

Report of the Sustainability Working Group

INTRODUCTION

The Ontario Teachers' Pension Plan (OTPP) continues to face funding challenges. Plan liabilities (the projected cost of future pensions) are growing faster than plan assets. This has resulted in recurring funding shortfalls since 2005.

In response to these funding challenges, a tripartite pension plan Sustainability Working Group (SWG) was established in September 2009. During the term of its mandate, the group studied options to keep the Teachers' pension plan secure and affordable for generations to come.

The following report to pension plan members summarizes the work conducted by SWG over the past year.



Report of the Sustainability Working Group

TABLE OF CONTENTS

BACKGROUND	3
ACTIONS TAKEN BY THE SWG	7
OVERCOMING FUNDING CHALLENGES	10

SUSTAINABILITY WORKING GROUP (SWG)

The SWG comprised representatives of the Ontario Teachers' Federation (OTF), the Ontario government, and the Ontario Teachers' Pension Plan. Dr. Harry Arthurs, chair of the Ontario Expert Commission on Pensions from 2006 to 2008, facilitated the group.

During the 10 major meetings and numerous sub-meetings held since the group was established in 2009, it reviewed many options for addressing the recurring funding challenges.

GROUP MEMBERS

Ontario Teachers' Federation

Reno Melatti - President*, Ontario Teachers' Federation (OTF)

Ken Coran - President, Ontario Secondary Schools Teachers' Federation (OSSTF)

Marshall Jarvis - General Secretary, Ontario English Catholic Teachers Association (OECTA)

Réjean LaRoche - General Secretary, Association des enseignantes et des enseignants franco-ontariens (AEFO)

Gene Lewis - General Secretary, Elementary Teachers' Federation of Ontario (ETFO)

Advisors: Murray Gold, Legal Counsel, Koskie Minsky; Scott Simpson, Actuary, Morneau Sobeco

*President while SWG existed

Ontario Government

Bruce Macnaughton - Director, Pension & Income Security Policy Branch, Ministry of Finance

Karen Maxwell - Acting Assistant Deputy Minister, Elementary/Secondary Business & Finance Division, Ministry of Education

Mehul Mehta - Manager, Funding Policy & Forecasting Unit, Ministry of Education

Ross Peebles - Retired Deputy Minister, Government of Ontario

Rob Pomykacz - Manager, Public Sector Pension Policy, Ministry of Finance

Didem Proulx - Director, Education Finance Branch, Ministry of Education

Advisors: Randy Colbert, Actuary, Towers Watson

Ontario Teachers' Pension Plan

Jim Leech - President & CEO

Ken Harrison - Director, Actuarial, Tax & Accounts Receivable

Melissa Kennedy - General Counsel, Corporate Secretary & Senior Vice-President, Corporate Affairs

Barbara Zvan - Senior Vice-President, Asset Mix & Risk, and Chief Investment Risk Officer

Report of the Sustainability Working Group

BACKGROUND

OVERVIEW

The Ontario Teachers' Pension Plan is a defined benefit pension plan. Pensions are defined by a formula based on members' average earnings and years of credit. This makes it possible to estimate the pensions members will receive in retirement. Other types of pension plans do not provide predictable retirement income. In defined contribution plans, for example, pensions depend on how much is saved, the growth in savings, and interest rates in effect when a member retires.

LEGISLATIVE AND REGULATORY FRAMEWORK

The Teachers' pension plan is governed largely by two Ontario statutes – the Teachers' Pension Act and the Pension Benefits Act – and by the federal Income Tax Act. The Teachers' Pension Act provides for the joint management of the pension plan by the Ontario government, through the Minister of Education, and the executive of the Ontario Teachers' Federation (OTF).

The Pension Benefits Act defines fiduciary duties for all pension plan administrators in Ontario. A central duty of the organization is the obligation to administer the Plan and invest assets with the same prudence expected of a person dealing with another's property.

