

Accounting by the Province of Ontario for the Ontario Teachers' Pension Plan

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1.0 Preamble

This document addresses the accounting for the net pension assets by the Province of Ontario in relation to the Ontario Teachers' Pension Plan (OTPP).

The constating documents of OTPP are different from those of the Ontario Public Service Employees' Union Pension Plan (OPSEUPP), the Healthcare of Ontario Pension Plan (HOOPP), and the CAAT pension plan (CAAT). The appropriate accounting for OTTP may be different than for other pension plans in Ontario as well as pension plans in other provinces, for example New Brunswick and British Columbia, as a result of differences in the respective constating documents.

2.0 Issue to be considered

In connection with the preparation and audit of the 2015-16 Public Accounts, the Office of the Auditor General of Ontario (OAG) and the government's professional accounting staff disagreed on an appropriate application of Public Sector Accounting Standards (PSAS) to net pension assets related to two pension plans that the Province jointly sponsors –OTPP and OPSEUPP. This position paper addresses the analysis for OTTP. A separate document will provide further analysis on the Province's accounting in relation to OPSEUPP, as well as HOOPP and CAAT.

This position paper addresses the following three questions in relation to the accounting for OTTP:

1. For accounting purposes, what type of pension plan is OTTP (i.e. how should OTTP be classified under Public Sector Accounting Standards (PSAS))?
2. As a result of the classification, how should the Province of Ontario account for the pension surplus of OTTP in the Public Accounts?
3. How should the pension asset of OTTP be measured in the Public Accounts of the Province of Ontario?

3.0 Conclusions

The following conclusions were reached regarding each of the above questions:

1. Classification of OTTP - The Province has concluded that OTTP meets the definition of a joint defined benefit plan as the Province and Ontario Teachers' Federation are shared sponsors of the plan. The Teachers' Pension Act, the Partners' Agreement and the plan text for OTTP collectively set out this shared control and equitable sharing of the risks and rewards (surpluses and deficits) of the plan, thus meeting the definition of a joint defined benefit plan in RETIREMENT BENEFITS, Section PS 3250 in PSAS. The classification of OTTP as a joint defined benefit plan for accounting purposes has been consistent since 2001 and had been consistently accepted without question by the OAG, including throughout the 2015/16 Public Accounts.
2. Recognition of a pension asset for a joint defined benefit plan - The Province has concluded that PSAS (Section PS 3250) supports the recognition of a pension plan asset in respect of a joint defined benefit plan and does not require that all recognized assets be subject to unilateral

control. Shared control is relevant and appropriate for a situation involving a joint defined benefit plan. The Province's share of OTPP's pension surplus meets the definition of an accrued benefit asset under Section PS 3250 which requires the Province to recognize its portion of the plan (50% for OTPP).

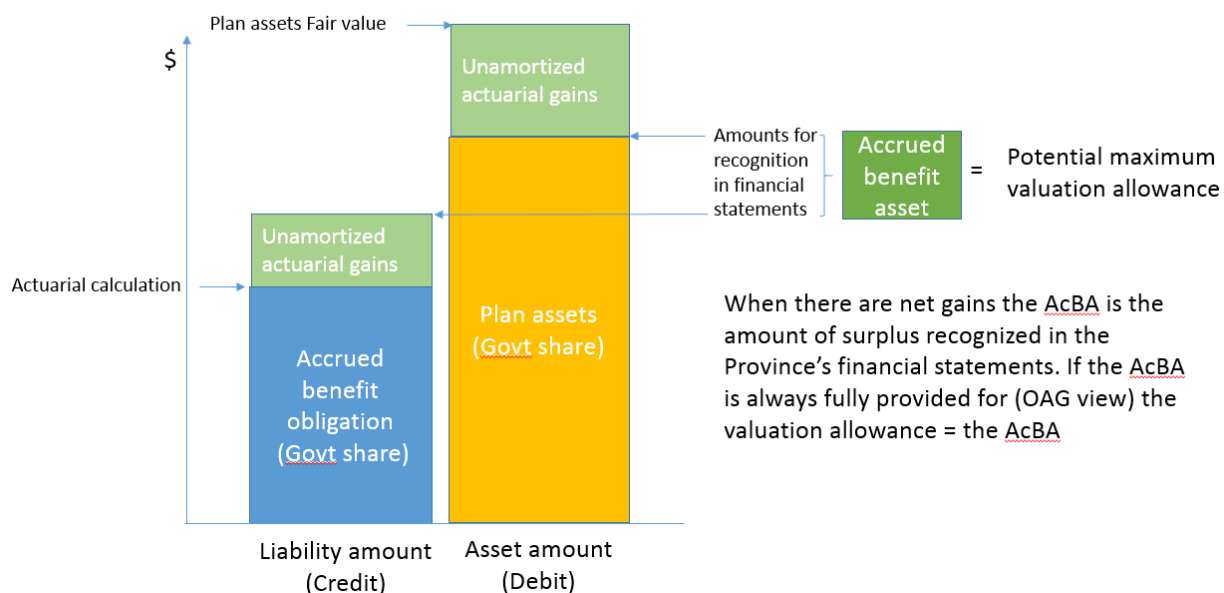
3. Measurement of a pension asset - The Province has concluded that the attributes of the joint defined benefit plan arrangements for the OTPP entitle the Province to access its portion of any plan surplus through the right to negotiate its use to the Province's benefit and that this results in an expected future benefit through the use of any plan surpluses to reduce contributions in the future. The Province has applied reasonable estimates of the plan's funding status necessary to determine what minimum contributions are required under the current plan contribution arrangements. Based on the results of those models to date no valuation allowance appears to be required and the OTPP pension assets should be recorded on the books of the Province. The Province recognizes that professional judgement must be applied in deriving an estimate of a potential valuation allowance under Section PS 3250.

4.0 Background Information

4.1 Accrued benefit asset

As described in PSAS, an accrued benefit asset (net pension asset) arises when the government's total contributions to a plan, including income earned thereon, are greater than the cumulative retirement benefit expense recognized since the start of the plan. An Accrued Benefit Asset (AcBA) includes the effect of net unamortized experience gains or losses. Actuarial (experience) gains can occur in respect to both plan assets as well as the pension obligation. OTPP currently has net unamortized experience gains. The following illustration reflects the compilation of the net pension asset (accrued benefit asset) reported on the Province's books for the OTPP.

An Accrued Benefit Asset (AcBA) occurs when there is a plan surplus, including the effect of net unamortized experience gains or losses. OTPP currently has net unamortized experience gains. Actuarial (experience) gains can occur in respect to both plan assets as well as the pension obligation



It is important to note that contributions to the plan are based on funding objectives of the plan. In contrast, benefit expense reflects the estimated cost of the pensions earned during the year that will be paid out to retirees in the future.

The Province's position is that the net asset balance (plan surplus for accounting purposes) in OTPP is an asset to the Province and it is appropriate to reflect it in the financial results in accordance with PSAS. The Province has also concluded that no valuation allowance under PSAS is required against the asset as at March 31, 2016.

The OAG disagrees with the Province's position. Specifically, the OAG has indicated that the Province does not have the legally enforceable right to unilaterally access the assets of the plan, and as such that the Province does not control the assets which the OAG interprets PSAS as requiring. Further, the OAG considers the lack of an enforceable agreement at year-end with the Ontario Teachers' Federation (OTF as the joint sponsor of the plan) that would provide for lower contributions in the future as requiring that a full asset valuation allowance be taken against the net asset under PSAS.

Financial statements for the Province have been prepared over the prior 14 years in accordance with the CPA Canada Public Sector Accounting (PSA) Handbook. RETIREMENT BENEFITS, Section PS 3250 of the PSA Handbook, addresses the accounting of obligations for employee retirement benefits in government financial statements. Since 2001, there have been no consequential changes to Section PS 3250. As a result Ontario has followed the same pension accounting treatment for OTPP over the past 14 years. The pension liability (asset) and expense reported by the Province of Ontario for OTPP over the period is reflected in Appendix A. Unqualified audit reports have been received for each of the years from the OAG on the Public Accounts. The pension accounting initially adopted by the Province for OTPP had

been accepted by the current Auditor General for the last two years and by the three previous Auditors Generals for the prior years.

In light of the contrasting views on interpretation of PS 3250 to the Province's jointly sponsored pension plans, a regulation was necessary to allow the public service to sign-off on the impact of the OAG's view on accounting for net pension assets in Ontario's 2015-16 financial statements. The regulation is time-limited and legislates the accounting for net pension assets of its two jointly-sponsored pension plans (OTPP and OPSEUPP) for 2015-16 in a manner that is consistent with the interpretation proposed by the Auditor General. The change in accounting treatment for 2015-16 resulted in an additional \$10.7 billion being added to the net debt and accumulated deficit and an increase in the 2015-16 annual deficit of \$1.5 billion.

To clarify, the government's regulated accounting for the 2015-16 Public Accounts although resulting in a consistent fiscal impact as would be reflected under the Auditor General's interpretation, does not reflect the Province's interpretation of pension accounting under the PSAS.

On October 5, 2016, the Auditor General issued a qualified report on the 2015-16 Public Accounts. While the 2015-16 results were accepted by the Auditor General, the audit opinion was qualified because the comparative financial balances were not restated for the prior year to reflect the Auditor General's interpretation of PSAS. Restating the previous year's results would have had no impact on the financial results for 2015-16, including the annual deficit and net debt and would have only been appropriate if the government had agreed with the Auditor General's interpretation of PSAS which would have acknowledged errors in the prior year's comparative results.

4.2 Overview of OTPP

OTPP is a jointly sponsored pension plan¹ (JSPP) as defined in the *Pension Benefits Act (Ontario)*, R.S.O. 1990, c. P.8 and as established under the *Teachers' Pension Act (Ontario)*, R.S.O. 1990, c. T.1. The sponsors of OTPP are the Province of Ontario (the "Province"), through the Minister of Education and the OTF (collectively, the "sponsors").

The plan administrator of the OTPP is a board of directors. The plan administrator is an independent entity, members of which are appointed by the sponsors.

The constating documents for OTPP set out the respective rights of the sponsors, and describe the powers of the plan administrator. OTPP is governed by:

¹ Jointly sponsored pension plans

(2) For the purposes of this Act, a pension plan is a jointly sponsored pension plan if it has the following characteristics:

- a. It provides defined benefits.
- b. The defined benefits are contributory benefits.
- c. Members of the pension plan are required, by virtue of the documents that create and support the plan, to make contributions in respect of any going concern unfunded liability and solvency deficiency of the plan.
- d. The plan satisfies such additional criteria as may be prescribed. 2005, c. 31, Sched. 18, s. 1 (2).

- a) The *Teachers' Pension Act* (TPA), R.S.O. 1990, c.T.1 (TPA);
- b) The *Pension Benefits Act (Ontario)*, R.S.O. 1990, c. P.8 (PBA) and the regulations thereunder (PBR);
- c) Plan text for OTPP ;
- d) An agreement between Her Majesty the Queen in right of the Province of Ontario represented by the Minister of Education and Training and The Ontario Teachers' Federation represented by its Executive, dated July 15, 1991, as amended (The Partners' Agreement);
- e) A Funding Management Policy, attached as Appendix A to the Partners' Agreement (FMP); and
- f) The Term Sheet agreed to by the Sponsors dated March 13, 2013 (the "2013 Term Sheet") describing the implications of the Freeze Period on the Funding Management Policy.

Three material implications for OTPP as a result of qualifying as a JSPP under the PBA are:

1. Plan Governance - Under a JSPP, the employers (or any persons or entities who make contributions on behalf of the employers or represent the employers) and the members of the pension plan (or any representatives of the members) are jointly responsible for making all decisions about the terms and conditions of the pension plan and any amendments to the pension plan. ²
2. Funding – OTPP is exempt from solvency funding requirements under the PBR. ³
3. Cost Sharing - In a defined benefit pension plan which does not qualify as a JSPP, the employer is solely responsible for funding any going concern unfunded liability or solvency deficiency. Given that the OTPP qualifies as a JSPP, however, the PBA permits members to be required to make contributions in respect of any going concern unfunded liability or solvency deficiency. ⁴

With respect to the cost-sharing principle referred to in #3 above, the TPA contains limitations on the contributions that the Province (and other participating employers) may make under OTPP:

5(1.1) The total amount of the contributions payable by the Minister of Education and the employers who contribute under the pension plan in respect of any year shall not exceed the amount of contributions payable by or on behalf of active plan members in respect of credited service for that year.

Despite this general principle, under the TPA the Province is required to make additional contributions to OTPP in the event that there are insufficient assets to make required payments out of the plan in any particular year. ⁵ This clause has been interpreted as a short term solvency protection clause, rather than a clause that transfers substantive residual risk to the Province, as the rest of the arrangement is structured such that the risk of these payments is minimal and the risks of the long term funding of the plan must still be equitably shared. The Province is also permitted to make additional contributions in respect of a solvency deficiency⁶ (although, as noted above, solvency funding is not required under

² PBR, subsection 3.1(1).

³ PBR, subsection 1.3.1(3).

⁴ PBA, subsection 1(2) and subsection 55(4).

⁵ TPA, subsection 5(3).

⁶ TPA, subsection 5(7).

OTPP). Notwithstanding that subsection 5(1.1) of OTPP provides a cap on the Province's normal cost contribution obligation, rather than requiring 50/50 cost sharing, in practice there has been 50/50 cost sharing of the normal contribution cost under OTPP since OTPP became jointly sponsored (and for the majority of periods of time since the inception of the plan in 1917). ⁷ The plan text itself also provides for equal contributions, at the basic level (see sections 25(1) and 26(1)).

Joint governance and cost sharing form two of the core features of OTPP. Consistent with the equal sharing of risk permitted under a JSPP, there is a requirement for decisions relating to plan design and plan amendments to be made jointly by the sponsors. In this regard, the Partner's Agreement requires the sponsors to negotiate and agree upon decisions relating to surplus or deficit utilization, which currently is outlined in the FMP. ⁸ The FMP indicates that deficits (or surpluses) may be addressed through increases (decreases) to the contribution rates, lowering (increasing) the amount of indexation and/or other decreases (increases) in benefits. While not binding upon the sponsors, as the sponsors can change the FMP at any time, any changes are required to have the mutual consent of both sponsors. Accordingly, the sponsors can be said to have equal opportunity to benefit from surplus utilization through the negotiation process.

Additional excerpts from constating documents for OTPP relating to use of the Plan's surplus and the sharing of responsibilities amongst the sponsors are included in appendix B. Some important elements of these are:

1. Paragraph 10(1)3 of the TPA provides that the Minister of Education and the executive of the OTF may enter into an agreement that provides for certain matters, including: "3. The sharing of entitlement to gains or surplus under the plan and of liability for deficiencies in the pension fund by the Minister, the employers who contribute under the plan and the active plan members". This is a fundamental legislative pronouncement that the Province and the members of the plan are meant to "share" both upside (surplus) and downside (deficit) under the plan. Although it is not an express statement of 50/50 sharing, it would presumably inform the expectations of the sponsors regarding how any surpluses are to be utilized. We note that the sponsors have in fact entered into such an agreement, in the form of the Partners' Agreement (to which is appended the FMP).

2. The Plan Documentation (specifically the FMP) and applicable legislation allow for the sponsors to utilize surplus in a variety of ways, depending on the funded status of OTPP. These surplus utilization options include the following avenues through which the Province may receive a financial benefit

⁷ See, Ontario Teachers' Pension Plan: "How Contribution Rates Have Evolved" available at: <https://www.otpp.com/documents/10179/20940/-/5e471c2b-23f1-44e6-b5c1d22e3e50dbc3/How+Contribution+Rates+Have+Evolved.pdf> As noted above, for the period from January 1, 2008 to December 31, 2008 the employee contribution rate was slightly lower than the employer contribution rate for earnings both above and below the YMPE (9.6%/11.20% versus 10.4%/12%, respectively). It is our understanding that member contribution rates in 2008 were partially subsidized by the OTF with a credit reserve from the 1998 to 2001 pension negotiations, which accounts for this difference.

⁸ See, for example, Section 3.09 and 3.11 of the FMP.

through the utilization of surplus (the three "zones" describe different levels of surplus, a greater amount of surplus being required in order for the next "zone" to come into play):

- a. In the Restoration Zone, a Restoration Contribution Reduction may be approved once certain other requisite conditions have been met.
- b. In the Temporary Improvement Zone, surplus may be utilized to provide a temporary contribution reduction (i.e., a contribution holiday), either as a stand-alone measure or in combination with other surplus utilization options (i.e., benefit improvements or surplus withdrawal).
- c. In the Permanent Improvement Zone, surplus may be utilized to permanently reduce the current contribution obligations of the employers and the members, either as a stand-alone measure or in combination with changes to benefits.

Notwithstanding the foregoing, under the FMP the sponsors have the discretion to, by mutual agreement, utilize surplus in any other manner.

3. Any enforceable legal right to obtain some value from any surplus pursuant to the Partners' Agreement (and FMP appended thereto) would be grounded in the law of contract. As the relevant provisions of the FMP require the sponsors to agree upon the manner in which surplus is to be utilized, neither sponsor has a legally enforceable right to unilaterally utilize surplus in OTTP. As such, the provisions in the FMP that contemplate the ability for the Province to receive a financial benefit through the utilization of surplus would not, in and of themselves, give rise to a legally enforceable right. What the Province does have, however, is a right to negotiate with the OTF the use of funding surpluses that may arise under the plan.

4. Negotiations on the use of the surplus occur as specified in the Partners' Agreement. The Partner's Agreement requires that any actuarial funding valuation submitted to the pension regulators must be "actuarially balanced" (Section 57 of the Partners' Agreement). This must occur at least once every three years, but can occur every year if the partners agree. If a preliminary funding valuation shows a funding surplus or deficit then the joint sponsors must negotiate how this surplus or deficit is to be resolved prior to filing the funding valuation.

4.3 Accounting for OTTP by the Province

Since fiscal year 2001-2002, the Province has recorded a net pension asset for OTTP on the Statement of Financial Position in accordance with Section PS 3250. A net pension asset has arisen because the government's share (50%) of the total contributions to OTTP plus recognized investment returns on the plan's assets have exceeded the government's share of the accumulated retirement benefit expense (see illustrative examples in Appendix J). The accounting for the accrued benefit obligation results from a complex process involving significant assumptions and actuarial calculations covering a very long time frame as is required by RETIREMENT BENEFITS, Section PS 3250.

