

Pensions

Backgrounder #1 for UTFA Members

This backgrounder introduces some of the key issues driving current discussions about the U of T pension plan and why a jointly sponsored pension plan (JSPP) option is being explored. You will receive additional backgrounders in the coming weeks and months. For an overview of the U of T plan, please see *U of T Pension Plan at a Glance*.

Current status of U of T pension plan

The U of T pension plan is a defined benefit plan. Under this type of plan, the amount of pension you receive at retirement is defined by a formula based on earnings and service. Pensions are paid from the pension fund, which is made up of employer and employee contributions, and investment earnings on these contributions. Employee contributions are based on an earnings-related formula set out in the plan. On the other hand, the employer is required to contribute whatever is required to meet Ontario's funding rules.

Managing the U of T Administration's contributions to the pension plan has become increasingly challenging in recent years. Like most defined benefit pension plans in the Ontario university sector, the U of T plan has a significant funding shortfall due largely to the adverse impact of the 2008 financial crisis on the plan's finances.

To pay down the shortfall, in addition to its regular pension contributions, the university is currently making annual special payments of \$78.7 million from its operating budget. However, in the absence of major changes to the plan or current provincial funding rules (see page 2), or both, the university will be faced with hundreds of millions of dollars in additional pension payments. These payments could have serious repercussions for U of T's programming, and may create pressure for additional employee contribution increases.

TWO SIDES OF PENSION PLAN

Assets in pension fund

Contributions and investment earnings

Liabilities

Cost of pension owed to active, inactive and retired members

Estimated cost of \$50,000 annual pension paid for life with a 10-year guarantee, starting at age 65

10 years ago: \$740,000

VS

Today: \$960,000

How we got here

Three factors contributing to the plan's current funding challenges are:

1. volatile investment markets, which are making it more difficult to achieve reasonable and predictable investment returns;
2. improvements in life expectancy, which translate into longer pension payouts (and costlier pensions); and
3. low and unpredictable long-term interest rates.

These challenges are compounded by current provincial funding requirements, which determine how the financial health of the plan is measured and what additional contributions must be made in the event of a shortfall.

Provincial funding requirements

The plan is required to file a formal valuation with the Ontario pension regulator at least once every three years. This valuation tests the plan's health based on two scenarios:

1. **going concern**, which assumes the plan will continue to operate as expected for many years to come; and
2. **solvency**, which assumes the plan ends on the date of the valuation, and is designed to protect plan members in the case of employer bankruptcy.

Any going-concern or solvency shortfall reported in the valuation must be paid off within a specified period.

The plan's most recent valuation showed that, as of July 1, 2016, the plan had both going-concern and solvency shortfalls—and that these shortfalls were bigger than they were in 2015. In particular, the plan experienced a significant deterioration in its solvency position. This is largely because the solvency valuation is required to use point-in-time interest rates to determine how much money is needed to provide pensions owed to members. When interest rates drop, more money is required to provide these pensions—and vice versa. Even minor changes in interest rates can have a dramatic impact on solvency funding results.

A drop of



in interest rates, increases U of T's solvency funding obligation by about 17% or

\$973 million

based on 2016 valuation

In recognition of the negative impact current low interest rates have had on Ontario university plans' solvency results, the province has granted temporary solvency relief that eliminates, or substantially reduces, any payments to address their solvency shortfall. Based on the 2016 valuation results, the going concern shortfall was \$573 million and the solvency deficit was \$1.7 billion. If solvency funding applied, this solvency deficit (after accounting for the going concern shortfall) would have to be funded. Of course, the plan's solvency funding status could look very different if interest rates change.

Provincial funding review

Given the extreme unlikelihood of the U of T suddenly shutting its doors, many experts agree that the solvency test is not an appropriate measure of our plan's financial health. In fact, most provinces in Canada don't require universities to fund for solvency, and Ontario universities have been lobbying for the removal of the solvency funding requirements for many years.

In 2016, the Ontario government launched a review of its current solvency funding regime led by David Marshall, former president and CEO of the Workplace Safety and Insurance Board. Marshall's report is expected to be released in spring/summer 2017. It would then be up to the provincial government to determine which, if any, of Marshall's recommendations will be implemented.