ROLES OF THE PLAN SPONSORS AND PLAN ADMINISTRATOR

The Ontario Teachers' Pension Plan is jointly sponsored by OTF and the Ontario government. OTF represents all plan members and the government represents employers. Together, OTF and the government set pension benefit and contribution levels. They also decide how to resolve any funding shortfalls and how to use any surplus assets.

Pension plan staff invests plan assets, collects contributions, and pays pension benefits. A nine-member board, appointed by OTF and the government, oversees the administration of the pension plan and reports on its funding status.

Board members are required to act independently of both the plan sponsors and plan management, and to make decisions in the best interests of all beneficiaries of the Plan.

BRIEF HISTORY

A pension plan has existed for Ontario teachers since 1917. Before 1990, the Plan was administered by the Ontario government and investment was restricted to holding Ontario government debt. In 1990, the government established the Ontario Teachers' Pension Plan Board as an independent organization.

Today, the Ontario Teachers' Pension Plan is the largest single-profession pension plan in Canada. It administers the pensions of 289,000 active and retired teachers in Ontario and manages the pension fund, which has \$96.4 billion in net assets (as of Dec. 31, 2009).

KEY PLAN FEATURES

Members will receive a lifetime pension when they qualify to retire. Members with at least two qualifying years of service can retire with an unreduced pension when they reach age 65 or achieve their 85 factor (age + qualifying years = 85).

A member's basic annual pension equals: 2% x years of credit x best-five years' average salary. This basic pension is reduced at age 65 to reflect the pension plan's integration with the Canada Pension Plan (CPP).

In addition to a retirement pension, the Teachers' pension plan provides benefits if a member dies, becomes disabled, or permanently leaves teaching before retirement age.

Members contribute an average of about 11% of their salaries to their future pension. These contributions are matched by the Ontario government and designated employers, such as private schools, that participate in the pension plan. Contributions are invested to achieve the long-term returns required to fund pensions.

Report of the Sustainability Working Group

CONDUCTING A FUNDING VALUATION

To assess the financial health of the Teachers' pension plan, the Plan commissions an annual funding valuation. The valuation measures the Plan's long-term health by looking ahead more than 70 years – from the time the newest member was hired until all of the Plan's obligations to that member and her survivors are fulfilled. The valuation projects whether the pension plan has a surplus of assets, a shortfall of assets, or sufficient assets to cover the costs of future pension benefits.

If there are not enough assets, OTF and the Ontario government are required to bring the pension plan back into balance before the valuation is filed with the provincial pension regulator. A filing is required every three years, although OTF and the government can decide to file more frequently.

VALUING THE PLAN

The valuation uses a number of assumptions to compare the value of pension plan assets (such as stocks and bonds, as well as future contributions) to the value of pension plan liabilities (the amount required to pay accrued and future pension benefits). Assumptions are made about the future inflation rate, future return on invested assets, future salary increases, age at retirement, life expectancy and other factors.

The investment rate of return assumption assumes how much the Plan's investments will earn over time, above the projected inflation rate, adjusted for risk. This assumption has a large impact on the funding valuation and has attracted considerable debate over the years.

CHANGES IN FUNDING STATUS

The pension plan had an unfunded liability of \$7.8 billion when it was established as an independent entity in 1990. The Ontario government agreed to make special payments, on top of its regular contributions, to amortize this unfunded liability over 40 years. The unfunded liability was

paid off early using the government's share of surplus funds, which were generated by good returns on plan investments in the 1990s.

OTF used its share of surplus funds generated during that same period to improve pension benefits for members. Among other plan improvements, it introduced a permanent 85 factor, a 10-year pension guarantee, a pension recalculation based on approximate best-5 years of salary for older pensioners, and the opportunity to retire with a reduced pension at age 50. It also waived the top-up for LTIP contributions, lowered the reduction for early retirement, and reduced the CPP offset to 0.45%.