The various valuations prepared for the OTPP – i.e. those for the Province’s public accounts, those for the funding valuation and those for the OTPP stand-alone financial statements, can create confusion when assessing the Province’s accounting. Therefore, this next section sets out the differences in those valuations.

With regards to any comparisons between surplus or deficit amounts reported in the Province’s financial statements versus OTPP’s financial statements or funding reports, it is important to acknowledge the different objectives of funding and accounting for a pension plan which are also explicitly addressed in Section PS 3250 as follows:

.008 Determining whether a retirement benefit plan should be funded and the amount to be funded each period is a financial management matter. The funding objective is to determine an acceptable policy for financing the estimated ultimate cost of a benefit plan. An actuarial valuation for funding purposes is performed to calculate the contributions required to secure the benefits promised.

.009 The accounting objective is to measure and report the obligation for employee retirement benefits and to attribute the costs of those benefits to the periods in which the related services are rendered. To meet that objective, a method is needed to determine the amount of the obligation for retirement benefits outstanding, which represents the liability at the financial statement date, and the value of the benefits employees earned during the period, which represents the expense of that period. ...

.010 Because the objectives of determining the most appropriate funding policy are not necessarily the same as those of determining the most appropriate accounting method, the liability for accounting purposes may not be the same as the amount due but not yet funded at the financial statement date according to the funding plan. In addition, the retirement benefit expense of the period for accounting purposes may not be the same as the contribution computed in the period for funding purposes.

Section PS 3250 paragraph .051 includes an explicit acknowledgement that the accounting position and funding position can be quite different, as follows: “Contributions reflect the funding objectives of the Plan. The benefit expense reflects the accounting objectives and may differ for a number of reasons...”

OTPP’s most recent preliminary funding valuation reported a preliminary funding surplus of \$13.2 billion as at January 1, 2016, as reported on the OTPP website (<https://www.otpp.com/home>). The Province’s relative portion of this surplus would be \$6.6 billion. OTPP’s published stand-alone financial statements showed a deficit for accounting purposes of \$1.8 billion in its financial statements as at December 31, 2015, for which the Province’s portion would be a deficit of \$900 million. The following background helps to clarify the reasons for these different results. OTPP’s financial statements are prepared under accounting standards for pension plans in Part IV of the CPA Canada Handbook (“Part IV”), which is a different accounting framework than the Province uses for its financial reporting and is also a different framework than is used to calculate the net surplus or deficit for funding purposes.

Accounting for employee future benefits requires the use of assumptions and methodologies to calculate both the obligation incurred to date and the value of the assets already set aside to meet those obligations. Accounting frameworks differ in standards that must be applied in determining appropriate assumptions and methodologies. Further, the assumptions and methodologies used in developing a “funding valuation” on a going concern basis also differ from those required by accounting standards. These differences result in a number of different valuations for the same plan, depending on the purpose of the valuation and can be affected by certain choices made between acceptable options within each framework. A summary of the main differences between the methodologies used to calculate a going concern funding valuation, OTPP’s accounting valuation and the Province’s accounting valuation is shown in Appendix D.

Specifically, the discount rate used to value the obligations of the plan has a significant impact on the overall position of the plan. A lower discount rate results in a higher liability and a higher discount rate results in a lower liability, all else being equal. Put another way, a higher estimate of the time-value of money results in the value the promises made today that will be paid out in the future cheaper. OTPP uses a discount rate based on corporate/government bond rates in its financial statements, as permitted by Part IV. The Province uses a discount rate based on the expected asset return, as permitted by PSAS. The rationale for using a corporate or government bond approach is that a pension promise is akin to a bond as it is a promise to pay a series of cash flows in the future regardless of what the asset returns actually are (which could be higher or lower than expected). The rationale for using an asset return approach is that it represents the amount of contributions that, combined with investment returns, should be sufficient to pay the promised benefits, particularly as pension plans will often invest in higher risk/higher return assets than simple corporate bonds. Both a discount rate based on the expected asset return and one based on corporate/government bonds are “best estimate” rates; they must both be based on management’s best estimate of the applicable discount rate. In both cases the estimates must be supportable. The difference results not from one being more “right” or “wrong” relative to the other but from fundamentally different approaches within the accounting standards to what the discount rate should be.

Typically the funding discount rate used for the funding valuation falls between the bond discount rate and the expected asset return, but it differs in that it does not purport to be the “best estimate” of the discount rate, rather it is designed to indicate the contributions that are required to fund the promised benefits with an additional conservative margin for adverse deviations. Note that over the long term the difference between funding valuations and accounting valuations would diminish as the impact of the discount rate unwinds and the asset valuation methods converge.

In practice, the discount rates used in the financial statements of government sponsored and joint defined benefit pension plans prepared under Part IV of the CPA Canada Handbook (Section 4600) use diverse methodologies. For example, in Alberta there are seven plans which prepare their financial statements under Part IV with reference to IFRS (same framework as OTPP). Of these none use a government bond discount rate and all use a discount rate calculated with some reference to a rate of return on invested assets, which may include factors for expenses, diversification and rebalancing. The analysis of a number of government sponsored plans is included as Appendix E. The analysis

demonstrates that in their stand-alone financial statements, a significant number of government sponsored plans use a discount rate aligned to an asset investment return rather than a bond discount rate. OTPP is actually in the minority of plans that choose to use the rate required by IFRS, resulting in a lower discount rate and higher liability for financial reporting purposes.

The above analysis explains how different discount rates impact the net surplus/deficit reported on OTPP's financial statements, OTPP's funding reports and the Province's financial statements. The fact that OTPP reports a deficit on its financial statements, or that the 50% of the net surplus reported by OTPP for funding purposes is lower than the surplus reported on the government's financial statements under PSAS does not impact the net pension asset amount or pension expense reported by the Province for OTPP.

To further clarify, that there is a deficit reported in OTPP's stand-alone financial statements while the Province of Ontario calculates a surplus under PSAS requirements does not mean that there is no accounting surplus and therefore no reportable asset for the Province. In fact, if OTPP had chosen (as an acceptable accounting policy choice) to use a discount rate more consistent with its counterparts in other jurisdictions (see Appendix E) such as a discount rate based on an expected asset return which would be closer to that used by the Province, it would eliminate much of the existing difference between the reported net surplus/deficit amounts in OTPP's stand-alone financial statements and the Province's share of OTPP reported for accounting purposes in the Province's Public Accounts.

4.4 Applicability of PS 3250 as primary source of GAAP

GENERALLY ACCEPTED ACCOUNTING PRINCIPLES, Section PS 1150 prescribes that, in developing and applying accounting policies, all primary sources of GAAP should be applied (Section PS 1150 paragraph .04). Primary sources of GAAP are Sections PS 1201-PS 3510, Public Sector Guidelines and appendices and illustrative material to those pronouncements. Only when there are no primary sources of generally accepted accounting principles (GAAP) that relate to the transactions or events under consideration, or more specific guidance is needed (Section PS 1150 paragraph .05), does an entity consider other primary sources of GAAP dealing with similar issues and also the concepts described in FINANCIAL STATEMENT CONCEPTS, Section PS 1000 (issued January 2003). Section PS 1000 is not, however, a "primary source of GAAP" under the PSA Handbook.

The primary sources of GAAP specific to the accounting for pension assets is RETIREMENT BENEFITS, Section PS 3250 (issued in September 2001 replacing the prior EMPLOYEE PENSION OBLIGATIONS, also titled Section PS 3250).

Other primary sources of GAAP that deal with similar issues might also be considered where additional interpretation or guidance may be required. For the issues dealt with in this paper - recognition and measurement of a joint defined benefit plan - this could include standards that relate to shared control, as OTPP is a joint defined benefit plan, standards that relate to the definition of an asset and standards that relate to measurement uncertainty:

- GOVERNMENT PARTNERSHIPS, Section PS 3060 (issued in October 1999)

- ASSETS, Section 3210 (issued in June 2015, effective from April 1, 2017)
- CONTINGENT ASSETS, Section 3320 (issued in June 2015, effective from April 1, 2017)
- MEASUREMENT UNCERTAINTY, Section PS 2130 (issued in April 2005)

There have not been consequential changes to any of the above standards since their introduction into the PSA Handbook. Furthermore, all the standards were developed several years ago with the exception of ASSETS, PS 3210 and CONTINGENT ASSETS, Section PS 3320 which are more recent and will be effective in for periods beginning on or after April 1, 2017. Section PS 3210 provides additional guidance on the various components of the existing asset definition found in Section PS 1000; it does not change the definition.

5.0 Question 1 – Classification of a pension asset

The analysis below addresses whether the Province's share of the pension surplus in OTPP, calculated in accordance with PSAS under Section PS 3250, represents a reportable asset to the Province of Ontario in the Public Accounts.

5.1 RETIREMENT BENEFITS PSAS 3250

The focus of the following analysis is on the accounting requirements in RETIREMENT BENEFITS, Section PS 3250 as this standard is a primary source of GAAP which specifically addresses the accounting for pension assets. The following highlights some key concepts and guidance contained in this standard.

5.1.1 Section PS 3250 – Purpose and Scope

The purpose and scope of Section PS 3250 is included in paragraph .001 which states:

PURPOSE AND SCOPE

.001 This Section establishes standards on how to account for and report obligations for employee retirement benefits in government financial statements. Other employee future benefits are specifically dealt with in POST-EMPLOYMENT BENEFITS, COMPENSATED ABSENCES AND TERMINATION BENEFITS, Section PS 3255.

Obligations for retirement benefits are further explained in RETIREMENT BENEFITS, Section PS 3250.003 as follows:

.003 Obligations for retirement benefits result from a promise by a government to provide these benefits to employees because of retirement in return for their services. Pensions and other retirement benefits, such as extended health care and life insurance benefits, are a form of compensation offered for services rendered and accrue over the years employees render those services. The fundamental accounting task is to determine the amount of the obligation for retirement benefits to attribute to each period of employee service. Determining such amounts involves not only accounting for past transactions and events; it also requires forecasts of future events, such as inflation, investment returns, medical costs and employee turnover and mortality.

RETIREMENT BENEFITS, Section PS 3250 applies to the accounting for OTPP in the Province of Ontario's financial statements as the pension plan represents an obligation of the Province to provide retirement benefits to the members of the plan in return for their services.

5.1.2 PS 3250 – Types of pension plans

RETIREMENT BENEFITS, Section PS 3250 addresses the accounting for different types of pension plans including:

- defined benefit plans (of which joint defined benefit plans are a subset),
- defined contribution plans, and
- multi-employer and multiple-employer benefit plans.

The definition of a joint defined benefit plan is included in the glossary to Section PS 3250 as follows:

*A **joint defined benefit plan** is a contractual arrangement between the government and another sponsor or sponsors representing plan participants that has all of the following characteristics:*

(a) the sponsors co-operate toward achieving the significant clearly defined common goal of providing retirement benefits in exchange for services rendered by the employees;

(b) funding contributions are shared mutually between the government and the plan members, represented by the non-government sponsor;

(c) the sponsors share control of decisions related to the administration of the retirement benefit plan and to the level of benefits and contributions on an ongoing basis; and

(d) the significant risks associated with the retirement benefit plan are shared on an equitable basis between the government and the plan members, represented by the non-government sponsor.

The contractual arrangement establishes that the sponsors have shared control over the retirement benefit plan, and ensures that neither party is in a position to control the plan unilaterally. Nevertheless, overall, there must be an equitable relationship between the funding by the government of the retirement benefit plan, the extent of control it is able to exercise over the plan and the risks and benefits that accrue to the government from the plan.

Additional guidance on identifying joint defined benefit plans (JDBPs) is in Section PS 3250 paragraphs .79 to .80 which similarly highlight the importance of both shared control and shared risks and rewards in a JDBP as follows:

.079 Governments may participate jointly in defined benefit plans where the government shares the risks and rewards jointly with plan participants, represented by a sponsor or sponsors. Joint defined benefit plans are governed by a formal agreement between the sponsors, which establishes that the sponsors have shared control over the plan. A governing board is generally appointed by the joint sponsors with equal representation and a mutually agreed-upon chair.

.080 A government would consider the characteristics of the plan to determine whether it meets the definition of a joint defined benefit plan. In a joint defined benefit plan, funding contributions are shared mutually between the government and the plan members. The sponsors have control over decisions related to the administration of the plan and the level of benefits and contributions on an ongoing basis based on the terms of the contractual agreement. The sponsors share, on an equitable basis, the significant risks associated with the benefit plan. Risk would not be considered to be equitably shared in an arrangement where the government and the joint sponsors fund the plan equally but where the government retains the full risk of the accrued benefit obligation. If the government retains the residual risks it is unlikely that the plan meets the definition of a joint defined benefit plan.

It should be noted that the definition of a JDBP under Section PS 3250 is not the same as the definition of a JSPP under the PBA, although there are some overlapping concepts between the two. A JDBP is a unique sort of retirement benefit plan where the sponsors have shared control over the plan. As a result, no one party can, by itself, control decisions around funding, benefits and other matters; funding contributions, risks and benefits are to be shared mutually between the sponsors. The Province has concluded that OTPP meets the definition of a JDBP as the Province and OTF are sponsors of the plan. OTPP is a contractual arrangement between the Province and OTF in which:

- (a) the sponsors co-operate toward achieving the significant clearly defined common goal of providing retirement benefits in exchange for services rendered by the employees;
- (b) funding contributions are shared mutually between the government and the plan members, represented by the non-government sponsor (addressed in paragraph 5(1.1) of the TPA for example);
- (c) the sponsors share control of decisions related to the administration of the retirement benefit plan and to the level of benefits and contributions on an ongoing basis (addressed in paragraph 8 of the Partners' Agreement for example) ; and
- (d) the significant risks associated with the retirement benefit plan are shared on an equitable basis between the government and the plan members, represented by the non-government sponsor (addressed in paragraph 10(1)3 of the TPA for example).

The TPA, the Partners' Agreement and the plan text collectively set out this shared control and that the Province of Ontario has an equitable sharing of the risks and rewards (surpluses and deficits) of the plan, thus meeting the definition of a JDBP.

The classification of OTPP as a JDBP for accounting purposes [and a JSPP under the PBA] by the Office of the Provincial Controller has been consistent since 2001 and had been consistently accepted without question by the OAG, including throughout the 2015/16 Public Accounts.

5.2 Conclusion on classification

The Province has concluded that OTPP meets the definition of a joint defined benefit plan as the Province and Ontario Teachers' Federation are shared sponsors of the plan. The Teachers' Pension Act,

the Partners' Agreement and the plan text for OTPP collectively set out this shared control and equitable sharing of the risks and rewards (surpluses and deficits) of the plan, thus meeting the definition of a joint defined benefit plan in RETIREMENT BENEFITS, Section PS 3250 in PSAS. The classification of OTPP as a joint defined benefit plan for accounting purposes has been consistent since 2001 and had been consistently accepted without question by the OAG, including throughout the 2015/16 Public Accounts.

6.0 Question 2 – Recognition of a pension asset for a JDBP

6.1 Standards in the PSA Handbook

RETIREMENT BENEFITS, Section PS 3250 paragraphs .081 to .082 provide guidance on the accounting for a JDBP in the financial statements of the government sponsor. As OTPP meets the definition of a JDBP for the reasons noted above, the relevant guidance for the Province for purposes of reporting retirement benefits in the Public Accounts includes:

.081 When a government participates in a joint defined benefit plan, the government's risk is limited to its portion of the plan. The government should account for its portion of the plan in accordance with the standards for defined benefit plans. [SEPT. 2001]

.082 A government may convert an existing defined benefit plan for which it is the sole sponsor to a joint defined benefit plan where the risks and benefits are shared. When converting to a joint plan, a government would consider whether there are any special accounting issues that arise, including whether the predecessor plan has been settled or partially settled and/or curtailed or partially curtailed. In assessing such issues a government would have regard to its specific circumstances and the terms of the joint defined benefit plan.

Section PS 3250 paragraph .081 clearly states that “The government should account for its portion of the plan in accordance with the standards for defined benefit plans”. It is clear from this that only the government's portion of the plan is included in the government's financial statements consistent with the requirements of Section PS 3250 (recognition) and the measurement of that portion is based on the requirements of Section PS 3250 (measurement). It is also then clear that the requirements of the standard for recognition and measurement, including the Limit of the Carrying Amount of an Accrued Benefit Asset guidance, are designed to be applied to a shared control situation and not only to situations where there is unilateral control. If it was intended that no pension asset could be recognized because the asset was subject to shared control and not unilateral control Section PS 3250 paragraph .081 would have made this clear. This paper discusses the question of measurement separately in Question 3.

The balance sheet recognition guidance for retirement benefits is stated in Section PS 3250 paragraphs .016 to .017:

.016 The statement of financial position should report the retirement benefit liability and the statement of operations should report the expenses for retirement benefits on the basis of the value of the benefits attributed to employee service to the financial statement date. [SEPT. 2001]

.017 The components of the retirement benefit liability are:

(a) accrued benefit obligation including the effects of plan amendments, settlements and curtailments;

(b) plan assets, if any; and

(c) unamortized actuarial gains and losses.

As OTPP is a funded plan there are plan assets that are recognized as part of the retirement benefit liability. When plan assets and the net impact of unamortized actuarial gains and losses exceed the accrued benefit obligation then there is an “Accrued benefit asset” (ABA). An ABA is defined in Section PS 3250 as follows:

GLOSSARY - An **accrued benefit asset** is the amount of any asset recognized on a government's statement of financial position in respect of employee retirement benefits before deducting any valuation allowance that may be required. It is the sum of the government's accumulated cash contributions less the sum of the current and prior years' benefit expenses (before any change in the valuation allowance).