We know that managing the cost of funding and maintaining defined benefit pension plans in the university sector has been on the provincial government's agenda since its 2012 release of the Drummond report on the reform of Ontario's public services and subsequent budget. The province wants equal sharing of pension costs between employers and employees—which naturally leads to equal participation in plan governance. It also supports the consolidation of plans to achieve efficiencies of scale.

Jointly sponsored pension plan option

JSPPs aren't new. Ontario's JSPPs currently include six of the largest pension plans in the province, such as the Ontario Teachers' Pension Plan (OTPP), the Ontario Municipal Employees Retirement System (OMERS) and the Healthcare of Ontario Pension Plan (HOOPP). These plans have a long history, and are internationally respected for their ability to provide secure, high-quality pensions. They are also exempt from solvency funding, with employers and employees sharing in both costs and governance.

The most recent comprehensive review of pension regulations in Ontario, conducted by Professor Harry Arthurs in 2010, highlighted the potential role for new JSPPs in Ontario. The provincial government responded by issuing draft regulations governing the conversion of existing defined benefit pension plans to JSPPs.

Like the current U of T plan, JSPPs provide defined benefit pensions. This means that pension amounts are pre-defined based on a formula that uses earnings and service. However, whereas the university is responsible for governing the U of T plan and ensuring it meets provincial funding requirements, employers and employees in a JSPP are jointly responsible for plan governance and plan costs.

Why now?

In other jurisdictions in Canada, the U.S. and U.K., defined benefit pension plans are under attack, including in the university sector. Here in Ontario, continued political support for defined benefit plans (like the U of T plan) for public sector workers is far from certain.

The JSPP option presents an opportunity to move university sector pension plans to a framework that includes world-renowned plans generally considered to be untouchable—thereby taking both solvency risk and political risk off the table.

Tri-university option

Ministry of Finance officials have consistently advised that the government will consider granting solvency exemptions only to JSPPs that include more than one employer (although this could change depending on the recommendations contained in the Marshall report and the government's response to those recommendations). To achieve exemption from solvency funding and the administrative economies of scale desired by the province, the U of T has partnered with Queen's University and the University of Guelph to explore a tri-university JSPP option. The goal is to model the pension provided by the new plan as closely as possible on the current U of T plan.

Three important drivers of UTFA's interest in the tri-university JSPP option:

- 1. Protect defined benefit pensions, which provide a secure and predictable income at retirement;*
- 2. Establish a prudent and stable funding regime; and*
- 3. Give employees an equal voice in the management of the plan.*

The goal is to model the pension provided by the new plan as closely as possible on the current U of T plan.

How transition to the new plan could work

We are at the very early stages of investigating the feasibility of participating in a tri-university JSPP, and we still have more questions than answers. However, we are reviewing approaches that are fair and equitable to pension stakeholders at all three institutions.

To that end, one of the underlying principles is that each university would be responsible for funding its current deficit at the time of conversion to the new plan. With these deficit payments, the JSPP would be fully funded on a going-concern basis at inception. Future gains and losses would be managed jointly by a sponsor board, with equal representation by employers and employees—and future contributions and benefits would be calculated on the same terms across all three universities.

All pensions already earned would be fully transferred to the new plan with no change and would be guaranteed. Retirees would continue to receive their pensions as usual, but payments would be made by the new JSPP administrator.

The decision to convert to the new plan will require a formal consent process and ratification by active, inactive, and retired members and beneficiaries.

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The process for moving forward

Over the coming weeks, UTFA's Ad Hoc Pensions Discussion Committee will make recommendations to our Executive and Council. With Council's approval, UTFA would start formal discussions with the representatives of other faculty associations and unions, as well as the administrations of the three universities. The goal would be to reach consensus on a potential JSPP design. That design would be carefully considered by Council, with a formal decision deferred until there is some clarity about the potential impact of the Marshall recommendations. Should Council endorse moving forward, a broader education and consultation process would begin. This would be followed by the necessary U of T internal approval processes, union processes and member ratification processes.

WHAT YOU CAN DO

Our task is to learn as much as we can about the additional implications of converting to a JSPP to support an informed judgement about the future of U of T's pension plan.

We encourage you to follow and become active in the discussions. Here's how you can do that:

- **Understand the issues:** In the weeks ahead, there will be several presentations, question and answer documents, and a website set up as a focal point for all supporting materials.
- **Lend your voice:** Your feedback on the issues will play an important part in how the JSPP option unfolds.
- **Stay up to date:** We'll keep you informed along the way, and send notifications when new information becomes available.

