measuring Scope 3 emissions associated with portfolio companies is still a relatively new exercise for pension funds and we rely heavily on estimates from our third-party data provider. Scope 3 emissions for all investments in our portfolio totalled approximately 1.5 million tonnes CO2-eq, down from 2.3 million tonnes CO2-eq in 2022.

Carbon footprint data quality

The table to the right describes our carbon footprint data sources and how we assigned a data quality score to each investment. It further explains how emission data is generated for our calculations. For our 2023 carbon footprint, 51% of the analyzed value was based on data reported by companies and collected by our third-party data provider (Score 1 and 2). The data quality of our sovereign debt emissions is a Score 1, as we used verified GHG emissions reported by the country.

Carbon footprint methodologies, including the attribution of portfolio company emissions to investors, are evolving at a rapid pace. We have calculated our metrics to the best of our ability at the time of publication. However, our approach is subject to various limitations and challenges. For example, we rely on two types of data to calculate our metrics: emission data reported by companies and collected by our third-party provider and estimates from a third-party data provider. Much of the reported company data is not third-party verified, a process that would provide greater certainty in the data. Our third-party data provider does not provide a Systems and Organization Controls Report to support its estimates. However, data quality control documentation is provided. Nearly half of our carbon footprint relies on estimated data from our third-party data provider or on internal calculation.

Going forward, we plan to continually improve the quality of our input data through engagement with companies and data providers, and we also plan to enhance our analytical capabilities.

	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 or other means

UPP's operational carbon footprint

UPP applies the operational control approach to our operational emissions accounting. UPP's workforce grew in 2023, which led to increases in electricity consumption and waste generated. This increase was offset by the move to a new office space at 16 York Street, which is certified as LEED Platinum, resulting in an overall 2023 operational emissions footprint of 49.7 tCO2e, which represents a decrease of 22% from 2022.

UPP does not directly own or control direct GHG emissions (i.e., Scope 1 emissions) from our operations. The following provides information about Scope 2 and 3 emissions associated with our operations.

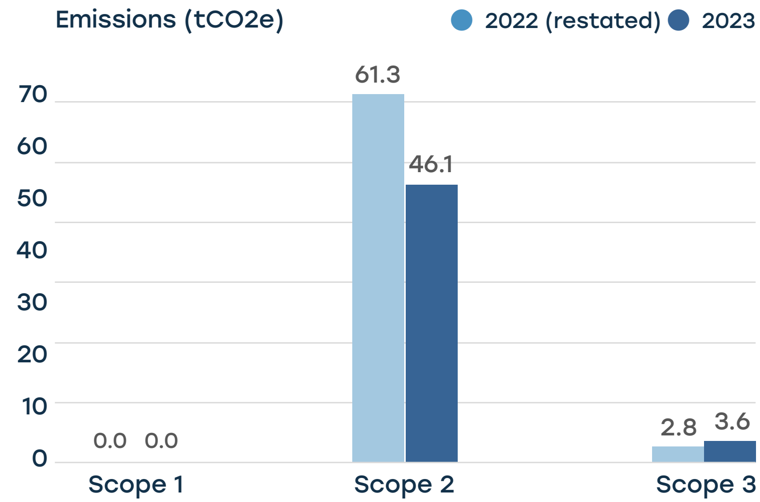
UPP's Scope 2 emissions

Scope 2 emissions arise from electricity and heat consumed at our office space. Data was collected from the property manager for electricity and steam use at 222 Bay Street (January to October) and for electricity and natural gas consumption at 16 York Street (November to December). Similarly, we received information on recycled, composted, and landfill waste for both office locations in 2023.

UPP's Scope 3 emissions

Scope 3 emissions include category 1 (purchased goods and services), category 5 (waste generated in operations), category 6 (business travel), category 7 (employee commuting), and category 15 (investments, reported above). In 2023, UPP began collecting and reporting Scope 3 categories 5 and 15 emissions. To address category 5, we received information on recycled, composted, and landfill waste for both office locations in 2023. UPP is currently establishing systems to collect additional Scope 3 emissions data for categories 1, 6, and 7 in 2024. Once additional Scope 3 emissions are collected, we will establish a baseline year for our operational footprint, which will allow us to track progress of our operational carbon footprint over time.