Accordingly, the portion of the government's plan to be recognized includes their share of the accrued benefit obligation and also their share of the plan assets. In the case of the Province's portion of OTPP there is no uncertainty regarding the *existence* of an ABA for the government's portion of the plan; the ABA is calculated by reference to accrued benefit obligation and plan assets, both determined based on the best estimate assumptions and the methodologies required by with Section PS 3250 for these items. As noted above an ABA is defined as the sum of the government's accumulated cash contributions less the sum of the current and prior years' benefit expenses (before any change in the valuation allowance). For a jointly sponsored plan, this is the government's accumulated cash contributions less the government's share of the current and prior years' benefit expenses that are attributable to the government under the JDBP. The Province's portion of OTPP resulted in an ABA of \$10.1 billion as at March 31, 2016. There is no uncertainty regarding the occurrence of the cash contributions made (and the interest earned thereon) measured in accordance with Section PS 3250 and the existence of the government's obligation. As Section PS 3250 paragraph .080 *requires* a government to account for its portion of the plan in accordance with the standards for defined benefit plans, this would include the recognition of any asset that meets the definition of an ABA under the standard.

Further, Section PS 3250 paragraph .050 refers to the presentation of the ABA; this amount is presented in the financial statements, net of any valuation allowance. This indicates that an ABA should be recognized in the financial statements, but measured in reference to the limit on the carrying amount of the asset - essentially a measurement requirement rather than a recognition requirement, as the limit could result in an ABA being measured at anything from \$nil to its full amount. Note that the

measurement of any net asset is subject to guidance in Section PS 3250 paragraphs .050-.059 and is discussed later in this paper.

To recognize only their share of the liability and not their share of the plan assets, or to recognize only a net liability (when the accrued benefit obligation exceeds plan assets) but never a net asset (when plan assets exceeds the accrued benefit obligation, subject to the valuation allowance guidance discussed in the Measurement section below), would indicate that the Province does not share equitably in the risks and rewards of OTPP because they bear only the risk of increased liabilities without being able to bear any rewards of investment returns on the plan assets and under this interpretation the plan would not therefore be a JDBP.

6.2 Concept of Shared Control and Asset Recognition

Included in the definition of a JDBP is the concept of shared control. Points (b) and (d) of the definition of a JDBP require shared control of decisions relating to administration, levels of benefits and contributions between the sponsors; and the sharing of risks between the government and the plan members. The concept of shared control resulting in a recognition of an asset could on the surface appear to conflict with the definition of an asset under FINANCIAL STATEMENT CONCEPTS, Section PS 1000 and ASSETS, Section PS 3210, as part of the definition of an asset under Section PS 1000 would suggest that the government must control the economic resource and access to the future economic benefits. Since shared control does not equate to control, there is a need to consider whether the recognition of any asset under PS 3250 is appropriate where there is only shared control.

The Province's position is that PSAS does not preclude asset recognition for assets under shared control and specifically for plan assets of JDBPs for the following reasons:

- As discussed above GENERALLY ACCEPTED ACCOUNTING PRINCIPLES Section PS 1150 states that a reporting entity applies every primary source of GAAP that deals with the transactions and events encountered by that entity. Section PS 3250 is a primary source of GAAP for dealing specifically with JDBPs and, as noted above, requires the government to account for their portion of the plan – both the accrued benefit obligation and plan assets in accordance with Section PS 3250. As such, reference to Section PS 3250 is sufficient to indicate that the recognition criteria are met for JDBP assets, no further source of PSAS guidance need be considered.
- Similarly, if other primary sources of GAAP are considered then it is relevant to consider GOVERNMENT PARTNERSHIPS, Section PS 3060 which also includes the concept of shared control. Under Section PS 3060, shared control is sufficient for asset recognition.
- The concept of shared control is not addressed in the definition and guidance of an asset in FINANCIAL STATEMENT CONCEPTS, Section PS 1000 and ASSETS, Section PS 3210. Although shared control is not included in FINANCIAL STATEMENT CONCEPTS, Section PS 1000, it has been a concept in the PSA Handbook since the introduction of Sections PS 3060 and PS 3250. With the introduction into the PSA Handbook of Section PS 1000 or Section PS 3210, the concept of

shared control was not removed from Sections PS 3060 and PS 3250. This indicates that the Public Sector Accounting Board (PSAB) did not consider Section PS 3250 (or Section PS 3060) to be inconsistent with the general concepts in Section PS 1000.

- The Province's reporting of a pension asset for the JDBP is therefore consistent with these primary sources of GAAP, subject to measurement guidance including impairment considerations.

The similarities between the definitions of a JDBP and a government partnership under PSAS are demonstrated in Appendix F to this paper, and further support Section PS 3060 as being a relevant primary source of GAAP dealing with similar circumstances, should it be considered necessary to go outside of the requirements of Section PS 3250 to look for further clarification and guidance on recognition.

Under Section PS 3060 a critical condition for a Government partnership is shared control. Section PS 3060 explicitly acknowledges that under shared control "none of the partners is in a position to exercise unilateral control over the government partnership" (Section PS 3060 paragraph .20), yet the accounting model required by Section PS 3060 for non- GBPs⁹ is that of proportionate consolidation which is the recognition of a pro rata share of assets, liabilities, revenues and expenses of the partnership. JDBPs (or pension plans in general) are not specifically excluded from the scope of Section PS 3060 (Section PS 3060 paragraph .05 lists a number of exclusions from its scope and pension plans are not noted), however some may interpret that they are excluded from the scope of Section PS 3060 on the basis that control is shared with employees rather than with a party outside of the reporting entity (Section PS 3060 paragraph .06 footnote 3). The Province of Ontario and OTF, which represents employees of the Province (Teachers), share control of OTPP. This interpretation indicates that such plans are excluded because of a closer relationship between the government and the other party than normally exists for government partnerships. Even when an independent third party shares control, Section PS 3060 still requires the recognition of a share in an asset subject to shared control, indicating that the PSAS framework does not require unilateral control in order to support asset recognition when there is shared control. It would not be appropriate to use Section PS 1000 to over-ride the requirement in Section PS 3060 for proportionate consolidation, and similarly it is not appropriate to use Section PS 1000 to over-ride the requirement in Section PS 3250 to account for the government's portion of a JDBP. In other words, Section PS 3250 is a primary source of GAAP and provides sufficient and complete guidance on how to account for assets related to JDBPs.

6.3 Concept of Contingent Asset

CONTINGENT ASSETS, Section PS 3320, provides guidance on the disclosure of contingent assets in a government's financial statements. It characterizes a contingent asset as one where there is uncertainty as to the existence of an asset (Section PS 3320 paragraph .04). It is the Province's position that the

⁹ Government business partnerships (GBPs) are accounted for under the modified equity method rather than proportionate consolidation.

existence of the pension asset is not uncertain – there is an accrued benefit asset calculated in accordance with Section PS 3250 as noted above that is based on past transactions, being the impact of cumulative contributions and benefit expense. The fact that shared control exists with regards to access to the assets of the plan does not create additional uncertainty that would impact asset recognition under PSAS. The Province anticipates that in a broad sense, any OTPP surplus would be shared in an “equitable manner” under the terms of the arrangement, and this is enabled through the ability to negotiate the utilization of the surplus including the ability to prevent the utilization of the surplus in a manner that does not benefit the Province. This expectation is further supported by past history of surplus utilization (see Appendix G). The method, extent and timing during which the Province will obtain the expected future benefits (contributions reductions vs increase in benefits) is not certain. However Section PS 3320 also states “The mere fact that an estimate of an amount is involved (measurement uncertainty) does not, in and of itself, constitute the type of uncertainty that characterizes a contingent asset. For example, even though there may be measurement uncertainty related to income tax receivable, there is nothing uncertain about the fact that this asset exists. Any uncertainty is related solely to the amount thereof” (Section PS 3320 paragraph .07). Based on past history of surplus utilization for OTPP and based on the constating documents, expected future benefits for the Government are present. The uncertainty as with many types of assets relates to measurement uncertainty which will be discussed below.

6.4 Conclusion on recognition

Therefore the Province has concluded that PSAS supports the recognition of a pension plan asset in respect of a joint defined benefit plan and does not require that all recognized assets must be subject to unilateral control. The Province’s share of OTPP’s pension surplus meets the definition of an Accrued Benefit Asset under Section PS 3250. The measurement of that accrued benefit asset is determined by reference to the guidance in Section PS 3250 regarding the Limit on the Carrying Amount of an Accrued Benefit Asset, discussed in Question 3 of this position paper.

7.0 Question 3 – Measurement of a pension asset

7.1 Standards in the PSA Handbook

Section PS 3250 addresses how to measure a pension asset. This is a two-step process for OTPP. Firstly the accrued plan obligation (a Credit) and the plan assets (a Debit) are measured in accordance with the standard, and adjusted for any unamortized actuarial gains or losses (a Debit for gains not yet realized, a Credit for losses not yet realized). This measurement results in a retirement benefit liability when it is a net liability (a Credit) amount or an accrued benefit asset when it is a net asset (a Debit) amount. When the resulting amount is an asset, the standard requires a second step to test that the asset is not impaired. It should be noted that impairment testing in some form is required for all assets recognized under PSAS standards except those carried at fair value, although the methodology of impairment tests will vary depending on the nature of the asset. The amount that is tested is the “adjusted benefit asset”. When there are net unamortized gains the ABA is equal to the

adjusted benefit asset. When there are net unamortized losses the ABA is reduced by those net unamortized losses to calculate the adjusted benefit asset. A graphical illustration of the calculation of the Accrued Benefit Asset (AcBA) and the Adjusted Benefit Asset (AdBA) are shown in appendix C. Section PS 3250 paragraphs .052 to .059 go on to explain what the standard means by expected future benefit and how a government may benefit from the ABA or adjusted benefit asset. Note that for OTPP the accrued benefit asset equals the adjusted benefit asset as there are net unamortized actuarial gains.

Section PS 3250 paragraphs .050-.059 are included here for completeness and ease of reference:

Limit on the carrying amount of an accrued benefit asset (i.e. Asset Ceiling Test)

.050 An accrued benefit asset should be presented on a government's statement of financial position net of any valuation allowance. When a defined benefit plan gives rise to an accrued benefit asset, a government should recognize a valuation allowance for any excess of the adjusted benefit asset over the expected future benefit. A change in valuation allowance should be recognized in the statement of operations for the period in which the change occurs. [SEPT. 2001]

.051 A government with a defined benefit plan may have an accrued benefit asset for accounting purposes. An accrued benefit asset arises when the government's total contributions to the plan, including interest earned thereon, are greater than the retirement benefit expense recognized since the start of the plan. Contributions reflect the funding objectives of the plan. The benefit expense reflects the accounting objectives and may differ for a number of reasons, including the fact that actuarial gains and losses are deferred and amortized in future periods.

.052 A government may benefit from an accrued benefit asset either by withdrawing surplus assets or by taking a contribution holiday or receiving a refund of contributions. The accrued benefit asset may become impaired when there is a plan surplus for accounting purposes that the government is not entitled to benefit from fully. For example, there may be a regulatory moratorium on pension surplus withdrawals or uncertainties as to a government's legal right to use a plan's accounting surplus.

.053 To determine the extent to which an accrued benefit asset may be impaired, the government first determines the adjusted benefit asset. The adjusted benefit asset is the accrued benefit asset less net unamortized actuarial losses (determined on a basis using market value of assets).

.054 The adjusted benefit asset is then compared to the expected future benefit. When the expected future benefit exceeds the adjusted benefit asset, the accrued benefit asset is not impaired and, accordingly, no valuation allowance is required. The chart included as Appendix A to this Section is intended to set out the relationship between the various defined terms.

.055 The objective of the standard in Section PS 3250 paragraph .050 is to limit a government's accrued benefit asset to the amount it can realize in the future. The expected future benefit is a

calculated amount representing the benefit a government expects to realize from a plan surplus. An expected future benefit includes any withdrawable surplus or reduction in future contributions.

.056 A government determines its expected future benefit as the sum of:

a) the present value of its expected future accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the government is required to make regardless of any surplus; and

b) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

.057 A government's expected future accruals for service for the current number of active employees are determined on a basis consistent with that used to determine its accrued benefit obligation. These expected future accruals for service, less required employee contributions and minimum contributions the government is required to make regardless of any surplus, are then discounted back to the current period to determine the present value. The interest rate used to calculate this present value is the expected rate of return on plan assets used to determine the benefit expense in the period.

.058 When administration expenses are paid by the plan and included in the normal cost calculation, a best estimate of the future administration expense is included in the expected future accruals for service. When administration expenses are paid by the plan and not included in the normal cost calculation, the rate of return on plan assets is adjusted to reflect the deduction of the administrative expenses.

.059 A key factor in determining a government's expected future benefit from a defined benefit plan with a plan surplus for accounting purposes is the ability of the government to withdraw assets from the plan. The expected future benefit includes amounts to which a government has a legally enforceable right of withdrawal. It excludes any withdrawable plan surplus a government is currently required, or intends, to allocate to employees. A government may not anticipate obtaining a legally enforceable right to withdraw a portion of a plan surplus to which it is not currently entitled, whether on the basis of precedent or otherwise. Accordingly, when withdrawal of plan surplus requires the approval of employees or an appropriate regulatory authority or a court of law, a government excludes any amount subject to this restriction from its expected future benefit until such approval has been obtained. A change in the allocation of surplus between a government and its employees is incorporated into the calculation of the expected future benefit only when it has been agreed to and, when required, approved by the appropriate regulatory authorities.

Section 3250 paragraph .052 states that a government may benefit from an ABA by either i) withdrawing surplus assets from the plan or ii) by taking a contribution holiday or receiving a refund of contributions. This is an explanatory paragraph on how a government may benefit from an ABA and why a valuation allowance may be needed, rather than detailing the test to be applied. Part of this justification is to note that that an ABA may be impaired when “the government is not entitled to benefit from [the ABA]

fully". Examples of when a government may not be entitled to benefit from the ABA fully are given, such as a regulatory moratorium on pension surplus withdrawals or uncertainties as to a government's legal right to use a plan's accounting surplus.

Section PS 3250 paragraph .059 gives additional guidance to apply when an entity contemplates realizing future benefits through a surplus withdrawal: "A key factor in determining a government's expected future benefit from a defined benefit plan with a plan surplus for accounting purposes is the ability of the government to withdraw assets from the plan. The expected future benefit includes amounts to which a government has a legally enforceable right of withdrawal". This introduces the concept of a legally enforceable right but only in the context of a government's withdrawal of surplus and not in the context of contribution holidays. If the standard setters had intended legal enforceability to be the test throughout the standard, they would not have raised it only in the context of a withdrawal of surplus, but as a more fundamental notion in the guidance on expected future benefit.¹⁰

It is acknowledged that the Province does not have a unilateral legal right to reduce its contribution levels without agreement from the OTF because OTTP is by nature a JDBP subject to shared control, they are entitled to an equitable share of the risks and rewards of the JDBP, essential to the definition of a JDBP. Section 3250 paragraph .052 does not state that being "entitled to benefit" means having a legally enforceable right as at the reporting date to take contribution holidays. When considering the ability to realize expected future benefits under Section PS 3250 paragraph .052, the Province's legal rights to utilize a surplus to reduce future contributions must be analyzed. Our interpretation of this guidance is that it presents a lower threshold than legal enforceability which is not explicitly required by the standard to support recognition and measurement of JDBP pension assets. Specifically, the amount of pension asset that gets recorded needs to take into account considerations around any legal uncertainties. This consideration involves significant professional judgment. However, it is our view that uncertainty does not need to be reduced to zero in order to recognize a pension asset in the Public Accounts. Pension plans, by their nature, include significant estimates - whether they be related to the value of assets held by the plan that are not publicly traded (e.g. investments in private companies and real assets) or in the present value of the projected benefit obligation that is based on a series of economic assumptions related to inflation, salary escalation, mortality and the rate of return that the assets in the plan will earn over the period that benefit payments are paid to pensioners. Any change in these assumptions will have an impact on the accounting surplus, so to apply a test requiring no uncertainty to the recognition of an asset is inconsistent with the accounting for pension plans as a whole. Further, the term used to describe the cap in the asset ceiling test is "expected future benefit". Expected does not equate to certainty or the absence of uncertainty (Section PS 3250 paragraph .056).

Under the Plan and Partners' Agreement, if funding surpluses occur the partners are required to negotiate the use of the funding surplus (at least once every three years) and the Province is entitled to negotiate a reduction in contributions in respect of its share of the surplus. Under the Partners'

¹⁰ Per page 10 of the October 2, 2016 dated letter from Deloitte LLP addressed to Ms. Karen Hughes, Associate Deputy Minister, Treasury Board Secretariat

Agreement any funding surplus must be dealt with (which includes the option of parking the surplus in the contingency reserve) so that the funding valuation becomes actuarially balanced. *In other words when there is a funding surplus over a certain range the “status quo” cannot be maintained, the surplus must be reduced by a combination of reductions in contributions, increases in benefits or withdrawals of surplus.* This is confirmed by the Partners’ Agreement Section 57 that requires an actuarially balanced valuation to be prepared at least once every three years, allowing for a contingency reserve, combined with the FMP which sets out the framework for determining when a surplus or deficit outside of agreed upon ranges are met and action must be taken. While the Province might choose to accept an increase in member benefits rather than to reduce funding, any such decision is at the Province’s discretion since the OTF cannot force the Province to increase benefits instead of reducing contributions. In other words it is at the Province’s discretion whether to address the actuarial balancing requirements by allowing its portion of the surplus to be utilized through increased benefits. The OTF equally has the right to not agree to reduced contributions from the Province, but they do not have the right to force an inequitable sharing of the surplus. Therefore, the Province is entitled to negotiate their share of the JDBP which may include taking contribution holidays in future negotiations and can effectively use their power in negotiations to benefit from the ABA. The joint partners do have the ability to renegotiate all aspects of the partners’ agreement including the FMP. However all changes require the agreement of both parties and as such the Province can veto any changes to the agreement. Note that while the negotiations are based on funding surplus amounts rather than accounting surplus amounts, any differences would be captured in the mechanics of the calculation of the expected future benefit rather than precluding an ability to benefit from any of the accounting surplus.