Other key changes in the Plan's funding status include:

- In 2005, the pension plan reported a preliminary \$6.1 billion funding shortfall. The shortfall was resolved by introducing contribution rate increases, totalling 3.1 percentage points, over three years beginning in 2007. The Ontario government and designated employers continued to share pension costs by paying the new higher contribution rates throughout the 15-year amortization period.
- In 2008, another preliminary shortfall arose. This \$12.7 billion gap was resolved primarily through the introduction of Conditional Inflation Protection (CIP) applied to service accrued after 2009. Under CIP, 50% of the annual inflation adjustment is guaranteed, and 50% is conditional on the financial status of the pension plan. The pension fund's long-term rate of return assumption was also adjusted modestly from that as outlined in the Plan's Funding Management Policy.
- In 2009, OTF and the government resolved a \$2.5 billion shortfall and filed a balanced funding valuation with the provincial pension regulator by assuming the pension fund would earn a slightly higher long-term rate of return on investments than outlined in the Plan's Funding Management Policy.

Report of the Sustainability Working Group

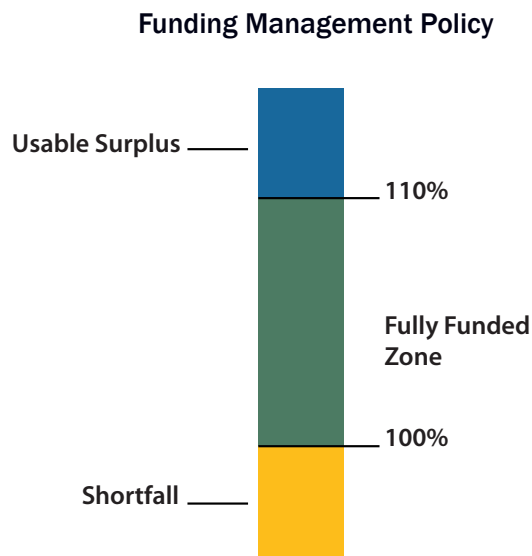
- In 2010, the pension plan reported a preliminary \$17.1 billion shortfall despite strong investment returns in 2009. Most of this projected shortfall was due to continued declines in the long-term real (after inflation) interest rate, which is used by the Plan to estimate the cost of future pensions. Real interest rates declined from 2.1% at the start of the year to 1.5% at the end of 2009, adding \$15.2 billion to the projected cost of future pensions.

The pension plan’s 2008 investment loss also contributed to the shortfall. A portion of the 2008 loss will be absorbed each year until 2012 due to “smoothing”. As of January 1, 2010, a smoothing adjustment of \$12.7 billion remains; this means that the Plan still needs to absorb \$12.7 billion of losses, most of which will be recognized over the next two years.

FUNDING MANAGEMENT POLICY

OTF and the Ontario government adopted a Funding Management Policy in 2003. The policy provides guidance on when to use surplus funds and when to change benefit or contribution levels when the Plan has a shortfall. Under the policy:

- If assets are equal to or up to 10% greater than liabilities, the Plan is in balance and no change is required.



- If assets are more than 10% greater than liabilities, the Plan has a surplus that can be used to reduce contribution rates or improve benefits.
- If liabilities are greater than assets, the Plan has a shortfall. OTF and the government can address a shortfall by increasing contributions, invoking conditional inflation protection for pension credit earned after 2009, changing other benefits members will earn in the future, or adopting a combination of these measures.

CURRENT FUNDING CHALLENGES

The Teachers’ pension plan continues to face funding challenges because plan liabilities (the projected cost of future pensions) are growing faster than plan assets. This has resulted in recurring funding shortfalls since 2005, including a preliminary shortfall of \$17.1 billion reported at the beginning of 2010.