This document describes highlights of the University of Toronto Pension Plan in simple terms. If there are any errors or differences between the information given here and the legal plan documents, the legal documents will apply.

Pensions

Backgrounder #2 for UTFA Members

This Backgrounder takes a closer look at the differences between single-employer DB plans and multi-employer JSPPs. See Backgrounder #1 for information on the current financial status of the U of T plan and the key issues driving UTFA's pension discussion.

A closer look at the jointly-sponsored pension plan option

Defined benefit (DB) pension plans, like the U of T's current plan, are generally considered the gold standard in pension plans because they provide secure, lifetime pensions. But these plans are under threat due to growing and increasingly volatile costs that are making DB plans difficult for employers to budget for. The shift away from DB is most evident in the private sector, where less than 25% of employees now have any kind of pension plan, and of those, only 45% participate in a DB plan.

Continued government support for good DB pensions in public sector institutions like ours is far from certain, especially in light of the large pension deficits currently plaguing most plans. Given the current pension environment and based on research to date, a jointly-sponsored pension plan (JSPP) framework has emerged as a strong option for preserving high-quality DB pensions while maintaining government support.

Many of Ontario's top public sector pension plans are JSPPs—names you probably know like Teachers and HOOPP. They enjoy an international reputation for delivering secure, sustainable retirement benefits. JSPPs are promoted by the Ontario Ministry of Finance over single-employer DB plans because they involve cost-sharing with employees, as well as:

- Greater transparency
- Better governance and
- More predictable costs.

A great deal of work has already been done towards the development of a JSPP model for the university sector. Through UTFA's participation in the U of T Joint Working Committee (JWC), we have been considering the potential of a JSPP for our members for more than a year. We have reached the point where we need to know much more precisely what a university JSPP would look like. Our immediate goal is to gather the information UTFA Council needs to make an informed decision about authorizing the Ad Hoc Pensions Committee to explore the JSPP option with Queen's and Guelph more fully.

With fading public support for the current provincial government and given the past positions taken by the official opposition, we believe there may be a limited window of opportunity to work through the details of a conversion to a JSPP that will work for the U of T and which will give plan members greater control over our own future. This is one reason why these discussions are happening now.

Our immediate goal is to gather the information UTFA Council needs to make an informed decision about authorizing the Ad Hoc Pensions Committee to explore the JSPP option with Queen's and Guelph more fully.

Key differences between DB plans and JSPPs

Both DB plans and JSPPs provide defined benefit pensions, based on a formula tied to earnings and service (years of eligible employment). But there are four main differences between these two types of plans:

1. In a single-employer plan, the employer, as sole plan sponsor, is responsible for both governance and funding. A JSPP, on the other hand, is jointly sponsored by employees and employers, who share responsibility for governance and funding.
2. We expect that entering into a multi-employer JSPP with Queen's University and the University of Guelph would exempt the plan from solvency funding. For the U of T, this would eliminate the need to fund the \$1.7 billion solvency shortfall (based on the most recent valuation).
3. The pensions promised to members in DB plans and JSPPs cannot be reduced while these plans are ongoing. In a JSPP, however, pensions may be reduced in the unlikely event the plan is wound up and has a solvency shortfall. In order for a multi-employer JSPP to wind-up, all employers must stop participating and the employee groups must give consent to the wind up. Any wind-up reduction would apply only to pensions earned after the conversion. All pensions earned under the current U of T plan would not be reduced—these are fully guaranteed for active, inactive and retired members, and their beneficiaries.
4. JSPPs are not protected by Ontario's Pension Benefit Guaranteed Fund (PBGF) because its coverage applies only to privately-sponsored, single-employer DB plans. The U of T plan is protected by the PBGF. This fund protects the first \$1,000 of monthly pension in the case of employer (U of T) bankruptcy. For example, if a plan that is 80% funded is wound up, the guarantee fund provides a benefit of up to \$200 per month to cover the shortfall (20% of \$1,000).

All pensions earned under the current U of T plan would continue to be fully guaranteed for active, inactive and retired members, and their beneficiaries.