Further, Section PS 3250 paragraph .055 indicates "The objective of the standard in Section PS 3250.050 is to limit a government's accrued benefit asset to the amount it can realize in the future. The expected future benefit is a calculated amount representing the benefit a government expects to realize from a plan surplus. An expected future benefit includes any withdrawable surplus or reduction in future contributions". Many generally accepted accounting frameworks use “expected” in a number of principles and it is typically used in the probabilistic sense – something is expected when it is probable at some level, it does not equate to certainty. The Province has an expectation that they will benefit fully from the ABA by exercising their current rights under the plan arrangements to negotiate the use of current and future surpluses in the form of contribution holidays. This position is supported by the review of the constating documents and past history of negotiations that indicate¹¹:

1. The TPA prohibits the total amount of the contributions payable by the Province (and other participating employers) from exceeding the amount of contributions paid by or on behalf of active members in respect of credited service for the year¹² (subject to certain exceptions for payment of a solvency deficiency and where there are insufficient cash and liquid assets in the fund). In practice, this has resulted in 50/50 sharing of the regular contribution costs between

¹¹ Per pages 3 to 6 of the September 20, 2016 dated letter from Osler, Hoskin & Harcourt LLP addressed to Len Hatzis and Paul Kaufman, Treasury Board Secretariat Legal Services

¹² TPA, subsection 5(1.1)

the participating employers (including the Province) and plan members since the OTPP became jointly sponsored.

2. The history of surplus utilization after the OTPP became a jointly sponsored plan and prior to the date that the FMP was established demonstrates a past practice of the sponsors equally sharing (in the aggregate) the financial benefits of surplus utilization, although surplus was not shared equally each time (refer to Appendix G for a history of surplus utilization for OTPP). Since the time the FMP was established, the OTPP has not reached the requisite level of surplus such that the sponsors could negotiate its utilization under the Temporary Improvement Zone or Permanent Improvement Zone.
3. The inability for either party to unilaterally require surplus to be utilized in a particular manner (subject to the OTF Call Right¹³)¹⁴, and the requirement to negotiate and agree (or in the absence of agreement, mediate and/or arbitrate) presents the Sponsors with an equal opportunity to benefit from surplus utilization.
4. One could argue that the obligation to bargain in "good faith" found in the Partners' Agreement (section 74) may include the obligation to take into account the "sharing" principles described elsewhere in this opinion, given that the OTPP is a jointly-sponsored plan. Under the plan, contributions are generally borne equally by the Province and the employees. Employees benefit economically from both an increase in benefits and from a reduction of contributions. The Province benefits economically directly from a reduction in contributions. This makes it reasonable that at least some contribution reductions would be agreed to by the joint sponsors as a highly unequal weighting towards increases in benefits would not balance the interests of taxpayers and teachers therefore may be unlikely to be a reasonable outcome of "good faith" negotiations between the Province and the OTF.

This is further supported by the historical actions of the parties, which reflect a history of working together to resolve both funding deficits and use of funding surpluses, and therefore, which should also be considered. In respect of conditional indexing, reduced indexation for current retirees was matched by an increase in payments by the Province for the first 50% of the indexation reduction. As the sponsors agreed to utilize the funding surplus to partially restore indexation, this restoration of indexation resulted in a decrease in the amount of future contributions that the Province would have otherwise had to pay to the plan in the amount of \$7.8 billion (\$4.3B for the 2016 change, \$1.98B for the 2015 change, and \$1.68B for the 2014 change). This demonstrates that historically and over the long term an equitable sharing of the deficits and surpluses has resulted in changes in the Province's contributions, even when there are decreases or increases to benefits for employees.

¹³ The OTF Call Right is a one-time arrangement intended to compensate Plan members for absorbing 100% (rather than 50%) of funding shortfalls arising the government initiated Freeze period. Part of a previously agreed upon arrangement to ensure equitable sharing of the risks and rewards over the long term of the plan, it is not a general unilateral right to utilize future surpluses beyond the recovery of the specific funding shortfalls.

¹⁴ FMP, section 6.03

5. In the event that the sponsors cannot agree upon how surplus is to be utilized in the Restoration Zone, the Temporary Improvement Zone or the Permanent Improvement Zone, a mediator may be chosen by agreement of the sponsors (section 77 of the Partners' Agreement). If the sponsors do not accept the report of the mediator, an arbitration board will be appointed (section 84 of the Partners' Agreement). The arbitration board would consist of three arbitrators. Arbitration provisions are generally procedural in nature and therefore do not provide a strong foundation upon which to base parties' reasonable expectations about their substantive rights under an agreement. To resolve a dispute, the arbitration board would engage in an exercise in interpretation of the operative substantive provisions of the relevant governing documents, including any applicable statutory provisions. However, the arbitral award must meet certain mandatory conditions set forth in the Partners' Agreement. Among other things, the arbitral award is required to ensure that the contributions of the Minister and those employers who are required to contribute are equal to the contributions of members (section 92(c) of the Partners' Agreement).

As part of the arbitration board's interpretation exercise of the relevant governing documents, in the event of ambiguity in the written terms of the documents, evidence of the parties' post-agreement practices can be admitted as an aid to interpreting the agreement. Past practices may illustrate the parties' intentions at the time of the agreement. These considerations of past practices would be in conjunction with any explicit mandatory considerations set out in the governing document, e.g. prevailing economic conditions and the overall state of the provincial economy under section 91 of the Partners' Agreement. The past practices which the arbitrator may consider would include those described herein: the long history of 50/50 member/employer contributions to the plan, and the equal sharing of surpluses prior to 2003 (from 2003 onwards the plan was mostly in deficit, with surpluses used to restore foregone escalated adjustments for members).

Based on the above analysis, the Province believes that the uncertainties around how and when to utilize a surplus in the OTPP do not result in an inability or lack of entitlement to utilize the surplus in accordance with Section PS 3250 paragraph .052.

7.2 Calculating the limit on the carrying amount of an accrued benefit asset

Section PS 3250 paragraphs .053 to .058 lay out a mathematical calculation that determines the value of the adjusted benefit asset and the expected future benefit, and tests whether a government can expect to recover its accrued benefit asset through a withdrawal of surplus or through the reduction of future contributions. The stated objective of this exercise, as set out in Section PS3250 paragraph .055, is to limit the amount of the government's accrued benefit asset to the amount "it can realize in the future." The expected future benefit is further described as "a calculated amount representing the benefit a government expects to realize from a plan surplus", where actual realization of the benefit would be reflected in a reduction in future contributions. A valuation allowance is recorded against the pension asset to limit the asset value, if necessary, based on this analysis. This is a prescriptive test under

Section PS 3250, specifically that the amount of an asset is limited to the “expected future benefit” as defined in Section 3250 paragraph .56.

Therefore in accordance with Section PS 3250 paragraph .56 the Province calculated the expected future benefit as the sum of:

- a) the present value of its expected future accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the government is required to make regardless of any surplus; and
- b) the amount of the plan surplus that can be withdrawn in accordance with the existing plan and any applicable laws and regulations.

Each of these is discussed separately.

7.3 Considerations re: withdrawal of the surplus (Section PS 3250 paragraph .056 (b))

In relation to the ability of a government to benefit from a surplus through the withdrawal of the surplus, Section 3250 paragraph .059 indicates “The expected future benefit includes amounts to which a government has a legally enforceable right of withdrawal.”

The TPA for OTPP does not specify a method for a potential withdrawal of surplus funds. Section 10(1), item 3 states:

10(1) The Minister of Education and the executive of The Ontario Teachers' Federation may enter into an agreement that provides for the following matters:

- 3. The sharing of entitlement to gains or surplus under the plan and of liability for deficiencies in the pension fund by the Minister, the employers who contribute under the plan and the active plan members.

Therefore, the conditions under which a surplus may be withdrawn from the fund is outlined outside of the text of the TPA itself, as OTF and the Province must reach mutual agreement on these terms in the form of the OTPP Funding Management Policy, as envisioned in Section 10(1).3 above.

Section 4.06 of the OTPP Funding Management Policy states:

Side Agreement: The commitment value shall be used to provide a surplus distribution referred to in Section 4.04(d) or a temporary benefit improvement referred to in Section 4.04(e) only if the partners have entered into a written agreement governing the manner in which the contributions by the Minister and the Employers may be adjusted to offset any surplus distribution or temporary improvement of benefits that is reflected in the value of the liabilities.

4.04(d) and 4.04(e) refer to actions that may be taken in the event that "...assets exceed current liabilities" (Section 4.04), meaning a surplus.

As Section 4.06 stipulates, a written agreement must be established between the sponsors (the Province and the OTF) to provide a surplus distribution. The Province does not have a legally enforceable right to withdraw assets from OTPP until such an agreement is reached.

The consent of the OTF would need to be obtained to be able to access surplus assets in OTPP through a withdrawal. As the Province does not have consent of OTF to withdrawal the plan surplus (for example at the end of fiscal year 2015-16), no expected future benefit should be recognized by the government based on its ability to withdrawal surplus from the plan.

The Province's position is that there is no amount of expected future benefit included in respect of withdrawable plan surplus.

7.4 Considerations re: reduced future contributions (Section PS 3250 paragraph .056 (a))

Section PS 3250 paragraph .056(a) sets out that the government's calculation of expected future benefit would be the present value of its expected future accruals for service for the current number of active employees, less the present value of required employee contributions and minimum contributions the government is required to make regardless of any surplus. Note that in the case at hand, the calculations are done on a 50% basis since the starting point, per Section PS 3250 paragraph.081 and as set out in the fact summary above, is that the government accounts for its portion of the Plan. For this same reason, employee contributions are also excluded in this case since they would represent the teachers' portion of the Plan.

Section PS 3250 paragraph .055 indicates that the expected future benefit is a calculation that represents the benefit a government expects to realize from a plan surplus. The expected future benefit would operate as a ceiling on the pension asset value to be recorded in the accounts. For example, if the pension asset were \$150, but the expected future benefit calculated as described above were \$100, a valuation allowance of \$50 would be recorded against the pension asset and the asset recorded in the government's financial statements would be reduced to \$100.

There are two parts to the calculation of expected future benefit. The first part of the calculation is the sum of the present value of the expected future accruals for service for the current number of active employees. This amount is required to be calculated using consistent assumptions as those used for the calculation of the accrued benefit obligation itself. It is therefore relatively straightforward and is typically calculated based on the Province's share of the current service cost reported in the actuarial valuation taken into perpetuity unless there is evidence to indicate the workforce will significant diminish over time (for example a closed plan).

The second part of the calculation is the present value of required employee contributions and minimum required contributions by the government itself, regardless of any surplus. The main area for judgment in the above calculation is in this second part of the calculation. Note that consistent with the calculation of the expected future accruals for service, no amounts are considered for employee contributions as these relate to the OTF's portion of the plan. The number of years that contributions are assumed in determining the asset ceiling are those minimum contributions that are required to be made "regardless of any surplus" (Section PS 3250 paragraph .056(a)). There is no further guidance in Section PS 3250 as to how the calculation of minimum required contributions should be performed and what restrictions or parameters should be factored into this calculation. Typically for defined benefit plans minimum contributions include those that are required by the pension regulator to be made for funding. However, minimum contributions regardless of any surplus, may be required by plan text, legislation or other agreements with employees. For OTTP a key element of judgment is determining what contributions are required by the current plan arrangements "regardless of any surplus". The constating agreements for OTTP require that the parties negotiate every 3 years as a minimum, and when there is a funding surplus.

Determining the number of years of contributions to include should involve an assessment of the facts and circumstances of the plan and should consider uncertainty. With respect to this uncertainty, there are a number of considerations that may be relevant. Uncertainties should be evaluated taking into consideration the contractual agreements between the sponsors that provide for the sharing of risks and benefits and specifically in respect of assessing the minimum contributions required by the plan agreements (there is no minimum contributions stipulated in the Plan text, legislation or Partners' Agreement) including the following:

- One view of minimum contributions might be that the agreed upon level of contributions are the minimum contributions until they are altered in the plan text. As this can only happen with agreement from OTF it cannot be assumed that changes will be made and therefore that the contribution formula as stated in the current agreements will continue in perpetuity. This view provides the most conservative view of minimum payments. However as the current contribution amounts are greater than the government's share of the annual current service cost for the existing workforce this indicates that continued contributions at this rate will result in ever increasing surpluses. Extrapolating the surpluses, at a certain point other requirements that are currently incorporated into the plan text, such as provisions in the Income Tax Act that limit the accumulation of surplus in a plan will apply to reduce the contributions. The effect of these caps on contributions would have to be estimated but cannot be ignored as they form part of the current contribution arrangements. Modelling could be performed to develop expectations as to when these CRA limits could be expected to be reached assuming no changes in the contribution levels. As is the most conservative view (highest minimum contributions) the impact of this has been considered, as discussed below.
- An alternative view of the minimum contributions required by the plan is that there is a contractual obligation under the Partners' Agreement that the Province and OTF negotiate and set both the benefits and the contributions every three years. A failure to agree might lead to

mediation or arbitration, but not an assumption of the 'status quo'. On this basis it could be argued that any agreed upon contribution levels are mandatory for only a three year period, after which the contributions must be renegotiated to stay the same, increase or decrease, such that the stated contribution level in the plan text constitute minimum payments for only three years. It should be noted that the plan text requires an actuarially balanced funding valuation, so to the extent that a funding deficit currently existed a contribution holiday (contributions lower than the annual cost of the plan) could not be negotiated. However because the funding situation at the time of future negotiations is not known it could be argued that no amount is a fixed “minimum contribution” in this context, because all of the contribution amount is subject to future changes in funding and negotiation by the joint sponsors.

- Other views of what the minimum contributions are would fall between these two views, such as that the current funding level is set to ensure that there is no funding deficit over a 11 year period and after that changes in contributions would be negotiated. This view has been used in calculating the actuarial calculation of the asset ceiling as noted in the table below.
- Another consideration might be the specific framework within the Funding Management Plan for OTPP which contemplates specified funding zones and expectations regarding possible contribution reductions by the sponsors. Informed stochastic modelling would be necessary to estimate when the different funding zones will be reached and probability of contribution reductions may be increased.
- The historical actions of the parties, which reflect a history of working together to resolve both funding deficits and use of funding surpluses should also be considered. As previously discussed, most recently in 2014, 2015 and 2016 with respect to OTPP, the sponsors agreed to use some of the funding surplus to restore indexation, which resulted in a decrease in the amount of future contributions that the Province would have otherwise had to pay to the plan in the amount of \$7.8 billion (\$4.3B for the 2016 change, \$1.98B for the 2015 change, and \$1.68B for the 2014 change).

In determining the range of possible outcomes, it is noted that measurement uncertainty may exist (Section PS 2130 paragraph .03). This paragraph also notes that many items are measured using management's best estimates based on assumptions that reflect the most probable set of economic conditions and planned courses of action. As noted in Section PS 2130 paragraph .13, “As a result of the estimation process, a government would be able to determine a range of reasonably possible amounts in accordance with assumptions that are realistic, supportable, internally consistent, and consistent with planned courses of action. The range of reasonably possible amounts would exclude amounts at the outer edges of possibility since such amounts, while possible, are considered to be outside the best estimate range. Relevant information available to the government to develop a reasonable range includes past experience, precedents, and opportunities to reach alternative arrangements.”

As part of the 2015/16 Public Accounts audit, the Office of the Provincial Controller engaged external consultants to conduct asset ceiling tests to assess the requirement for a valuation allowance against the \$10.1 billion of net pension assets reported by the Province for OTPP . The results of those reports are summarized in Table 1 below.

Table 1: Summary of Asset Ceiling Models performed for OTPP

Model Assumptions	Expected Future Benefit or Asset Ceiling (\$ Billions)	Results
1. There is no minimum employer contribution under the plan/legislation that is required even if a surplus is present.	\$44.6	The expected future benefit (EFB) as at March 31, 2016 exceeds the Adjusted benefit asset. There is no valuation allowance created and no reduction in the balance sheet asset position.
2. The employer minimum contribution considers the most recent funding valuation dated January 1, 2015 for the period covered by the current funding report. Contribution requirements are therefore \$1.7B per year for 2015, 2016 and 2017.	\$41.8	The minimum contribution requirement applies to the period covered by the funding report until a new report is completed. We do not know the minimum funding requirement after that date. EFB is reduced as of March 31, 2016 by the present value of the minimum contributions of \$1.3B in 2016 (9 months left) and \$1.7B in 2017. Still EFB exceeds the Adjusted benefit asset.
3. The employer minimum contribution considers the most recent funding valuation dated January 1, 2015 for the period of expected special contribution requirement (i.e. 11 years through 2026).	\$29.3	Uses a period to 2026 (11 year period) based on the funding report special contribution requirement. When special contribution is present, the basic contribution cannot be reduced either. Once special contribution ends (2026) expected situation is surplus using the Province accounting best estimate assumption for asset return. The EFB at March 31, 2016 is reduced by \$15.3B. Still EFB exceeds the Adjusted benefit asset.
4. The surplus is never used until the time it reaches the Income Tax Act (ITA) threshold. Once attained, the excess surplus above the threshold is used at	\$23.2	The ITA surplus limit is reached at the end of 2024, leading to forced contribution reductions from 2025. The EFB is reduced by \$21.4B at March 31, 2016. Still EFB exceeds the

50% for employees in benefit improvement and 50% for the Province to reduce contributions in the following years.		Adjusted benefit asset.
5. Every year, 50% of current year surplus is applied to improve member benefits and the remaining 50% of the current year surplus is retained and continues to accrue unused. Once the unused portion attains the ITA threshold, the excess surplus is used 50%-50% to reduce contributions by employees and the Province.	\$14.2	The ITA surplus limit is reached at the end of 2041 leading to forced contribution reductions from 2042. The EFB is reduced by \$30.4B at March 31, 2016. Still EFB exceeds the Adjusted benefit asset.

Note: Models above made no assumption on any value of the surplus withdrawal.

In all 5 models above, the expected future benefit (EFB) for OTPP is greater than the accrued pension asset of OTPP of \$10.1 billion, at March 31, 2016. Even under the most conservative model (number 5 above) under which 50% of the current year surplus is applied to improve member benefits while the remaining 50% is retained and continues to accrue a return on assets until the Income Tax Act (IITA) surplus threshold is reached, the EFB of \$14.2 billion is greater than the accrued pension asset of \$10.1 billion. As such no valuation allowance was required and reported for OTPP as of March 31, 2016.

For purposes of OTPP, 11 years has been used. However, it is worth noting that up to 33 years of contributions could be factored into this calculation before the calculation would result in a conclusion that the OTPP asset is impaired.