Here are some of the key challenges on the liability side of the pension balance sheet:

Low real (after inflation) interest rates – Long-term real interest rates are used by the Plan to estimate the cost of providing teachers’ pensions. When interest rates drop, pension costs rise because the Plan needs to set aside more money to earn the amount required for future pensions. Every 0.25% decline in real interest rates increases estimated future pension costs by about \$7 billion.

Teachers are living and collecting pensions for longer periods – A typical teacher retiring today is expected to collect a pension for 30 years, plus a pension may be paid to a survivor after the teacher dies. This means a typical teacher can expect to collect a pension about four years longer than she contributed to the Plan.

Report of the Sustainability Working Group

The plan has difficulty absorbing funding

shortfalls – The Teachers’ pension plan is mature and continues to mature more each year. This means that the proportion of working members is declining relative to the growing number of pensioners. As the Plan matures, the administrators must be increasingly cautious in determining the Plan’s asset mix. Exposure to riskier asset classes like equities must be reduced in favour of less risky asset classes, such as bonds. This, when combined with the smaller proportion of active members, means that overcoming funding shortfalls with contribution rate increases alone is much more difficult, especially if markets drop or the Plan’s investments underperform. For example, solving a 10% decline in plan assets with contribution rates alone would require an increase of about 4.0 percentage points to close the gap. In 1970, the same decline would have required an increase of only about 0.5 percentage points.

There are also challenges on the asset side of the pension balance sheet:

Modest projected investment returns – Pension plan management expects to achieve more modest long-term investment returns due to the Plan’s lower risk tolerance and unpredictable markets.

Absorbing 2008 investment losses until 2012 –

The Plan will gradually absorb the 2008 investment loss until 2012 due to the effect of smoothing these losses over five years. Smoothing evens out short-term fluctuations in investment returns. Without being able to stretch out investment gains or losses over five years, the Teachers’ pension plan would have to change contribution rates, benefit levels, or both much more frequently to keep the pension plan balanced.

NEED FOR BALANCE

The aim of pension plans is to have members pay more or less the same contribution rates for more or less the same pension benefits through all generations of members. Achieving sufficient, sustainable funding of a defined pension plan to answer that objective is no easy feat. All over the world, pension plans are struggling in the wake of the 2008 economic downturn and continued low interest rates.

It is technically possible to eliminate funding shortfalls through the use of aggressive or overly optimistic assumptions about the future. The temptation to do this must be strenuously resisted since problems are not resolved but merely pushed into the future when they will be even more difficult to address.

As decision-makers wrestle with today’s difficult questions, they must also try to ensure that they don’t simply leave the tough decisions to future generations. There is a danger in being overly optimistic about the outlook for pension funding.

Report of the Sustainability Working Group

ACTIONS TAKEN BY THE SWG

The achievements of the Sustainability Working Group (SWG) are the direct result of constructive tripartite discussions throughout the past year. All factors that affect the cost of providing pensions were tabled; all potential solutions were examined and discussed. The universe of member contribution rate and benefits options, as well as the process for establishing the discount rate (rate of return assumption), were debated thoroughly to ensure all possibilities can be considered in future valuation filings.

Projecting a pension plan's liabilities depends on a variety of economic and non-economic assumptions. The discount rate is the pivotal economic assumption. In the case of the Teachers' pension plan, the pension plan board members have chosen a market-based forecast of the long-term rate of return that the fund can reasonably expect to earn, adjusted for risk. The Plan's rate of return assumption is based on Government of Canada 30-year real-return bonds. These bonds are used by the Plan as a starting point because they are a good proxy for inflation-adjusted pensions.

The fund expects – or assumes – it will outperform these bonds somewhat and this higher number is the so-called 'discount rate'. If the assumption is too conservative, benefits for current members may not be as generous as possible and future generations may benefit from the surpluses that result. If the assumption is too high, future generations may be left to deal with shortfalls that cannot be covered by investment returns alone.