Differences between plans

	Single-employer DB plan	Multi-employer JSPP
Governance	<ul style="list-style-type: none"> • Employer has full control and responsibility • Decision-making may be hidden and private 	<ul style="list-style-type: none"> • Sponsor board with representation from both members and employers • Decision-making is shared and public
Changes to future pension	<ul style="list-style-type: none"> • Negotiated through collective bargaining process 	<ul style="list-style-type: none"> • Sponsor board approves changes with agreement by both employees and employers (each acting as one group)
Contributions	<ul style="list-style-type: none"> • Employee contributions negotiated under collective agreement • Employer responsible for paying difference between employee contributions and pension costs 	<ul style="list-style-type: none"> • Contributions negotiated by sponsor board based on funding need • Employee and employer both contribute (typically 50/50) to plan costs
Deficits/surpluses	<ul style="list-style-type: none"> • Employer solely responsible for shortfall payments • Surpluses may revert to employer • Plan subject to both going-concern and solvency funding rules 	<ul style="list-style-type: none"> • Shared responsibility for shortfalls—future contributions could be increased for active employees and/or future pension benefits could be decreased for active employees • Shared ownership of surpluses • Plan subject to going-concern funding rules, but expected to be exempt from solvency funding

Plan administration	<ul style="list-style-type: none"> • Employer responsible • May be delegated to a third party 	<ul style="list-style-type: none"> • Sponsor board responsible • Usually delegated to a third party
Plan investments	<ul style="list-style-type: none"> • Overseen by employer • Defined long-term return objective with risk levels appropriate to employer 	<ul style="list-style-type: none"> • Overseen by administrative board based on investment policy developed by the sponsor board • Defined long-term return objective with risk levels appropriate to sponsor board

What would happen to the current funding shortfall

It is expected that solvency funding would no longer apply on conversion to a JSPP, and the need to fund any solvency shortfalls would be eliminated. We hope to have greater clarity on the criteria for solvency exemption following the release of David Marshall’s report on Ontario’s solvency funding framework. The report is expected to be released in spring/summer 2017.

Each of the three universities’ plans would undergo a going-concern valuation on a standard basis determined by the JSPP’s actuaries. On conversion, any going-concern funding shortfall identified in this valuation would be the responsibility of that university, and would have to be fully paid down within a specified period, such as 15 years. Each university, in other words, would be responsible for its own shortfall.

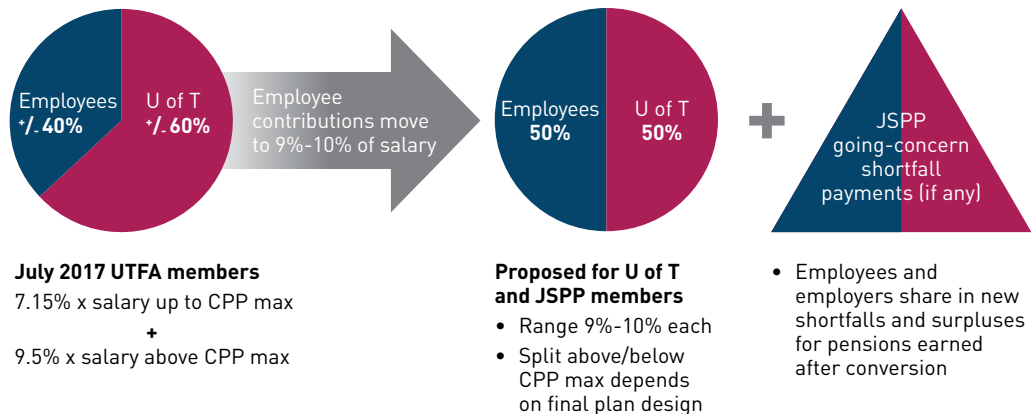
What moving to a JSPP would mean for your pension contributions

The province has indicated that it wants universities with DB plans to move to 50/50 sharing of pension costs between employers and employees. This means that employee pension contributions will likely continue to increase, whether we convert to a JSPP or not. If we don’t convert, we could end up paying 50% of the cost without an equal say in decision-making.