In addition to the above calculations, the impact of the provision in the Income Tax Act that limits the amount of surplus that can be held in a plan should also be considered. Based on preliminary analysis assuming no changes to management's assumptions, contribution levels and benefits provided to employees, we believe that the OTPP will be required to begin using its surplus through a reduction in contributions in between 10 and 15 years into the future. Taking this timing into account, the pension asset ceiling is in excess of the pension asset recognized (pension asset ceiling of between \$19.9 Billion and \$22.3 Billion); therefore indicating that no valuation allowance is required.

The determination of the minimum contribution levels required as input to the calculation of the expected future benefit involves significant judgements, estimation and assumptions about future funding surplus levels. These judgements, estimates and assumptions should be made on a consistent basis with best estimates used in developing the accrued benefit obligations and plan asset amounts. Regardless of the need to apply judgements, estimates and assumptions for the calculation, this does not imply that no asset can be recognized or that it cannot be reliably measured. In fact, pension plans, by their nature, include significant estimates - whether they be related to the value of assets held by the plan that are not publicly traded (e.g. investments in private companies and real assets) or in the present value of the projected benefit obligation that is based on a series of economic assumptions related to inflation, salary escalation, mortality and the rate of return that the assets in the plan will earn over the period that benefit payments are paid to pensioners. Any change in these assumptions will have an impact on the accounting surplus, so to apply a test requiring no uncertainty to the recognition of an asset is inconsistent with the accounting for pension plans as a whole. Further, the term used to describe the cap in the asset ceiling test is "expected future benefit". From the Province's perspective, 'expected' does not equate to 'certainty' or the absence of uncertainty.

The assumptions used in the calculation of the accrued benefit obligation are required to be the "government's best estimate of expected long-term experience and short-term forecasts" (Section PS 3250 paragraph .042) and each key assumption must be based on the government's best estimate of those future events that have an effect on the accrued benefit obligation (Section PS 3250 paragraph .041). This approach is designed to recognize the long-term nature of the retirement promises with appropriate consideration of, but not undue influence of, experience expected in the short-term. Section PS 3250 paragraph .057 requires that the future service cost calculation included in the calculation of the valuation allowance be determined on a consistent basis with that used to determine the accrued benefit obligation itself. The Province has determined the discount rate to be used in valuing the pension obligation related to OTTP by referencing the expected rate of return on plan assets, which is one of the acceptable references suggested on Section PS 3250 paragraph .044.

The OAG and the Province differ in their interpretation regarding whether it needs to be "expected" that the Province will benefit from the surplus in OTTP through future contribution reductions or whether it needs to be "legally enforceable". The OAG considers there needs to be the same level of assurance the government will benefit from the surplus through reduced contributions (legal enforceable) as is required in Section PS3250 paragraph .059. The Province considers that it needs to be expected that future economic benefits are to be obtained reflected in the definition of "expected future benefit" defined in the glossary to Section PS 3250 with consideration as to uncertainties as to the right to benefit from a plan surplus.

7.5 Other guidance in the PSA Handbook on measurement

MEASUREMENT UNCERTAINTY, Section PS 2130 provides guidance on dealing with measurement uncertainty through additional disclosure in the financial statements, which we believe would be a

useful addition to the financial statements. Section PS 2130 also provides guidance on how to deal with measurement uncertainty and includes the following guidance:

.12 The estimation of the amount of an item to be accrued or disclosed in financial statements may be based on information that provides a range of amounts. When a particular amount within such a range appears to be a better estimate than any other, that amount would be used. When uncertainty exists, estimates used would attempt to ensure that assets, revenues and gains are not overstated and that liabilities, expenses and losses are not understated. Estimates of the financial effect are determined using professional judgment, supplemented by experience of similar transactions and, in some cases, reports from independent experts. Estimates include any additional evidence provided by subsequent events occurring after the financial statement date.

.13 As a result of the estimation process, a government would be able to determine a range of reasonably possible amounts in accordance with assumptions that are realistic, supportable, internally consistent, and consistent with planned courses of action. The range of reasonably possible amounts would exclude amounts at the outer edges of possibility since such amounts, while possible, are considered to be outside the best estimate range. Relevant information available to the government to develop a reasonable range includes past experience, precedents, and opportunities to reach alternative arrangements.

The estimate of the valuation allowance, and in fact pension plan accounting as a whole, is subject to measurement uncertainty. As previously noted, accounting for pension plans involves significant estimates in all aspects of the accounting whether that be in valuation of non-traded assets, estimation of the economic assumptions used to value current service cost and the projected benefit obligation or the valuation allowance. One of the key assumptions impacting the measurement of the net pension asset is the discount rate which reflects management's best estimate of rate of return. The rate used by the government is an acceptable alternative under PSAB and consistent with rates followed by other senior Canadian governments. Actual historical results since the inception of the plans corroborate the reasonableness of the rates used by management and the continued appropriateness for purposes of determining pension expense and pension assets reported in the Public Accounts. Appendix J includes a comparison of the OTPP funding rate assumptions, the Provincial discount rate for OTPP and the actual performance of OTPP from 2005 to 2016. Historical rates of return on plan assets have supported the past discount rates used by the Province in relation to OTPP.

7.6 Impact of valuation allowance

The current Auditor General's view challenges previous interpretations of the Provincial Controller and former Auditor Generals regarding the interpretation and application of Section PS 3250 to those JDBPs where the government is a joint sponsor. The impact of the OAG's view is that no net pension asset

should be recognized in the Province's Public Accounts for JDBPs until the joint sponsors agree to a change in the plan text to provide for unilateral authority to the Province to access surplus or reduce future contributions or the sponsors enter into an agreement by year-end enabling the government to take a contribution holiday. In the absence of meeting either the criteria set out by the Auditor General, any ABA would therefore be fully provided for through a valuation allowance, impacting each year's statement of operations by the amount by which the asset would otherwise increase in value. These results are counterintuitive with pension expense being higher in years in which increased funding is made and also higher when poor investment returns create actuarial losses that have not yet been amortized into the statement of operations. These examples are illustrated in Appendix C.

For information purposes, refer to Appendix H for a comparison of the pension expense, surplus (deficit), net debt and net debt-to-GDP of the Province over the prior 10 years following the Auditor General's approach to pension accounting for OTTP compared with following the Province's interpretation of the PSAS. Of particular note is the impact in 2008 when the deficit would have been lower by \$3 billion in a year when pension asset values fell significantly because of the financial crisis.

7.7 Comparability of Ontario's accounting to other Provinces defined benefit plans

Not all of the jurisdictions noted in this comparative overview have joint defined benefit plans. Furthermore, the specific terms and conditions of any jurisdiction's plans will determine the appropriate accounting under PSAS. This information is provided for reference purposes only and has no direct impact on the Province's accounting treatment for OTTP or other defined benefit plans on the Province's financial reports.

The Province of British Columbia does have a jointly sponsored pension plan. Appendix I provides details from a legal opinion prepared by lawyers, Koskie Minsky which compared access to the pension surplus of OTTP relative to JDBPs in British Columbia. The Province of British Columbia does not report a pension asset in their financial statements as the Province has given up any rights to the surplus in the Joint Trust Agreements. The provision was established to support the independence of the four pension plan Boards. As a result the accounting by British Columbia is appropriately different than the accounting by Ontario for OTTP.

The Province of Manitoba has a multi-employer defined benefit plan for their healthcare employees. The Province neither records the net pension liability or the net pension asset on their financial statements as the Province is not a direct sponsor of the plan. The Province of Manitoba appropriately reduces the accrued benefit asset to nil in accordance with Section PS 3250 paragraph .050 as the Province does not expect future benefits from any plan surplus in contrast to OTTP and the Province of Ontario.

The Province of Nova Scotia's Public Service Superannuation Plan transitioned to a joint governance structure in April 1, 2013. Due to the wording of the legislation, the Province has determined it no

longer has any residual liability for the plan, and therefore has no entitlements to its assets. The legislation and funding policy alleviated the Province from any responsibility to fund shortfalls or to benefit from fund surpluses. As a result, the Province no longer records a net pension asset or liability in their financial statements. The Province of Nova Scotia therefore appropriately reduces the accrued benefit asset to nil in accordance with Section PS 3250 paragraph .050 as the Province does not expect future benefits from any plan surplus in contrast to OTPP and the Province of Ontario.

Quebec has two joint sponsored plans: Government and Public Employees Retirement Plan, and Pension Plan Management Plan. These plans are structured such that employee and employer contributions are in separate funds. Currently both of these plans are in net pension liability positions.

In New Brunswick, the target benefit pension plans are governed by an Agreement and Declaration of Trust which restricts the Province's access to the plan assets. On this basis, the Province records the value of the plan net assets as nil when these plans are in a net asset position. These plans are shared risk plans that are governed by a Board of Trustees to which the Province has appointed one-half of the members. The Plans are jointly funded by employees and the Province. These target benefit plans target retirement benefits as opposed to guaranteeing them. Two of the four target benefit plans are in a net asset position, where a full allowance is taken by the Province against the net pension asset. The Province of New Brunswick appropriately reduces the accrued benefit asset to nil in accordance with Section PS 3250 paragraph .050 (there is no specific guidance on target benefit plans in PSAS) as the Province does not expect future benefits from any plan surplus in contrast to OTPP and the Province of Ontario.

As noted above, the constating documents for pension plans in other provinces are different than those of OTPP, therefore caution should be exercised when trying to compare accounting among the jurisdictions, or others.

7.8 Conclusion on measurement

As discussed, there is significant professional judgement and estimation in determining how to measure the valuation allowance under Section PS 3250, including the determination of the minimum contributions required by the current plan arrangements. It is the Province's position that the attributes of the JDBP arrangements for the OTPP entitle the Province to access its portion of any plan surplus through the right to negotiate its use to the Province's benefit and that this results in an expected future benefit through the use of any plan surplus through reduced contributions.

The Province has applied reasonable estimates of the plan's funding status necessary to determine what minimum contributions are required under the current plan contribution arrangements. Based on the results of various actuarial assessments for the asset ceiling test date, no valuation allowance appears to be required and the OTPP pension assets should continue to be recorded on the books of the Province.

Appendix A – Pension liability (asset) and expense reported by the Province of Ontario for OTPP over the prior 14 years

Ontario Teachers' Pension Plan (excluding Retirement Compensation Plan)						
\$ Millions						
Fiscal Year	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06
50% Pension Liability (Asset) Reflecting Accounting Policy for Joint Plans						
Accrued benefit obligation, closing balance	27,544	32,185	33,660	35,505	37,045	40,186
Less: pension fund assets (market related values), closing balance	(34,390)	(36,215)	(37,929)	(39,579)	(41,396)	(44,347)
Unamortized experience gains (losses)	6,066	2,750	2,646	2,112	2,028	1,493
Adjustment for different year ends	421	436	449	472	497	523
Other Unamortized Amounts (initial unfunded liability, difference in contributions, etc.)	642	507	383	256	135	20
Pension liability (Asset) at March 31 Reported before any valuation	282	(336)	(791)	(1,233)	(1,691)	(2,126)
Valuation Allowance	-	-	-	-	-	-
Pension Liability (Asset) after valuation Allowance	282	(336)	(791)	(1,233)	(1,691)	(2,126)
50% Pension Expenditure Reflecting Accounting Policy for Joint Plans						
Current period benefit cost	650	770	848	868	878	955
Amortization of experience gains	(568)	(235)	(247)	(222)	(233)	(234)
Pension interest expenditure	(353)	(374)	(250)	(272)	(261)	(281)
Cost of plan amendment	-	2,260	-	-	-	-
Less: recognition of unamortized experience gains	-	(2,260)	-	-	-	-
Amortization of Other amounts	(134)	(131)	(130)	(132)	(134)	(135)
Pension expense before valuation	(405)	29	221	241	250	305
Expense increase (reduction) in valuation Allowance	-	-	-	-	-	-
Pension Expense after valuation Allowance	(405)	29	221	241	250	305

Ontario Teachers' Pension Plan (excluding Retirement Compensation Plan)					
\$ Millions					
Fiscal Year	2006-07	2007-08	2008-09	2009-10	2010-11
50% Pension Liability (Asset) Reflecting Accounting Policy for Joint Plans					
Accrued benefit obligation, closing balance	41,560	44,178	46,011	48,304	49,559
Less: pension fund assets (market related values), closing balance	(47,425)	(52,459)	(53,479)	(54,556)	(57,123)
Unamortized experience gains (losses)	2,888	4,560	2,617	277	772
Adjustment for different year ends	529	650	687	764	774
Other Unamortized Amounts (initial unfunded liability, difference in contributions, etc.)	(114)	54	136	206	220
Pension liability (Asset) at March 31 Reported before any valuation	(2,562)	(3,016)	(4,027)	(5,005)	(5,799)
Valuation Allowance	-	-	-	-	-
Pension Liability (Asset) after valuation Allowance	(2,562)	(3,016)	(4,027)	(5,005)	(5,799)
50% Pension Expenditure Reflecting Accounting Policy for Joint Plans					
Current period benefit cost	998	1,051	1,118	1,175	1,217
Amortization of experience gains	(235)	(355)	(557)	(458)	(294)
Pension interest expenditure	(258)	(381)	(536)	(481)	(397)
Cost of plan amendment	-	-	-	-	-
Less: recognition of unamortized experience gains	-	-	-	-	-
Amortization of Other amounts	(146)	38	34	30	(4)
Pension expense before valuation	359	354	60	266	523
Expense increase (reduction) in valuation Allowance	-	-	-	-	-
Pension Expense after valuation Allowance	359	354	60	266	523

Ontario Teachers' Pension Plan (excluding Retirement Compensation Plan)					
\$ Millions					
Fiscal Year	2011-12	2012-13	2013-14	2014-15	2015-16
50% Pension Liability (Asset) Reflecting Accounting Policy for Joint Plans					
Accrued benefit obligation, closing balance	51,847	52,977	54,762	56,901	58,184
Less: pension fund assets (market related values), closing balance	(57,843)	(59,932)	(65,434)	(71,538)	(78,499)
Unamortized experience gains (losses)	(1,648)	(1,237)	1,851	4,816	9,001
Adjustment for different year ends	799	826	853	882	895
Other Unamortized Amounts (initial unfunded liability, difference in contributions, etc.)	222	242	257	273	272
Pension liability (Asset) at March 31 Reported before any valuation	(6,623)	(7,124)	(7,711)	(8,667)	(10,147)
Valuation Allowance	-	-	-	-	10,147
Pension Liability (Asset) after valuation Allowance	(6,623)	(7,124)	(7,711)	(8,667)	-
50% Pension Expenditure Reflecting Accounting Policy for Joint Plans					
Current period benefit cost	1,283	1,396	1,327	1,462	1,451
Amortization of experience gains	(245)	(91)	35	(156)	(362)
Pension interest expenditure	(495)	(387)	(457)	(707)	(939)
Cost of plan amendment	-	-	-	-	-
Less: recognition of unamortized experience gains	-	-	-	-	-
Amortization of Other amounts	(24)	(26)	(30)	(31)	(33)
Pension expense before valuation	519	892	875	569	118
Expense increase (reduction) in valuation Allowance					1,480
Pension Expense after valuation Allowance	519	892	875	569	1,598

Appendix B – Guidance in the various constating documents for OTPP relating to use of the surplus and the sharing of responsibilities

Pension Benefits Act (PBA) and the regulations (PBR)
While they do address surplus withdrawals, the PBA and PBR do not otherwise mandate any particular use of ongoing surplus that may arise in a pension plan, e.g. for benefit improvements or contribution holidays. One must therefore look to the Teachers' Pension Act and to the Partners' Agreement and Funding Management Policy in order to determine how ongoing surplus is dealt with under the OTPP.
Teachers' Pension Act (TPA)
Paragraph 10(1)3 of the TPA provides that the Minister of Education and the executive of the OTF may enter into an agreement (i.e., the Partners' Agreement) that provides for certain matters, including: "3. The sharing of entitlement to gains or surplus under the plan and of liability for deficiencies in the pension fund by the Minister, the employers who contribute under the plan and the active plan members". This is a fundamental legislative pronouncement that the Province and the members of the plan are meant to "share" both upside (surplus) and downside (deficit) under the plan. Although it is not an express statement of 50/50 sharing, it would presumably inform the expectations of the sponsors regarding how any surpluses are to be utilized. Pursuant to Section 10 of the TPA, the Minister of Education and the OTF (collectively the sponsors) have entered into an agreement for the management of the Plan (Partners' Agreement), to which is appended a Funding Management Policy (FMP) that is deemed to form part of the Partners' Agreement. The FMP provides a framework for the funding of the Plan and how deficits and surpluses will be addressed. The Partners (sponsors) can deviate from the FMP by agreement.
Partners' Agreement
The Partners' Agreement is between the Province of Ontario and the OTF and sets out the formal relationship between the partners (sponsors) in sponsoring the OTPP. Paragraph 8 of the Partnership Agreement states that the partners will be responsible for designing the Plan structure, setting the benefits of the Plan, developing new policy, deciding what the contribution rate will be, what the funding levels, margins and contingency reserves will be, how to make changes to the Plan and other Plan documents, deciding whether or not to file a valuation more frequently than required by the PBA, appointing the OTPP Board, and defining the role of the Board. Section 10 requires that the partners meet and negotiate changes to the plan every three years. Section 19 of the Partners Agreement sets out the responsibilities of the OTPP Board, and does not confer any authority on the OTPP Board to change benefits or contribution rates that are provided under the OTPP. This means that the OTPP Board has no authority to use ongoing surpluses either to improve benefits or reduce contributions. Only the sponsors to the OTPP have the authority to utilize ongoing surpluses. Section 19 also requires the Board to prepare a valuation at least every three years to comply with the PBA. Paragraph 57 requires a valuation prepared for filing with the Superintendent of Financial Services to be

actuarially balanced so that the present value of benefits and costs to be paid out of the fund (plus any contingency reserve) be equal to the present value of sponsor contributions. An actuarial valuation for funding purposes of the pension fund shall be prepared by the Board's actuary as at the 1st day of January and filed annually with the Superintendent of Financial Services, unless the partners jointly agree to instruct the Board not to file the valuation. The partners shall establish a committee to deal with accounting matters relating to joint pension plan sponsorship and agree to contact the Public Sector Accounting Board to raise issues of concern to the partners.

Paragraphs 58 to 60 indicate the actions to be taken based on the preliminary results of a valuation prepared for filing with the Financial Services Commission of Ontario. If the valuation indicates a need to increase the contribution rate, the partners need to meet as soon as possible to discuss how to adjust for that need on an equally shared basis. If the valuation indicates the contribution rate can be decreased, the actuarial gain can be applied to reduce the payments required to liquidate any unamortized balance of a solvency deficiency.