Only time – decades, in fact – will tell whether the discount rate assumption was too high or too low. Although the goal is to make the best possible assumptions, assumptions are only forecasts based on current data and best estimates. Actual results always will be different.

The pension plan's board members decide the discount rate. As agreed in the Plan Funding Management Policy, when the Plan has a surplus, the

discount rate is the Plan's rate of return assumption plus a premium of 0.5%. That means the Plan expects to earn half a percentage point more than the real-return bonds used by the Plan for calculating the rate of return assumption. When the Plan is in a strong financial position, using the 0.5% premium helps build a cushion for the future.

When the Plan has a shortfall, the discount rate is the Plan's rate of return assumption plus 1.4%. This higher 1.4% premium helps absorb short-term market changes, allowing the Plan to avoid the need for frequent changes to contribution or benefit levels to keep plan assets and costs in balance.

The SWG recognized that the responsibility for determining the discount rate is the responsibility of the pension plan board members. It also recognized, however, that because of the critical role that the discount rate plays in determining the funded status of the Plan, and consequently the decisions that OTF and the government must take regarding contributions and benefits, the sponsors have a major stake in the decision about the discount rate that is selected.

As such, the parties have agreed to three significantly enhanced processes associated with the triennial valuation filing of the Teachers' pension plan. The processes provide for:

1. An annual consultative process for the preliminary valuation;
2. An independent review of the discount rate used to estimate the value of plan liabilities; and
3. A review of options, including possible changes to contribution and benefit levels, if the valuation shows a funding shortfall in the future.

In every valuation, a common understanding among the parties of its key elements is fundamental. OTF, the government, and pension plan management believe these three changes will improve the exchange of information, leading to greater efficiencies and more responsive decision-making in the valuation process.

Report of the Sustainability Working Group

1. CONSULTATIVE PROCESS OVERVIEW

The SWG has agreed on an annual consultative process for the preliminary valuation. The process, outlined below, establishes annual timelines for the development of common understandings among the pension plan, OTF, the government and advisors. The Partners' Consultative Committee, formed following the 2008 funding valuation filing, becomes part of the process as its original mandate expands from information sharing to open discussion and debate.

To begin the process, OTF and the government will review the funding risk model, with the support of pension plan staff. This will ensure the parties are made aware of the material factors affecting the Plan's funding risk profile at the outset of the valuation process. A Technical Group – made up of the pension plan's external actuary, actuarial and other technical staff, and consultants engaged by OTF and the government – will undertake this part of the process. The group will have the opportunity to consult at each stage of the valuation as follows:

- In advance of the preliminary valuation, the Technical Group will meet to discuss best-estimate non-economic assumptions (such as life expectancy and average retirement age)
- The pension plan's external actuary will present the preliminary valuation to the pension plan
- The actuary will present the valuation to OTF and the government, and their advisors, outlining and explaining key assumptions
- The Technical Group will meet to discuss the valuation
- Within approximately two weeks of the valuation presentation to OTF and the government, a follow-up meeting will be held to address any remaining questions or concerns about the valuation
- In March, the Partners' Consultative Committee will discuss strategies related to the current year's valuation and its potential filing

- In May of a required filing year, the Partners' Consultative Committee will discuss strategies related to achieving a balanced valuation
- In August of a required filing year, the Partners' Consultative Committee will discuss outstanding issues related to the upcoming filing, which is required by October 1

2. OVERVIEW OF DISCOUNT RATE REVIEW PROCESS

The SWG also agreed on a discount rate review process that formalizes the intent of the original 2008 Plan valuation agreement. This process can be triggered if the funding valuation shows a deficit and the real discount rate proposed by the pension plan is less than 3.575%. It allows the pension plan, OTF and the government to review the valuation discount rate, in the context of the Plan characteristics, and to receive a report of a third-party hearing officer. This process can be invoked by OTF and the government, acting together, by notifying the pension plan in writing by March 1 of the filing year.