How the U of T plan is funded now
(based on 2016 valuation)



How funding would change after conversion to a JSPP
(based on 50/50 cost sharing preferred by province)



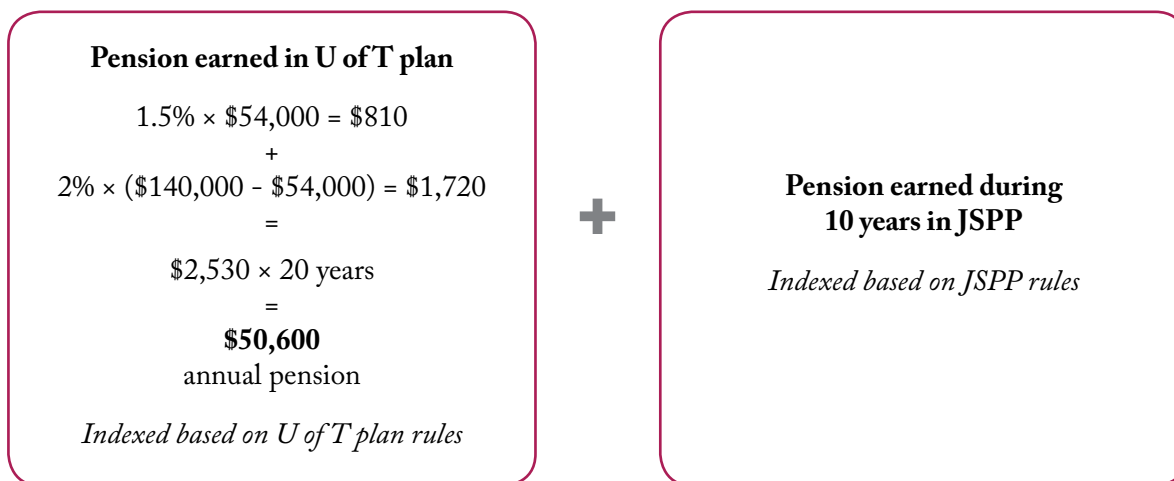
U of T would be responsible for any going-concern shortfall identified at conversion.

No impact on pensions already earned in the U of T plan

All pensions earned under the U of T plan would be fully transferred to the JSPP with no change. The JSPP cannot reduce pensions while the plan is ongoing, and the U of T must make up any shortfall related to pensions earned in the U of T plan if the JSPP ends.

EXAMPLE: Retirement at age 65

- 20 years of service in the U of T plan
- 10 years of service in the JSPP
- Best salary (highest 36 months at retirement) = \$140,000
- Average CPP max at retirement = \$54,000



No impact on current retirees

Anyone who retired under the U of T plan before conversion to the JSPP would continue to be paid the same amount of pension after conversion. These retirees would not be affected by any contribution increases and would receive the same cost-of-living increases after conversion that they would under the current U of T plan. In the unlikely event the JSPP was wound up, the U of T would be required to pay into the JSPP any additional amount required to ensure that retirees and their beneficiaries receive full payment of the pension earned under the U of T plan.

NEXT STEPS

- Backgrounder #3 will review the pros and cons of converting to a JSPP, and outline the proposed ratification process.
- UTFA will launch a pension website dedicated to the JSPP discussion.
- UTFA will continue to hold a series of meetings in preparation for the April 6 Council meeting, where UTFA Council will be asked to decide whether to give the Ad Hoc Pensions Committee authority to negotiate the terms of the JSPP alongside other JSPP stakeholders. A vote will take place at that meeting.
- Pending this decision, UTFA will launch a full-scale pension education program for all members, and will participate in discussions with unions and faculty associations at the U of T, Queen's University and the University of Guelph.

This document describes highlights of the University of Toronto Pension Plan in simple terms. It also provides general information about jointly sponsored pension plans. It is not intended to be relied upon as legal or financial advice. Every effort has been made to ensure the accuracy of this information, but if there are any errors or differences between the information given here and the legal plan documents or applicable legislation, the legal plan documents or applicable legislation will govern.