The process governing the use of ongoing surpluses by the sponsors is set out in the Partners' Agreement. It anticipates that the OTPP Board will prepare an actuarial valuation of the OTPP every three years (section 73).

Paragraph 74 requires negotiation in good faith regarding changes to the Plan that flow from a valuation that is be filed with the regulators.

Paragraph 75 of the Partners' Agreement requires the sponsors to advise the Board of OTPP of what changes affecting benefits and contribution rates they are proposing so that the Board can provide cost estimates and comments on the administrative impact of the changes to both partners as soon as possible.

Section 77 of the Partners' Agreement anticipates that the sponsors may appoint a mediator to assist them and sections 84 and 86 of the Partners' Agreement provide for the appointment of a Board of Arbitration to make a final and binding order with respect to the utilization of an ongoing surplus disclosed by the actuarial valuation. A Board of Arbitration is empowered to change contribution rates and/or benefits under the Plan, or to keep an amount of surplus in reserve, but is subject to certain limits that are set out in section 92.

If the sponsors cannot agree on the changes required to the Plan, a mediator is appointed to assist the sponsors in coming up with an agreement. The mediator is responsible for submitting a report to the sponsors on his or her views on the positions of the partners and provide a recommendation to the sponsors. If the sponsors do not accept the mediator's report, the arbitration process will begin and an arbitration board will be appointed. The board will consist of 3 people, with each partner selecting one representative and two appointees will select the final member who is an umpire. Paragraph 94 of the Partners' Agreement indicates that the report created by the arbitration board will be implemented.

Paragraph 92 sets some parameters for the arbitration, including part (c), which sets out that the parameters that the award of the arbitration will provide that the contributions from the Minister and employers be equal to those of the members.

The mediation/arbitration process would not be triggered unless there is an actuarial valuation to be filed with the regulators that requires the sponsors to agree on how any surplus or deficit is to be addressed. If a valuation is prepared in a year when no filing is required (filings generally only being required every three years), and the sponsors do not agree to file the valuation, then the sponsors do not necessarily have to address funding and benefit issues and therefore no negotiations may occur.

In addition to the clauses identified above, the Partners' Agreement has an appendix called the Funding Management Policy which sets out the sponsors' responsibilities in making funding decisions and surplus allocation regarding the Plan.

Funding Management Policy (FMP)

The FMP is an appendix to the Partners' Agreement that speaks to how the Plan should be funded and how surpluses should be utilized by both parties. The protocol for the use of a surplus under the OTPP is detailed in the FMP adopted by the Ontario Government and OTF as sponsors of the OTPP. The FMP sets out a complex series of considerations surrounding funding management and the use of any excess of assets over liabilities. The FMP sets out a number of "funding zones", depending on the level of funding in the Plan. The following three are most relevant to addressing surpluses:

- i) Restoration zone (Article 3 of the FMP) allows for a surplus to be utilized to "restore" foregone indexation and then to either increase benefits to the "run-rate benefit" level (i.e., the long-term target level) or to lower contributions (or a combination of these two options) (Section 3.06(e)).
- ii) Temporary improvement zone (Article 4 of the FMP) is the zone where contributions can be temporarily reduced, a surplus distribution can be made on a temporary basis and/or benefits can be temporarily improved (as long as it does not create a long term cost) (Section 4.05).
- iii) Permanent improvement zone is where the Plan is essentially fully funded and has the funding security desired to support permanent changes. Article V (Permanent Improvements) of the FMP provides for permanent actions that can be taken when Plan assets exceed current liabilities by more than 10% of current liabilities. In this regard Section 5.05 provides for actions that can be taken in respect of the amount that assets exceed current liabilities. Such actions can include changes to current benefits, current contributions, or both.

The ability to reduce contributions or increase benefits through the temporary or permanent improvement zone are subject to ensuring that the requirements of 3.06 in the restoration zone are met. Article VIII of the FMP sets out that the parties must agree to any changes arising out of FMP decisions. For filing valuations, if the sponsors are unable to agree the mediation process set out in the Partners' Agreement, the arbitration process outlined in the Partners' Agreement will be followed. For valuations that are not filed, either party can decide not to negotiate.

The Plan is currently in the Restoration Zone. Contributions to the OTPP currently include a 1.1% special contribution on all earnings and that the Restoration Contribution Reduction under Section 3.06(e) would if agreed to by both sponsors, permit this special contribution to be eliminated. This special contribution is scheduled to end in 2026.

If the Plan gets to either the temporary improvement zone or the permanent improvement zone, section 4.06 and subsection 5.05(b) of the FMP provides that a benefit improvement can only occur if the sponsors (the Ontario government and the OTF) have entered into a written agreement governing the manner in which the contribution by the government and other employers may be adjusted to offset any surplus distribution or benefit improvement (temporary or permanent) to be granted.

Section 8.01 of the FMP provides the following:

Section 8.01 Unless the sponsors mutually agree to the contrary, they shall follow the procedures described in paragraphs 74 to 100 when determining the plan changes arising from Section 3.07.

The Partners' Agreement and the FMP contain no general arbitration clause governing all disputes relating to the agreement, although Section 14 of the Partners' Agreement provides for the possibility of voluntary arbitration. There has been no instance where the arbitration provisions have been invoked by the parties since the FMP was established. OTPP's internal legal counsel, has indicated that the arbitration provisions in the FMP would be expected to apply to disputes relating to the utilization of surplus under each of these provisions.

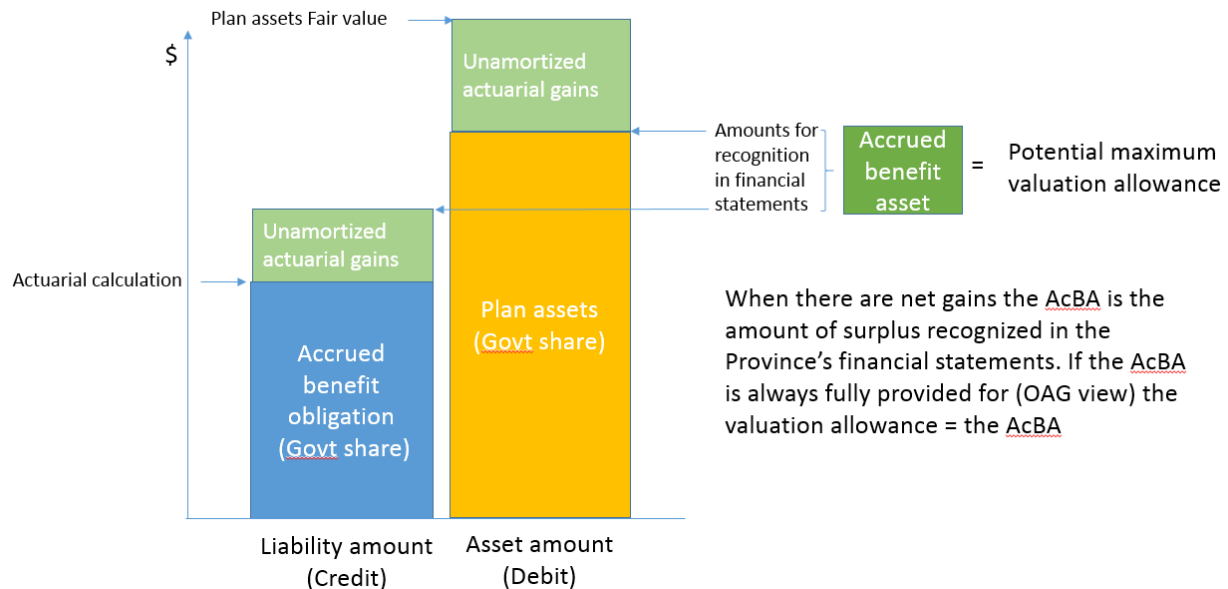
Where a matter has been submitted to arbitration, case law has established that the agreement between the parties that is being arbitrated is the fundamental source of subject matters that come within the arbitration board's jurisdiction. The parties are free to design their own procedures, including setting the scope of the arbitration board's jurisdiction and specifying the potential outcomes of the arbitration (subject to certain default appeal rights and mandatory grounds to set aside an award under the Arbitration Act). The arbitration board is empowered to make binding decisions because of the arbitration agreement, including any limitations on that authority. Canadian courts have traditionally granted deference to arbitration awards.

Arbitration provisions are generally procedural in nature and therefore do not provide a strong foundation upon which to base parties' reasonable expectations about their substantive rights under an agreement. To resolve a dispute, the arbitration board would engage in an exercise in interpretation of the operative substantive provisions of the relevant governing documents, including any applicable statutory provisions. However, as noted above, under section 92 of the Partners' Agreement, the arbitral award must meet certain mandatory conditions. Among other things, the arbitral award is required to provide that the contributions of the Minister and those employers who are required to contribute are equal to the contributions of members (section 92(c) of the Partners' Agreement). The arbitration board does not have discretion to ignore this mandatory provision, although the provision

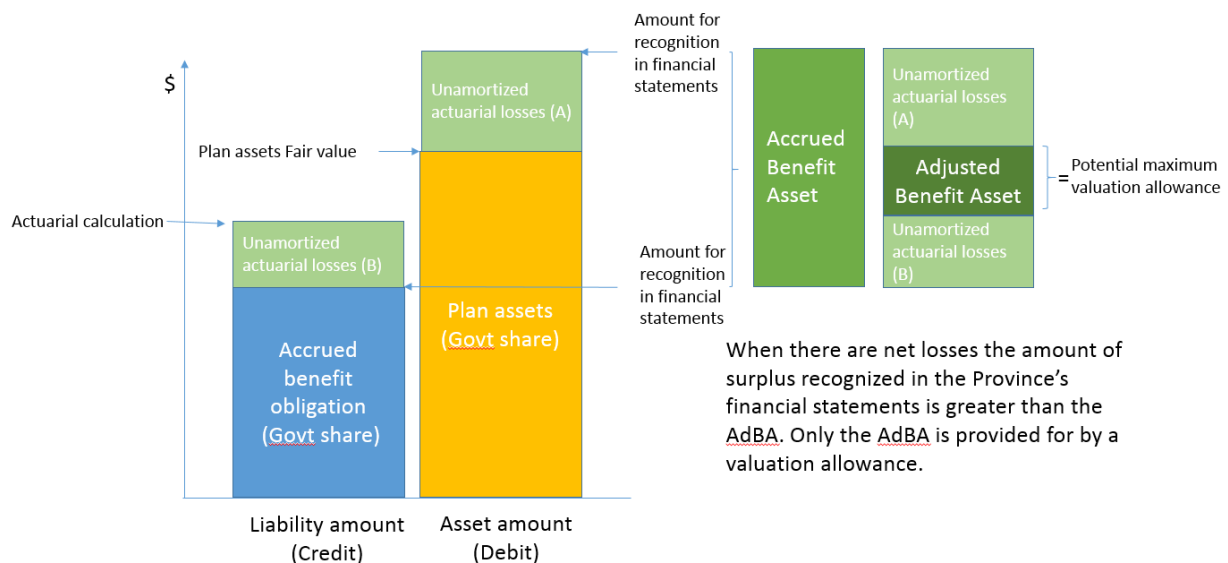
would need to be given effect within the context of the relevant documents and applicable statutes, interpreted as a whole, and other relevant factors, such as past conduct of the parties. As part of the arbitration board's interpretation exercise of the relevant governing documents, in the event of ambiguity in the written terms of the documents, evidence of the parties' post-agreement practices can be admitted as an aid to interpreting the agreement. Past practices may illustrate the parties' intentions at the time of the agreement. These considerations of past practices would be in conjunction with any explicit mandatory considerations set out in the governing document, e.g. prevailing economic conditions and the overall state of the provincial economy under section 91 of the Partners' Agreement. The past practices which the arbitrator may consider would include those described above: the long history of 50/50 member/employer contributions to the plan, and the equal sharing of surpluses prior to 2003 (from 2003 onwards the plan was mostly in deficit, with surpluses used to restore foregone escalated adjustments for members).

Appendix C – Overview of a Valuation Allowance on Pension Assets

An Accrued Benefit Asset (AcBA) occurs when there is a plan surplus, including the effect of net unamortized experience gains or losses. OTPP currently has net unamortized experience gains. Actuarial (experience) gains can occur in respect to both plan assets as well as the pension obligation



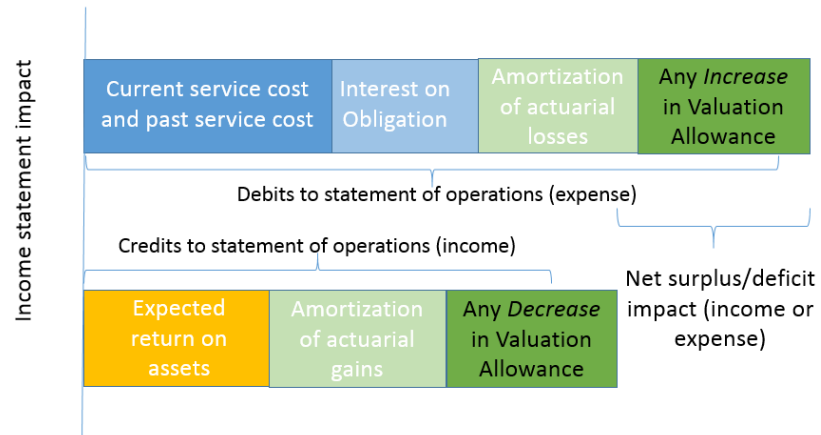
An Adjusted Benefit Asset (AdBA) is required when there are unamortized losses



Components of Expense

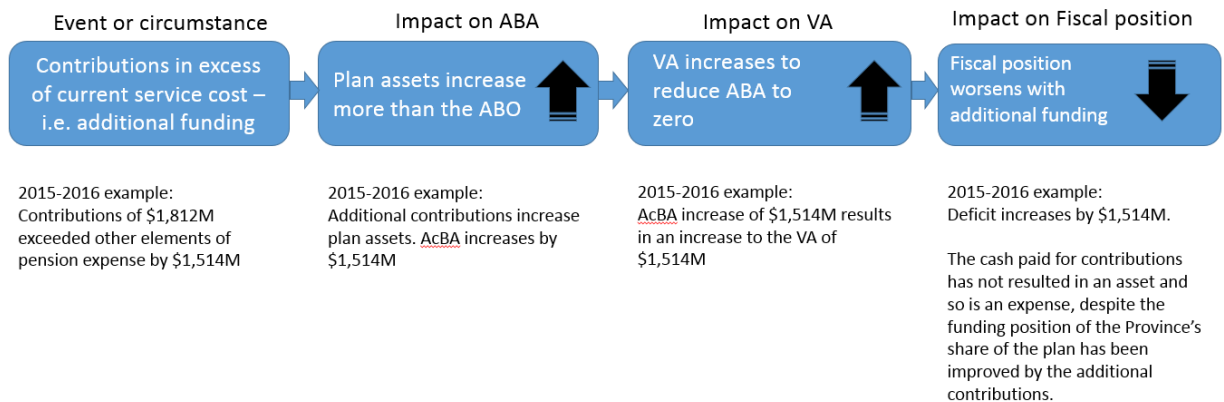
The *change in* the valuation allowance flows directly through the statement of operations.

The change in valuation allowance = the change in the AcBA (or AdBA if applicable)



Changes in the Accrued Benefit Asset

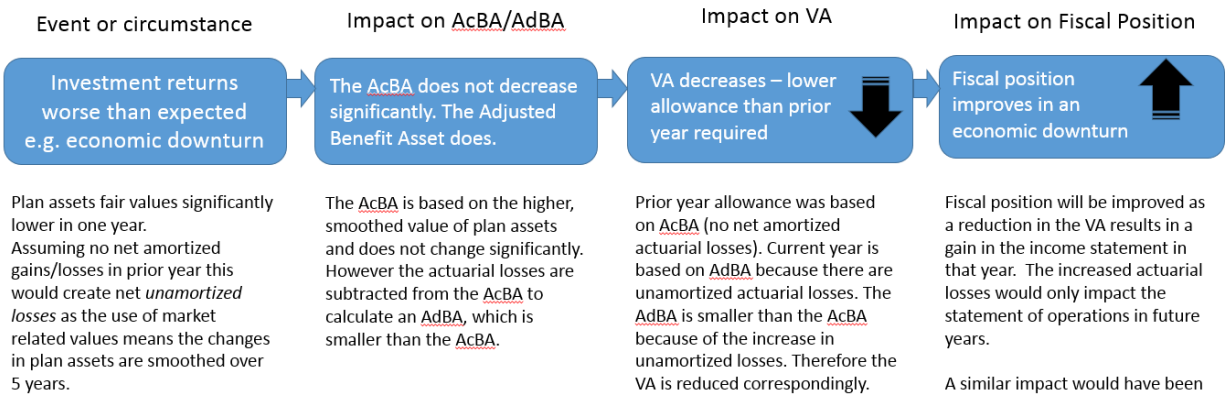
Changes in the AcBA may occur for a number of reasons. Where changes result in an increase in the AcBA without expectation of future benefit, such changes would result in a change in the valuation allowance (VA) to effectively reduce the AcBA to zero. In this situation, the following impacts on the statement of operations would be noted ¹



¹ Impact of change, all other elements being held constant.

Changes in the Accrued Benefit Asset

Continuing from the previous slide, where valuation allowances are taken to effectively reduce the value of the AcBA to zero, in the year of a reduction in the value of the AcBA or AdBA, where an economic downturn occurs for example, the following impacts on the statement of operations would be noted ¹



¹ Impact of change, all other elements being held constant.

Appendix D – Summary of different valuation methodologies for pension valuations

The following table summarizes the main similarities and differences in assumptions and methodologies used for i) OTPP's funding valuation, ii) the financial statements of OTPP, prepared under CPA Canada Handbook – Accounting Part IV and iii) actuarial valuation of the Province's share of OTPP prepared for the province under Public Sector Accounting Standards.