UPP Operational Emissions Scopes 1, 2, and 3



	Units	2023	2022 (restated)	YoY change (%)
Scope 1				
Scope 1	tCO2e	**-**	-	-
Scope 2				
Electricity	tCO2e	**5.94**	5.90	0.59
Emissions factor	gCO2e/kWh	**30.00**[23]	28.00[23]	-
Steam	tCO2e	**34.49**	55.38	(37.72)
Emissions factor	gCO2e/lb.	**76.60**[24]	76.602	-
Natural Gas	tCO2e	**5.71**	-[25]	-
Emissions factor	$gCO2e/m^3$	**1,921.00**[26]	1,921.00[27]	-
Total Scope 2	**tCO2e**	**46.14**	**61.28**	**(24.71)**
Scope 3				
Landfilled waste	tCO2e	**1.81**	1.34	35.08
Emissions factor	tCO2e/short tonne	**0.52**[28]	0.52[29]	-
Composted waste	tCO2e	**0.60**	0.51	18.88
Emissions factor	tCO2e/short tonne	**0.17**[28]	0.17[29]	-
Recycled waste	tCO2e	**1.18**	0.91	30.23
Emissions factor	tCO2e/short tonne	**0.99**[28]	0.99[29]	-
Total Scope 3	**tCO2e**	**3.60**[30]	**2.76**	**30.50**
Total				
Scope 2 and 3	**tCO2e**	**49.74**	**64.04**	**(22.33)**

[23] Ontario emissions factor as defined by Government of Canada's 2023 Emission Factors and Reference Values.

[24] Based on the 2021 EPL Study of Enwave DLWC and Steam

[25] UPP's office building in 2022 did not use natural gas

[26] Ontario emissions factor as defined by Government of Canada's 2023 Emission Factors and Reference Values

[27] Ontario emissions factor as defined by Government of Canada's 2022 Emission Factors and Reference Values

[28] Mixed municipal solid waste in landfill emissions factor as defined by 2023 United States Environmental Protection Agency Emissions Factor for Greenhouse Gas Inventories

[29] Mixed municipal solid waste in landfill emissions factor as defined by 2022 United States Environmental Protection Agency Emissions Factor for Greenhouse Gas Inventories

[30] Figures do not add up due to rounding.

Appendix 3: TCFD disclosure matrix

In line with our expectation of investee companies, we publicly report on our climate management practices annually, in line with the recommendations of the Task Force on Climate-Related Financial Disclosures. Below is a cross-reference to where the recommended disclosures can be found throughout the report.

Disclosure	Page
Governance	
a) Describe the Board's oversight of climate-related risks and opportunities.	49
b) Describe management's role in assessing and managing climate-related risks and opportunities.	49
Strategy	
a) Describe the climate-related risks and opportunities the organization has identified over the short-, medium-, and longer terms	In progress
b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	6, 16, 28, 31, 45
c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	In progress
Risk management	
a) Describe the organization's processes for identifying and assessing climate-related risks	39-46
b) Describe the organization's processes for managing climate-related risks	39-40, 45-46
c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	39-40
Metrics and targets	
a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	46-47
b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 GHG emissions and related risks	47, 114-119
c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	45-47

Appendix 4: Top external managers

$50 million or more of our assets under management[31]

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, LP.	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
Compass Rose Asset Management, LP	Active
Crestline Management, L.P.	Active
DigitalBridge	Active

Name	Active/passive
Fiera Capital Corporation	Active/Passive
Impax Asset Management Group	Active
Marshall Wace LLP	Active
Orbis Investment Management Limited	Active
PAG	Active
Q Residential	Active
Quinbrook Infrastructure Partners LLC	Active
Redwheel	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/Passive
Trustbridge Partners	Active
Two Sigma Advisers, LP	Active
Voloridge Investment Management, LLC	Active

[31] Includes external managers who have consented to disclosure. UPP provides this list for information purposes only. It 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, 2023, and may not reflect UPP's current external managers. UPP does not guarantee the completeness, timeliness, nor 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.

Appendix 5: Limited assurance opinion on public equity portion of carbon footprint

Independent practitioner's limited assurance report on the select performance metrics of University Pension Plan Ontario (UPP) as presented in UPP's 2023 Annual Report

To the Board of Trustees and Management of UPP

We have undertaken a limited assurance engagement of the select performance metrics included below (the select performance metrics) for the year ended December 31, 2023, as presented within UPP's 2023 Annual Report.