Current U of T pension plan at a glance

Type of plan	<ul style="list-style-type: none"> • Single employer defined benefit plan • Provides retirement income for life, regardless of financial market conditions or how long you live • Pension calculated using pre-set formula based on earnings and years of pensionable service
Who pays for it	<ul style="list-style-type: none"> • University pays difference between employee contributions and cost of pensions • In 2015/2016 plan year, employees contributed \$63.9 million • In 2015/2016 plan year, university made regular contributions of \$108.7 million, plus \$78.7 million toward plan's going concern deficit
Who it covers	<ul style="list-style-type: none"> • Employees at all three U of T campuses, including academic staff, librarians, research associates, unionized and non-unionized administrative staff, and other unionized staff • To join, must have annual salary of at least 35% of CPP maximum or scheduled to work 700 hours (35% × \$54,900 as of July 1, 2016; rising to 35% × \$55,300 on July 1, 2017)
Plan size (July 1, 2016)	<ul style="list-style-type: none"> • Total plan assets: \$4.1 billion • Participating members: 18,641 (9,945 active plan members; 5,656 retirees/beneficiaries; 3,040 inactive members who have left U of T, but still have a pension in the plan)
How changes are made	<ul style="list-style-type: none"> • Changes to future pensions and UTFA member contributions are negotiated under the collective bargaining process • Otherwise, plan is governed by U of T's Governing Council, which has final decision-making authority, but has delegated certain responsibilities to two bodies: <ul style="list-style-type: none"> - Business Board for plan provisions, member contributions and funding - Pension Committee for actuarial, financial and investment matters
Investments	<ul style="list-style-type: none"> • Investments are managed by University of Toronto Asset Management (UTAM)
What legislation governs it	<ul style="list-style-type: none"> • Plan is registered in Ontario and subject to Ontario's <i>Pension Benefits Act</i> and regulations overseen by Financial Services Commission of Ontario • Plan is registered under <i>Income Tax Act</i> and regulations overseen by Canada Revenue Agency

Additional details

<p>What you contribute</p> <p>CPP maximum = \$54,900 as of July 1, 2016; rising to \$55,300 on July 1, 2017</p> <p>Salary = annual salary before deductions, including academic administrative stipends (current maximum = \$161,000)</p>	<div style="border: 1px solid #800040; padding: 10px; margin-bottom: 10px;"> $6.3\% \text{ (rising to 7.15\% on July 1, 2017)} \times \text{salary up to CPP maximum}$ $+ 8.4\% \text{ (rising to 9.5\% on July 1, 2017)} \times \text{salary above CPP maximum (to \\$161,000 cap for 2016)}$ </div> <div style="border: 1px solid #800040; padding: 10px; margin-bottom: 10px;"> <p>Example: \$140,000 salary</p> $6.3\% \times \\$54,900 = \\$3,459^*$ $+ 8.4\% \times \\$85,100 = \\$7,148^*$ $= \\$10,607 \text{ (annual contribution)}$ <p style="text-align: right;">*rounded</p> </div> <ul style="list-style-type: none"> If you contribute more than half the lump-sum value of your pension, the difference is refunded to you when you retire or leave the plan.
<p>Amount of annual pension</p> <p>Best salary = average salary over highest 36 months</p> <p>Average CPP maximum = average during the last 36 months of plan membership</p>	<div style="border: 1px solid #800040; padding: 10px; margin-bottom: 10px; display: flex; align-items: center; justify-content: space-between;"> <div style="flex: 1;"> $1.5\% \times \text{best salary up to average CPP maximum}$ $+ 2.0\% \times \text{best salary above average CPP maximum}$ </div> <div style="flex: 0.2; text-align: center;">×</div> <div style="border: 1px solid #800040; padding: 5px; text-align: center;">years of pensionable service</div> </div> <div style="border: 1px solid #800040; padding: 10px; margin-bottom: 10px;"> <p>Example: \$140,000 best salary, 30 years of service, \$54,000 average CPP maximum</p> $1.5\% \times \\$54,000 = \\810 $+ 2\% \times \\$86,000 = \\$1,720$ $= \\$2,530 \times 30 \text{ years} = \\$75,900 \text{ (annual pension)}$ </div>
<p>When you can retire</p>	<ul style="list-style-type: none"> Full pension at age 65 regardless of years of service Unreduced pension from age 60 with at least 10 years of service Reduced pension from age 55 (reduced by 5% for each year before age 65) Postponed pension up to December 1 of year you reach age 71 (pension continues to grow with active service) Phased-in retirement for up to three years for members who are between age 57 and 68
<p>Form of pension</p>	<ul style="list-style-type: none"> If spouse or dependents at retirement: pension paid for life with 60% continuing to spouse for life after your death (or, if spouse dies, in equal shares to children while dependent) If no spouse at retirement: pension paid for life with five-year guarantee (if you die within five years, payments continue to beneficiary for remainder of five-year period) Other payment options available, including option to transfer lump-sum (commuted) value of pension on early retirement, on condition of waiving retiree health and dental benefits
<p>Post-retirement cost-of-living increases</p>	<ul style="list-style-type: none"> Pensions in pay increased each July 1 by greater of: <ul style="list-style-type: none"> - 75% of first 8% increase in previous year's Consumer Price Index (CPI), plus 60% of CPI increase above 8%; or - increase in CPI less 4%
<p>Life events</p>	<ul style="list-style-type: none"> Plan pays pension benefits on termination of employment, disability or death