Assumption/ methodology	Funding valuation (Going concern basis)	Accounting Part IV of the CPA Canada Handbook – (OTPP Financial statements)	Accounting PSAS – (Province Financial statements)
Purpose	To inform plan sponsors of the amount that needs to be contributed each year to adequately fund benefits and to provide information on the financial position of the plan as of the valuation date on a funding basis in accordance with the Pension Benefits Act, the Income Tax Act as well as generally accepted actuarial practice.	Financial statements [of pension plans] provide information about the pension plan including net assets available for benefits, pension obligations and the financial position of the plan as of the valuation date in accordance with Part IV of the CPA Canada Handbook (Part I of the CPA Canada Handbook (i.e. IFRS) is referred to where Part IV is silent).	Measure and report the obligation for employee retirement benefits, attribute the costs of those benefits to the periods in which the related services are rendered and to provide information on the financial position of the plan in accordance with PSAS.
Actuarial cost method	Modified aggregate method (level cost method)	Projected benefit method prorated on services	
Asset valuation	The actuary should select an asset valuation method that is consistent with the circumstances of the work. The value of assets may be, subject to specific requirements for different types of valuation, any of: • Their market value; • Their market value adjusted to moderate volatility in	Fair value for all plan assets. Fair value is determined in accordance with IFRS 13, <i>Fair value measurement</i>.	PSAS allows choice regarding the valuing of plan assets at market-related value. Market -related values, are defined as either market values or amounts adjusted to market values over a period not to exceed five years, applied

	investment returns; • The present value of their cash flows after the calculation date; and • Their value assuming a constant rate of return to maturity in the case of illiquid assets with fixed redemption values For funding valuation, the plan uses the actuarial value of assets which are the market value of assets adjusted for investment gains / losses spread over a period of 3 years.		consistently. The Province has chosen to value OTPP's plan assets by adjusting to market value over a period of 5 years in accordance with PSAS.
Discount rate	Best estimate less Margins for adverse deviations and expenses where appropriate. For funded plans, the best estimate may be either the expected investment return on the assets of the pension plan at the calculation date and the expected investment policy after that date, OR reflect the yields on fixed income investments, considering the expected future benefit payments of the pension plan and the circumstances of the work For the purpose of the funding valuation, the plan uses a	Part IV notes that guidance on determining the defined benefit obligation can be found in EMPLOYEE FUTURE BENEFITS, Section 3462, in Part II of the Handbook, and in IAS 19 Employee Benefits in Part I of the Handbook. OTPP follows Part I (IAS 19) which requires the use of government bonds when no deep market for high quality corporate bonds exists. Per their financial statements OTPP uses a discount rate based on bonds issued by the Province of Ontario. As	Not specified. However two methods are specifically acknowledged in PSAS – a) discount rates determined by reference to plan asset earnings and b) discount rates determined by reference to the government's cost of borrowing.¹⁵ The Province of Ontario uses a discount rate for OTPP determined by reference to the expected long-term return on plan assets. The discount rate used

¹⁵ The Public Sector Accounting Board has formed an Employment Benefits Task Force to examine a number of aspects of the existing Public Sector Accounting Standard dealing with retirement benefits, including consideration of the discount rate. To date there have been no due process documents and no indication as to the direction of the PSAB in respect to discount rates.

	discount rate which is based on market related rates averaged over a period of 36 months. The discount rate used in the most recent funding valuation for OTPP as at January 1, 2015 was 4.85%.	illustrated in Appendix E, this is inconsistent with other Provincial pension plans in Canada which use as a discount rate, the long-term rate of return on plan assets. The discount rate used by OTPP in their December 31, 2015 financial statements was 3.25%.	by the Province to account for OTPP in their March 31, 2016 financial statements was 6.25%. This is the long-term rate of return on plan assets which is in accordance with PSAS.
Independent verification		OTPP's financial statements are audited by Deloitte LLP.	The Province's financial statements are audited by the OAG.
Underlying population data	All valuations use consistent underlying data of the population covered by the plan (membership data as at August 30 of the prior year projected to the valuation date is used].		
Inflation rate	All valuations treat inflation in a consistent manner (on a best estimate basis). Best estimate assumptions are derived based on the best estimate of future events. Best estimates of inflation by the Province may be different from those of the OTPP Board, even though they are both best estimate assumptions. In developing its best estimate assumptions, the Province references a broad range of available data, including the best estimate from the OTPP Board.		
Demographic assumptions	Valuations use consistent demographic assumptions (best estimate by the OTPP Board).		
Other economic assumptions	The OTPP Board develops its own salary escalation assumption to be used for both the funding and the Board's financial statement valuation. Economic assumptions other than the discount rate, inflation rate and salary assumptions are determined by the Board. These are the same for funding valuation and the Board's financial statement valuation.	The Province prescribes the future salary escalation rates. The Province develops this assumption by referencing the outcome of the most recent collective agreements as well as compensation policies issued from time to time by the government and the historic increases	

		granted.
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Appendix E - Comparison of the discount rates used by Provincial pension plans across Canada relative to the discount rate used by OTPP

Review of Discount Rates Across Jurisdictions

- In the inter-jurisdictional review of all funded provincial sponsored or joint sponsored plans which also have stand-alone plan financial statements:
 - the Ontario Teachers' Pension Plan (OTPP) is the only plan where the discount rate used in the plan's financial statements is more than 50 basis points below the discount rate used by the province.
 - OTPP stand-alone financial statements use the market rate of Provincial bonds.
- All other plans' financial statements (i.e. 23 plans across jurisdictions) use the long-term rate of return as the discount. The discount rate used by the plans' are lower than 50 basis points or less than the provinces' discount rate or at times higher than the provincial rate.



Plan's discount rate is lower than the provincial rate by more than 50 bps

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
Ontario					
Ontario Teachers' Pension Plan (OTPP)	6.25%	LT return on plan assets	ON 1	3.25%	Market rate of Provincial Bonds



Plan's discount rate is lower by 50 bps or less (or higher than the provincial rate)

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
Ontario					
Ontario Public Service Employees Union Pension Plan (OPSEUPP)	6.25%	LT return on plan assets	ON 2	5.75%	LT return on plan assets
Healthcare of Ontario Pension Plan (HOOPP)	5.75%	LT return on plan assets	ON 3	5.65%	LT return on plan assets plus margin
Colleges of Applied Arts and Technology Pension Plan (CAATPP)	6.00%	LT return on plan assets	ON 4	5.70%	LT return on plan assets
Ontario Public Service Pension Plan (PSPP)	6.00%	LT return on plan assets	ON 5	5.95%	LT return on plan assets
Alberta					
Teachers' Post-1992 Pension Plan	6.80%	LT return on plan assets	AB 1	7.00%	LT return on plan assets
Universities Academic Pension Plan	6.00%	LT return on plan assets	AB 2	5.95%	LT return on plan assets

3

Plan's discount rate is higher than the provincial rate (or lower by 50 bps or less) (cont'd)

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
Alberta (cont'd)					
Local Authorities Pension Plan	5.60%	LT return on plan assets	AB 3	5.60%	LT return on plan assets
Public Service Pension Plan	6.00%	LT return on plan assets	AB 4	6.00%	LT return on plan assets
Management Employees Pension Plan	6.10%	LT return on plan assets	AB 5	6.10%	LT return on plan assets
Provincial Judges and Master in Chambers Pension Plan	5.40%	LT return on plan assets	AB 6	5.80%	LT return on plan assets
Supplementary Retirement Plan for Public Service Managers	6.00%	LT return on plan assets	AB 7	6.00%	LT return on plan assets
Special Forces Pension Plan	5.90%	LT return on plan assets	AB 8	5.90%	LT return on plan assets

4

Plan's discount rate is higher than the provincial rate (or lower by 50 bps or less) (cont'd)

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
Saskatchewan					
Saskatchewan Healthcare Employees' Pension Plan (SHEPP)	6.50%	LT return on plan assets	SK 1	6.50%	LT return on plan assets
British Columbia					
Public Service Pension Plan	6.50%	LT return on plan assets	BC 1	6.50%	LT return on plan assets
Municipal Pension Plan	6.50%	LT return on plan assets	BC 2	6.50%	LT return on plan assets
Teachers' Pension Plan	6.50%	LT return on plan assets	BC 3	6.50%	LT return on plan assets
College Pension Plan	6.50%	LT return on plan assets	BC 4	6.50%	LT return on plan assets



5

Plan's discount rate is higher than the provincial rate (or lower by 50 bps or less) (cont'd)

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
Quebec					
Commission administrative des régimes de retraite et d'assurances	6.50%	LT return on plan assets less inflation	QC 1	6.40%	LT return on plan assets less inflation
Newfoundland					
Memorial University of Newfoundland Pension Plan	6.30%	LT return on plan assets	NF 1	6.80%	LT return on plan assets
Nova Scotia					
Nova Scotia Public Service Superannuation Plan (PSSP)	6.70%	LT return on plan assets	NS 1	6.15%	LT return on plan assets
Nova Scotia Teachers' Pension Plan (TPP)	6.75%	LT return on plan assets	NS 2	6.25%	LT return on plan assets



6

Plan's discount rate is higher than the provincial rate (or lower by 50 bps or less) (cont'd)

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
Manitoba					
Civil Service Superannuation Plan	6.00%	LT return on plan assets	MB 1	6.00%	LT return on plan assets plus inflation
Teachers Pension Plan	6.25%	LT return on plan assets	MB 2	6.00%	LT return on plan assets
New Brunswick					
Provincial Court Act and Provincial Court Judges Pension Act (JUDGE)	6.15%	LT return on plan assets		No individual financial statements	
Pension Plan for Management Employees of New Brunswick School Districts (Sch-Mgt)	6.05%	LT return on plan assets		No individual financial statements	
Pension Plan for General Labour, Trades and Services Employees of New Brunswick School Districts (GLTS)	6.05%	LT return on plan assets		No individual financial statements	
Pension Plan for Full-Time CUPE 2745 Employees to New Brunswick School Districts (CUPE 2745)	6.05%	LT return on plan assets		No individual financial statements	

7

Plan's discount rate is higher than the provincial rate (or lower by 50 bps or less) (cont'd)

	Provincial Nominal Discount Rate	Basis of Provincial Nominal Discount Rate	PLAN REF#	Plan's Nominal Discount Rate	Basis of Plan's Nominal Discount Rate
New Brunswick					
NH-Hgt, NH-G&S, NH-N&P (i.e. NH Nursing Home)	6.20%	LT return on plan assets		No individual financial statements	
CUPE Employees of New Brunswick Hospital (shared risk)	5.45%	LT return on plan assets		No individual financial statements	
Certain Bargaining Employees of New Brunswick (shared risk)	5.70%	LT return on plan assets		No individual financial statements	
Public Service Shared Risk Pension Plan	6.00%	LT return on plan assets		No individual financial statements	
New Brunswick Teachers' Pension Plan (shared risk)	6.15%	LT return on plan assets		No individual financial statements	

8

Appendix F – Comparison of definitions of a Joint Defined Benefit Plan and Government Partnership

The definition of a government partnership is provided in GOVERNMENT PARTNERSHIPS, Section PS 3060 paragraph .06. Section PS 3060 was introduced into the Public Sector Accounting (PSA) Handbook in October 1999.

The definition of a joint defined benefit plan is provided in the glossary to RETIREMENT BENEFITS, Section PS 3250. Section PS 3250 was introduced into the PSA Handbook subsequent to Section PS 3060 in September 2001.

Both standards use similar wording in the definitions of a government partnership and of a joint defined benefit plan illustrating the development of Section PS 3250 considered the content in Section PS 3060.

Below is a comparison of the two definitions as currently in the PSA Handbook (consistent wording between the two definitions are underlined):

	Definition of a government partnership (GP)	Definition of a joint defined benefit plan (JDBP)	Comparison
Introductory paragraph	A government partnership is not a government organization but <u>is a contractual arrangement² between the government and a party or parties outside of the government reporting entity³ that has all of the following characteristics:</u>	A joint defined benefit plan <u>is a contractual arrangement between the government and another sponsor or sponsors representing plan participants that has all of the following characteristics:</u>	Consistent in concept with the wording in the GP definition being more general.
Criteria 1	(a) the partners <u>co-operate toward achieving significant clearly defined common goals;</u>	(a) the sponsors <u>co-operate toward achieving the significant clearly defined common goal</u> of providing retirement benefits in exchange for services rendered by the employees;	
Criteria 2	(b) the partners make a financial investment in the government partnership;	(b) funding contributions are shared mutually between the government and the plan members, represented by the non-government sponsor;	Consistent in concept with the definition of a GP focusing on investments in the partnership and the definition of a JDBP

			focusing on contributions into the plan.
Criteria 3	(c) the partners <u>share control of decisions related to the financial and operating policies of the government partnership on an ongoing basis</u> ; and	(c) the sponsors <u>share control of decisions related to the administration of the retirement benefit plan and to the level of benefits and contributions on an ongoing basis</u> ; and	Consistent in concept with the wording in the GP definition being more general.
Criteria 4	(d) the partners <u>share, on an equitable basis, the significant risks</u> and benefits associated with the operations of the government partnership.	(d) <u>the significant risks</u> associated with the retirement benefit plan are <u>shared on an equitable basis</u> between the government and the plan members, represented by the non-government sponsor.	
Concluding paragraph	<u>The contractual arrangement establishes that the parties have shared control over the government partnership, regardless of the difference in their ownership interest. Nevertheless, overall, there must be an equitable relationship between the financial investment of the government in the government partnership, the extent of control it is able to exercise over the activities of the government partnership, and the risks and benefits that accrue to the government from the government partnership.</u> Government partnerships	<u>The contractual arrangement establishes that the sponsors have shared control over the retirement benefit plan, and ensures that neither party is in a position to control the plan unilaterally. Nevertheless, overall, there must be an equitable relationship between the funding by the government of the retirement benefit plan, the extent of control it is able to exercise over the plan and the risks and benefits that accrue to the government from the plan.</u>	

	may be structured as operations under shared control, assets under shared control or organizations under shared control. [Former paragraph PS 3060.06 retained in Archived Pronouncements.]		
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In addition to consistent wording, the concepts in the definitions of a government partnership and a JDBP are similar.

While similar in concept and wording, the definition of a JDBP is more specific than the general definition of a government partnership. GOVERNMENT PARTNERSHIPS, Section PS 3060 is a general standard for all types of government partnerships. Alternatively RETIREMENT BENEFITS, Section PS 3250 addresses specific types of employee retirement benefits including JDBPs.

There is one principle in the JDBP paragraphs in Section PS 3250. Paragraph .081 indicates *“When a government participates in a joint defined benefit plan, the government's risk is limited to its portion of the plan. The government should account for its portion of the plan in accordance with the standards for defined benefit plans. [SEPT. 2001]”*. This principle is consistent with the proportionate consolidation method included in Section PS 3060.

Appendix G – History of Surplus Utilization for OTTP

The history of OTTP surplus utilization from the time the OTTP became a jointly sponsored pension plan to the date that the FMP was established (in March 2003) demonstrates a past practice of the sponsors equally sharing (in the aggregate) the benefits of surplus utilization:

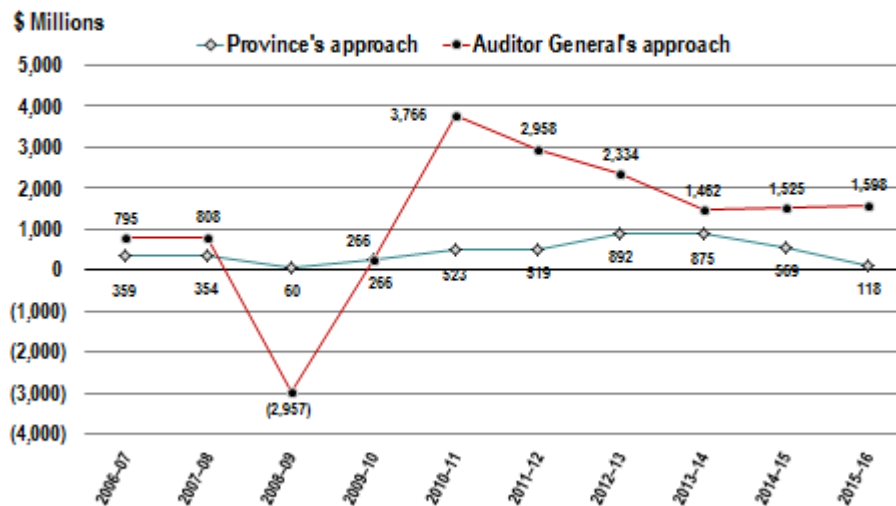
Valuation Date	Surplus/(Deficit)	OTF	Ontario Government	Surplus Remaining
1993	\$1.5 billion	\$325 million to offset social contract days	Eliminated special payments for \$1.2 billion saving	\$0
1996	\$0.7 billion	\$0.6 billion for benefit improvements and RCA contributions	N/A	\$0.1 billion
1998	\$6.8 billion	\$2.2 billion for benefit improvements	\$4.6 billion to reduce the value of remaining special payments	\$0
1999	\$3.5 billion	N/A	\$3.5 billion to reduce the value of remaining special payments	\$0
2001	\$6.8 billion	\$6.2 billion for benefit improvements	N/A	\$0.6 billion
2002	\$1.9 billion	Sponsors agreed not to make any changes to benefits or contributions		\$1.9 billion
Total		\$9.3 Billion	\$9.3 Billion	

Although surplus utilization prior to 2003 may not have been 50/50 each time, from 1993 to 2002 the aggregate value obtained by each of the sponsors was equal. In certain instances where the Province received a disproportionate share of the financial benefits from surplus utilization, a commitment was made to the OTF that they would receive future surplus available for utilization. In 1998, \$6.8 billion in surplus was utilized to cause a \$2.2 billion benefit improvement and to provide the Province with a \$4.6 billion reduction in the value of special payments owed by the Province. As part of this negotiation, the OTF and the Province agreed to allow future surplus to be utilized to eliminate the Province's remaining special payments (which resulted in \$3.5 billion surplus being utilized in 1999 to reduce the value of the Province's remaining special payments) and a commitment was made for the next \$6.2 billion in surplus to be available to OTF for benefit improvements (such surplus being utilized for benefit improvements in 2001).