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

Performance metrics	2023
Total Carbon Emissions	181,066 tCO2eq
Carbon footprint	46 tCO2eq/$M invested

UPP's responsibility for the select performance metrics

UPP is responsible for the preparation of the select performance metrics in accordance with the applicable criteria established in Exhibit 1 (the applicable criteria). UPP is also responsible for selecting the applicable criteria used. UPP is also responsible for the design, implementation and maintenance of internal control relevant to the preparation of the select performance metrics that are free from material misstatement, whether due to fraud or error.

Our independence and quality management

We have complied with independence and other ethical requirements of 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 Management 1, *Quality Management for Firms that Perform Audits or Reviews of Financial Statements, or Other Assurance or Related Services Engagements*, which requires the firm to design, implement and operate a system of quality management, including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our responsibility

Our responsibility is to express a limited assurance conclusion on the select performance metrics based on the procedures we have performed and 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* and in respect of greenhouse gas emissions, Canadian Standard on Assurance Engagements (CSAE) 3410, *Assurance Engagements on Greenhouse Gas Statements* issued by the Auditing and Assurance Standards Board.

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"PwC" refers to PricewaterhouseCoopers LLP, an Ontario limited liability partnership

These standards require that we plan and perform this engagement to obtain limited assurance about whether the select performance metrics are free from material misstatement.

A limited assurance engagement undertaken involves assessing the suitability in the circumstances of UPP's use of the applicable criteria as the basis for the preparation of the select performance metrics, assessing the risks of material misstatement of the select performance metrics whether due to fraud or error, responding to the assessed risks as necessary in the circumstances, and evaluating the overall presentation of the select performance metrics. A limited assurance engagement is substantially less in scope than a reasonable assurance engagement in relation to both the risk assessment procedures, including an understanding of internal control, and the procedures performed in response to the assessed risks.

The procedures we performed were based on our professional judgment and included 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 select performance metrics were appropriate and consistent with the applicable criteria;
- through inquiries, obtained an understanding of UPP's control environment and the information systems relevant to the select performance metrics 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;
- for a limited sample of assets, reconciled the select performance metrics data back to the underlying records; and
- reviewed the select performance metrics disclosure in UPP's 2023 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. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had we performed a reasonable assurance engagement. Accordingly, we do not express a reasonable assurance opinion about whether UPP's select performance metrics have been prepared, in all material respects, in accordance with the applicable criteria applied as explained in Exhibit 1.

Significant inherent limitations

Non-financial data is subject to more limitations than financial data, given both the nature and the methods used for determining, calculating, sampling, or estimating such data. Qualitative interpretations of relevance, materiality and the accuracy of data are subject to individual assumptions and judgments.

GHG quantification is subject to inherent uncertainty because of incomplete scientific knowledge used to determine emissions factors and the values needed to combine emissions of different gases.

Limited assurance 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 year ended December 31, 2023, are not prepared, in all material respects, in accordance with the applicable criteria.

Purpose of the select performance metrics and restriction on use of our report

The select performance metrics have been prepared in accordance with the applicable criteria to report to the Board of Trustees. As a result, the select performance metrics may not be suitable for another purpose. Our report is intended solely for UPP.

We neither assume nor accept any responsibility or liability to any third party in respect of this report.

PricewaterhouseCoopers LLP

Chartered Professional Accountants
Toronto, Ontario

June 6, 2024

Exhibit 1: Select performance metrics and criteria

KPIs name	Description	Reporting criteria and scope
Total carbon emissions	The absolute GHG emissions associated with the measured portfolio, expressed in Metric tonnes CO2-equivalent (tCO2eq) as at December 31, 2023.	• Management's internally developed criteria as outlined in UPP's 2023 Annual Report. • The Global GHG Accounting and Reporting Standard Part A: Financed Emissions Second Edition developed by the Partnership for Carbon Accounting Financials (PCAF). • The Greenhouse Gas Protocol, A Corporate Accounting and Reporting Standard, Revised Edition **In-scope asset class:** Public Equity
Carbon footprint	Total carbon emissions for a portfolio normalized by the market value of the portfolio, expressed in tCO2eq/$M invested as at December 31, 2023.	