The parties will agree on the selection of the third-party hearing officer by March 15. (If no agreement can be reached, the parties will ask the President of the Canadian Institute of Actuaries to select from a list of names put forward by each party.)

The hearing officer will review the board's proposed discount rate and issue a report to the parties by May 1 that indicates:

1. the reasonable range for the discount rate assumption, given the pension plan's characteristics;
2. an opinion as to whether the board's proposed discount rate is within that range; and
3. a recommendation of a specific, appropriate discount rate for the Plan valuation. (If the hearing officer's recommended rate differs from the rate proposed by the board, the report will detail the issues considered in arriving at the rate, and how the recommendation will affect the Plan's risk profile).

Report of the Sustainability Working Group

An executive summary of the hearing officer's report, together with the board's response thereto, will be released to members of the Plan by June 15. Although the recommendation of the hearing officer is not binding on the board, this process will give Plan members enhanced insight into the factors that shape the board's decision. Moreover, if the hearing officer recommends a different rate, the board will have the opportunity to justify its decision to reject this recommendation.

3. REVIEW LIABILITY REDUCTION OPTIONS

The SWG recognizes that further Plan changes may be needed in the future if shortfalls persist. In order to prepare for that eventuality, it has requested pension plan staff to undertake an extensive process to:

1. isolate the various contribution rate and benefit variables;
2. provide costings for each variable individually and in combination;
3. evaluate their impact on plan liabilities overall; and
4. present their findings and regular updates to OTF and the government, through the Partners Consultative Committee. This will allow the Partners to consider the full range of possible Plan changes and determine which would have the most appropriate impact on the shortfall.

EXPANDED COMMUNICATIONS TO MEMBERS

Central to the working group's efforts over the past year has been a comprehensive, bilingual education program designed to help members better understand the funding challenges their pension plan faces.

This program was developed by a sub-group of the SWG. The group developed electronic and printed funding updates, as well as a speaker's kit and guide for use in pension presentations to members. The kit comprises a core "Funding Your Pension" PowerPoint presentation, with four supplementary modules on: assumptions, smoothing, conditional inflation protection, and plan maturity.

An independent website was built to broaden the availability of these presentations and ensure accessibility of information.

The website – www.FundingYourPension.com – houses the presentations and materials, including FAQs. A series of webcasts was also conducted in April, featuring a live question and answer session with experts from OTF and the pension plan. The webcast and a document covering the most common webcast Q&As are archived on the website.

Report of the Sustainability Working Group

OVERCOMING FUNDING CHALLENGES

The objective of this report to members is to explain some of the challenges that face the pension plan and to offer an assurance that OTF, the government and the Plan staff are working together to ensure that the Plan remains viable into the future. Members should not be alarmed about the state of their Plan. The current exercise was undertaken to ensure that future challenges can be successfully overcome.

In addition to formalizing the consultation process between the Partners and the board and agreeing on a process to review the discount rate in certain circumstances, the SWG examined all the ways that the Plan might be changed to address a future funding deficiency. The pros and cons of each were considered in detail.

With the next mandatory valuation filing not due until 2012, it is far too early in the process to conclude that a shortfall will persist and, if so, how it might best be resolved. Plan members can rest assured, however, that if the shortfall persists and steps must be taken to eliminate it, the Partners will have the information they need to take appropriate and responsible decisions.

To eliminate a funding shortfall, the OTF and the Ontario government can:

- increase contribution rates (the maximum contribution rate currently permitted under the Funding Management Policy is 15% for earnings above the YMPE);
- invoke conditional inflation protection for pension credit earned after 2009;
- reduce pension benefits members will earn in the future; or
- adopt a combination of these options.

The value of pension benefits already earned by working and retired members cannot be reduced under current law.

Working together, OTF, government and the pension plan are committed to keeping the Teachers' pension plan affordable and secure for all plan members in the future. The steps taken by the SWG to improve valuation processes and study liability options set the stage for this.