Appendix H - Illustrative impact of 100% valuation allowance on OTPP on key indicators for prior 10 years

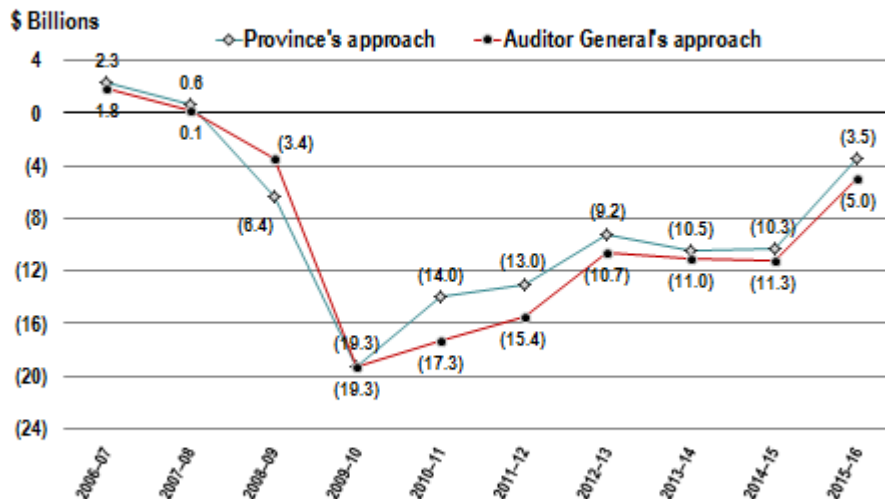
OTPP expense comparison — 10-year

Chart 1



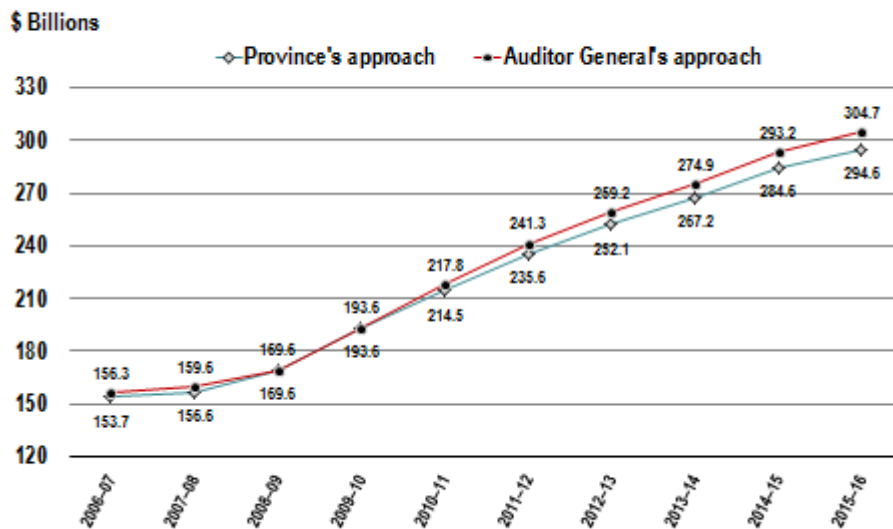
Surplus/(deficit) comparison — 10-year

Chart 2



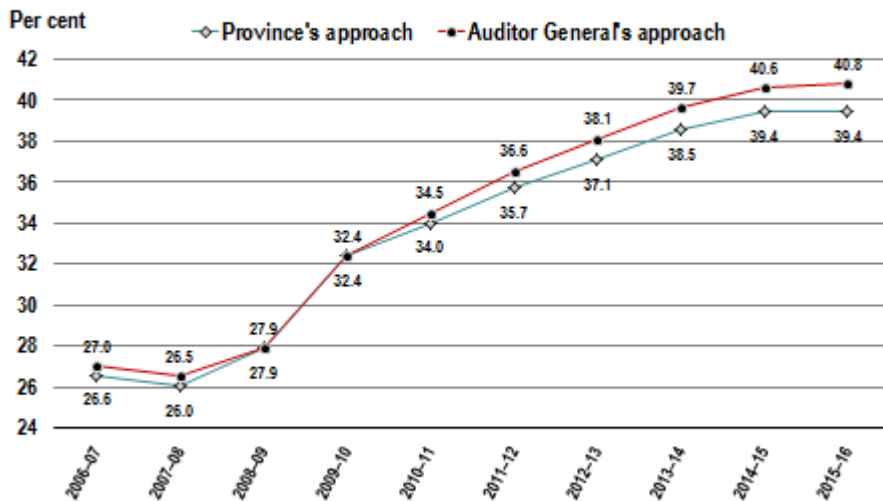
Net debt comparison — 10-year

Chart 3



Net debt-to-GDP comparison — 10-year

Chart 4



Appendix I – Analysis of the British Columbia pension plans in relation to OTTP (prepared by lawyers, Koskie Minsky)

BRITISH COLUMBIA PLANS

In British Columbia, the Municipal Pension Plan, the Colleges Pension Plan, the Teachers' Pension Plan and the Public Sector Pension Plan were all converted from employer sponsored pension plans to jointly sponsored plans in accordance with the Public Sector Pension Plans Act, S.B.C. 1999, c.44 (the PSPPA").

A. British Columbia Municipal Pension Plan (the "MPP")

The MPP is governed by:

- (a) Municipal Pension Plan Joint Trust Agreement (consolidated), updated to September 30, 2015 (the "MPP Trust Agreement"); and
- (b) Municipal Pension Plan Rules effective April 1, 2000 (current to November 19, 2015).

Under the MPP Trust Agreement, the following rules govern the Sponsors of the MPP and the Board of Trustees of that arrangement in regard to Plan surpluses:

The Board of Trustees may amend the MPP to utilize surpluses under section 11.5, provided that the conditions in 11.5(a) and (b) are met. These provisions permit the Board of Trustees to utilize Plan surpluses to improve Plan benefits for Plan members, provided that the surplus is sufficient to fund the benefit improvement "based on the open group of Plan Members and using a twenty-five year amortization schedule for the Plan actuarial excess to be used to fund the benefit improvement". Any benefit improvement made by the Board of Trustees cannot result in increased contribution rates nor can it create an unfunded liability. Any such improvement must also be consistent with the Trustees' fiduciary responsibilities. Within these parameters, however, the Board of Trustees of the MPP does have the authority to utilize Plan surpluses on an ongoing basis.

The MPP Partners may also amend the MPP using ongoing surpluses in accordance with section 11.3 of the MPP Trust Agreement. This section permits the Partners to direct the Board of Trustees to amend the Plan rules and requires the Board of Trustees to comply with that direction so long as three conditions are met: (a) the Partners first receive and consider the advice of the Board respecting the proposed amendment, (b) the proposed amendment is compliant with the Trustees' fiduciary responsibilities and (c) the proposed amendment will not result in the Plan failing to be funded in accordance with the PBSA going concern funding requirements. Significantly, the MPP constating documents contain no right of recourse to arbitration or other final and binding dispute resolution in the event that the MPP Partners cannot agree on surplus utilization. This contrasts with the OTTP Partners'

Agreement, which does provide for third party determinations of differences arising between Partners with respect to surplus uses.

Accordingly, under the MPP, both the Partners and the plan administrator may utilize Plan surpluses by amending the Plan terms in regard to either or both of contribution rates and benefits.

It should be noted that, during a Transitional Period, the use of actuarial gains in the MPP is prescribed by Appendix "B" to the MPP Joint Trust Agreement. During the Transitional Period, all gains must first be used to eliminate unfunded liabilities. Then, actuarial gains must be applied to both (a) reconfigure employer contribution rates and (b) make specified benefit improvements. Employer contribution rates are to be reconfigured by eliminating the 'doubling' feature of employer contribution rates applicable to employees in certain Plan membership categories once they reach either 45 or 50 years of age (depending on the employment category). The transitional provisions prescribe the new base rates for each of the 5 categories of members in the BC, but also stipulate that employer contribution rates for two of the five categories will be increased beyond those base rates to reflect the differential current service cost for those two groups. The surplus implications of the reconfiguration of employer contribution rates are not predictable, and depend, at least in part, on the relationship between the 'base rates' under the transitional provisions and the actual rates being paid by employers at the time of the reconfiguration. Once the employer contribution rates are reconfigured and the specified benefit improvements are made, then 50% of any additional actuarial excesses must be used to fund a contribution rate stabilization reserve, and the balance of the actuarial excess must be transferred to the Inflation Adjustment Account to an aggregate total of \$1 billion. The contribution rate stabilization reserve is intended to be shared on an equal (50/50) basis between Plan members and employers in order to maintain or reduce future contribution rates. Until such time as the objectives identified for the Transitional Period are fulfilled, there is no discretion left to either the Partners or the Board of Trustees to utilize ongoing MPP surpluses.

B. British Columbia Public Service Pension Plan ("PSPP")

The PSPP Joint Trust Agreement contains provisions regarding the authority of the Partners and the Board of Trustees to utilize ongoing surpluses that are equivalent to the provisions cited above with respect to the MPP. Accordingly, under the PSPP, both the Partners and the Board of Trustees have the authority, in the circumstances and subject to the conditions described in relation to the MPP, to utilize ongoing surpluses to reduce contributions or improve Plan Member benefits.

In this regard, section 10.3(c) of the PSPP Joint Trust Agreement expressly provides the Board of Trustees¹⁶ with the authority to apply ongoing surpluses (the term used in the PSPP Joint Trust Agreement is "surplus assets") in one or more of the following manners:

¹⁶ It is noteworthy that s. 14(c) of the PSPP Joint Trust Agreement stipulates that the Trustees are not acting in a fiduciary capacity when they make decisions that apply ongoing surpluses, and may take account of the financial and other interests of the party that appointed them.

1. transfer all or portions of surplus assets to the reserve established within the Pension Fund for stabilising contribution rates;
2. transfer all or portion of the surplus assets to the Inflation Adjustment Account;
3. apply all or a portion of the surplus assets to an equal reduction or elimination of Employer and Plan Member contributions to the Basic Account for a period of time;
4. apply all or a portion of the surplus assets to fund changes to the PSPP's benefit provisions provided that any change to benefits does not result in contribution rate increases, does not create or increase an unfunded liability, is consistent with the Trustees' fiduciary obligations and does not conflict the requirement (in s. 13.5) that, upon the termination and wind-up of the PSPP any remaining assets are to be equally shared between the employees and the employers.

At the same time, as is the case for the MPP, the Partners have the authority, pursuant to s.11.3 of the PSPP Joint Trust Agreement, to direct the Board of Trustees to amend the PSPP Plan rules and change either or both of the PSPP's contribution rates or benefits so long as the Partners have received and considered the advice of the Board respecting both the cost and administrative impact of any proposed amendments, the amendment is not inconsistent with the Trustees' fiduciary responsibilities or any funding policy adopted by the board and the proposed amendment will not result in the PSPP failing to be funded in accordance with British Columbia's Pension Benefits Standards Act. Significantly, the PSPP constating documents contain no right of recourse to arbitration or other final and binding dispute resolution in the event that the MPP Partners cannot agree on surplus utilization. This contrasts with the OTTP Partners' Agreement, which does provide for third party determinations of differences arising between Partners with respect to surplus uses.

Section 15.4 of the PSPP Joint Trust Agreement provides that certain benefit improvements must be made using Plan surpluses that are identified in actuarial valuations dated March 31, 2001 and March 31, 2002. Unlike with respect to the MPP, the PSPP does not appear to have an indefinite 'Transitional Process' that commits all ongoing surpluses until the Transitional objectives are accomplished. Rather, the PSPP Trustees and Partners have had discretionary authority with respect to ongoing PSPP surpluses

C. British Columbia Teachers Pension Plan ("TPP")

The TPP is governed by:

- (a) a Joint Trust Agreement made as of April 2, 2001 between Her Majesty the Queen in right of the Province of British Columbia as represented by the Minister of Finance and Corporate Relations (the "Government") and the British Columbia Teachers' Federation ("BCTF");

- (b) the TPP Rules.

The Joint Trust Agreement contains provisions permitting both the Partners and the TPP Board of Trustees to amend the Plan rules using ongoing Plan surpluses (section 11 of the Joint Trust Agreement). These provisions are the equivalent of the MPP Joint Trust Agreement provisions regarding the same matters, as described above. In particular, it is significant that the TPP constating documents contain no right of recourse to arbitration or other final and binding dispute resolution for either Partner in the event that they cannot agree on surplus utilization. This contrasts with the OTPP Partners' Agreement, which does provide for third party determinations of differences arising between Partners with respect to surplus uses.

As well, Appendix "B" to the TPP Joint Trust Agreement adopts special funding rules for a "Transitional Period" during which the Board of Trustees is directed to use surpluses to achieve specified contribution and benefit improvement outcomes. The transitional objectives for the TPP are not the same as for the MPP, although they entail both contribution rate changes and benefit improvements. In the case of the TPP, however, the transitional provisions build in a 4% reduction in the employer contribution rate from its July 1, 2010 level. As with the MPP, the Transitional Period is of indefinite duration, and only ends when the transitional objectives have been satisfied. During the transitional period, all ongoing surpluses are committed to the transitional objectives and no ongoing surpluses are available for discretionary reductions in contributions or surplus withdrawals.

D. British Columbia Colleges Pension Plan ("CPP")

The CPP is governed by:

- (c) the CPP Joint Trust Agreement made April 4, 2011; and
- (d) the CPP rules, effective June 22, 2012 (current to April 1, 2016).

The CPP Joint Trust Agreement allocates powers and authorities with respect to ongoing surpluses in the same way as the other BC Plans.

The Partners have the authority (s.14 (2) of the Joint trust Agreement) to direct the Board to amend the Plan rules, and the Plan Board is required to amend those rules, provided that the Partners "first receive and consider the advice of the Board respecting both the cost and the administrative impact of implementing the proposed amendment" and the proposed amendment is not inconsistent with applicable law or the Trustees' fiduciary responsibilities. Significantly, the CPP constating documents contain no right of recourse to arbitration or other final and binding dispute resolution in the event that the CPP Partners cannot agree on surplus utilization. This contrasts with the OTPP Partners' Agreement, which does provide for third party determinations of differences arising between Partners with respect

to surplus uses

Pursuant to subsection 14(4) of the CPP Joint Trust Agreement, the Board of Trustees is also permitted to amend the Plan rules and to utilize Plan surpluses so long as there is no resulting increased in contribution rates, there is no creation of, or increase in, an unfunded liability and the proposed amendment is consistent with the Trustees' fiduciary responsibilities. As with the other BC Plans, the Board of Trustees must use a twenty-five year period for the amortization of the Plan surplus.

Unlike the MPP, TPP and PSPP, the CPP Joint Trust Agreement has no transitional provisions that direct the Board of Trustees as to the application of ongoing surpluses during a transitional period.

III. SUMMARY AND CONCLUSIONS

A. Ontario Plans

OTPP - The governance arrangements with respect to the OTPP provide that the Partners that sponsor that arrangement, being the Minister of Education and the OTF, may utilize ongoing surpluses as they believe appropriate, subject only to the Ontario Pension Benefits Act, R.S.O.

1990, c.P.8 (the "Ontario PBA"). The Board of Directors of the OTPP, being the OTPP administrator for purposes of the PBA, has no authority with respect to the use of Plan surpluses. The OTPP Partners' Agreement anticipates that the Partners will, on a triennial basis, review the results of a preliminary actuarial valuation and determine whether and how they wish to adjust Plan benefits or contribution rates in view of any existing funding deficiencies or ongoing surpluses. The Partners are obliged to bargain in good faith with each other with respect to the disposition of ongoing surpluses, and may have recourse to mediation and final and binding arbitration should they not reach an agreement on their own. An arbitration panel may apply ongoing surpluses to improve benefits or reduce contributions, subject to the limitations set out in section 92 of the Partners Agreement.

B. BC Plans

Ongoing Surpluses - All of the BC Plans follow the same pattern with respect to the authority to use ongoing surpluses. In the normal course, the Boards of Trustees of the BC Plans, unlike their Ontario counterparts, are permitted to utilize ongoing surpluses through the amendment of the Plan rules governing contributions and benefits, so long as the amendment of the Plan rules does not result in an increased contribution rate for employees or employers, does not create or increase an unfunded liability in the Plan and is otherwise compliant with applicable legislation and the Trustees' fiduciary obligations.

At the same time, each of the BC Plans also permits the Plan Partners to utilize ongoing surpluses by

directing the Board of Trustees to amend the Plan rules. The Partners may so direct the Board of Trustees after receiving advice from the Board with respect to the costs of any Plan amendment and the administrative implications of such an amendment, and so long as the proposed amendment is compliant with law and with the Trustees' fiduciary obligations. However, unlike for the OTPP, the BC Plans' constating documents provide neither Partner with a right of recourse to a third party for a final and binding determination concerning surplus utilization.

Transitional Period- In addition, three of the four BC Plans we have reviewed (MPP, TPP and, for only two years, the PSPP) contain special rules governing the utilization of ongoing surpluses during a "Transitional Period". In these cases, the Transitional rules require that ongoing surpluses that emerge during the Transitional Period are to be used to restructure the employer contribution obligation and improve benefits. In the cases of the MPP and TPP, the Transitional Periods do not come to an end until all of the intended uses of ongoing surplus during the Transitional Period have been fulfilled. We are not currently aware as to whether the Transitional Periods for the MPP and the TPP remain ongoing, or have terminated. Until such time as the objectives identified for the Transitional Periods are fulfilled, there is no discretion left to either the Partners or the Board of Trustees to utilize ongoing MPP surpluses.

Appendix J – Summary of OTPP Funding Rate Assumptions and Provincial Discount Rates vs. Actual Performance

Ontario Teacher's Pension Plan Rate Comparison

	OTPP Annual Performance	OTPP Filed Discount Rate *	Province Economic Assumption for Nominal Return
2005	17.2%	6.48%	7.00%
2006	13.2%		7.00%
2007	4.5%		6.75%
2008	-18.0%	5.65%	6.75%
2009	13.0%	5.00%	6.75%
2010	14.3%		6.75%
2011	11.2%	5.40%	6.75%
2012	13.0%	5.30%	6.75%
2013	10.9%		6.75%
2014	11.8%	4.95%	6.75%
2015	13.0%	4.85%	6.50%
2016	n/a	n/a	6.25%

* The plan does not file a valuation annually. Under the Pension Benefits Act, plans must file at least every three years

Ontario Teacher's Pension Plan Plan Performance

2015	13.0%
2014	11.8%
4 - Year	12.2%
10- year	8.2%
Inception	10.3%