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Summary of U of T pension plan funding

Two sides of pension plan

Assets

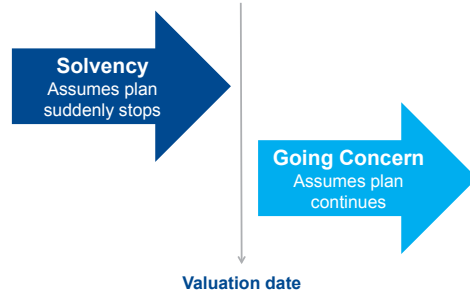
Contributions and investment earnings



Liabilities

Cost of providing pensions

Two valuations required by law



Going-concern valuation

- Measures plan's health assuming it continues to operate well into the future
- Compares value of fund on date of valuation to value of benefits earned as of valuation date
- Uses reasonable long-term assumptions based on information available at valuation date
 - When members will retire
 - Future investment returns
- Deficits paid off over 15 years

Solvency valuation

- Tests plan's health assuming U of T shuts down
- Compares market value of fund on date of valuation to current value of pensions earned by members
- Can exclude certain benefits (such as indexing)
- Tied to current interest rates and assumptions prescribed
- Additional deficits paid off over 5 years

Going-concern valuation results

July 1, 2016	July 1, 2015	July 1, 2014
\$573.1 million shortfall	\$445.9 million shortfall	\$729.5 million shortfall

Improved life expectancy
(longer pension payouts)

= ↑ liabilities
(more money needed to fund pensions)

Lower expectations for future returns
(less investment income)

= ↑ liabilities
(more money needed to fund pensions)

Year-over-year investment returns

= ↑ ↓

Going-concern valuation results

Impact of drop in expected future investment returns on going-concern results

Drop in expected returns from 5.75% to 4.75%

1%

\$758 million increase

in going-concern funding obligation

Based on 2016 valuation

Solvency valuation results

July 1, 2016	July 1, 2015	July 1, 2014
\$1.7 billion shortfall	\$1.1 billion shortfall	\$1.1 billion shortfall

Lower interest rates =  liabilities
(more money needed to settle pensions)

Solvency valuation results

Impact of low interest rates on solvency results

1% drop in interest rates

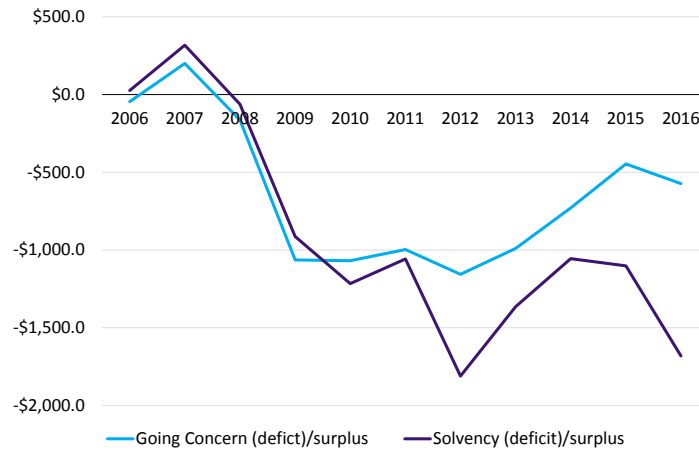
1%

\$973 million increase

in solvency funding obligation

Based on 2016 valuation

Deficit/surplus history (\$millions)



Source: University of Toronto Pension Plan Annual Financial Report for the year ended June 30, 2016; assumes that the U of T and OISE plans were merged throughout the entire period