Treasury Board of Canada Secretariat | Secrétariat du Conseil du Trésor du Canada

Canada

Review of Methodologies to Determine Discount Rates

Published: 10/19/2018

Published by Treasury Board of Canada, Secretariat
90 Elgin, Ottawa, Ontario, K1A 0R5, Canada

Catalogue Number: BT22-218/2018E-PDF
ISBN: 978-0-660-29107-9

This document is available on the Government of Canada website, Canada.ca

This document is available in alternative formats upon request.

Aussi offert en français sous le titre : Examen des méthodologies quant à la détermination des taux d'actualisation

Review of Methodologies to Determine Discount Rates

A report outlining how the Government of Canada reviewed and updated its methodologies to determine discount rates used to value various assets and liabilities in its consolidated financial statements.

On this page

1. Executive summary
2. Background
3. Current requirements in Canadian Public Sector Accounting Standards
4. Considerations for discount rates
5. Discount rate methodologies for the Government of Canada
6. Useful Links
7. Appendix A: summary of changes
8. Appendix B: extract from Note 2 to the consolidated financial statements of the Government of Canada 2018

1. Executive summary

This document has been prepared pursuant to the Government Response to the Twenty-Eighth Report of the Standing Committee on Public Accounts (Public Accounts of Canada, 2016, June 2017). In its response, the Government of Canada committed to explain publicly how it reviewed and updated its methodologies to determine discount rates used to value various assets and liabilities in the government's consolidated financial statements. The resulting change in methodologies considered:

- industry practices
- emerging changes in accounting standards

- trends in the Canadian financial market

Supported by the Auditor General of Canada, the government reviewed its methodologies for selecting discount rates in order to promote consistency of measurement across financial statement items when using a present-value technique.

A present-value technique may be used in the measurement of long-term assets and liabilities to reflect the time value of money. Under the Canadian Public Sector Accounting Standards (PSAS), the rate used to discount these long-term items may be based either on the expected rate of return on plan assets, which is generally used for funded pension benefits, or the government's cost of borrowing.

A variety of methodologies has previously been used to select discount rates. However, as a result of the discount rate review, these have been replaced by one methodology (summarized in Appendix A), with the exception of the discount rate used in the measurement of funded pension benefits. The new methodology is used in the measurement of:

- liabilities for unfunded pension and other employee future benefits
- liabilities for contaminated sites
- asset retirement obligations
- liabilities for comprehensive land claims
- capital lease obligations
- the concessionary portion of long-term loans receivable

This new discount rate methodology selects the rates on the actual zero-coupon yield curve for Government of Canada bonds, published by the Bank of Canada, which reflect the timing of expected future cash flows for financial statement items that are discounted to their present values based on the government's cost of borrowing. The effects of implementing the new methodology were summarized in Note 2 to the audited consolidated financial statements of the Government of Canada as at March 31, 2018, which is included in Appendix B.

The methodology to select discount rates used in the measurement of funded pension benefits, based on the expected rates of return on plan assets, remains unchanged.

2. Background

Present value is a means of reflecting the time value of money in the measurement of long-term assets and liabilities. A present-value technique may be used within various measurement bases, including historical cost and current value-based models. Current

value measurements are used to reflect the economic environment prevailing at the reporting date, whereas historical cost measurements reflect the historical transaction price.

The inputs to derive an estimate under a present-value technique consist of the future cash flows and the discount rate, taking into account the risks specific to the asset or liability. Consequently, the discount rate should reflect the time value of money and those risks specific to the long-term asset or liability for which the estimation of future cash flows has not been adjusted.

The Office of the Comptroller General of Canada, in consultation with the Department of Finance Canada and the Office of the Chief Actuary, has reviewed the methodologies to determine the discount rates employed in preparing the government's consolidated financial statements. These statements are prepared using the government's accounting policies, which are based on the Public Sector Accounting Standards (PSAS) contained in the CPA Canada Handbook: Accounting.

Given the significance of liabilities for employee future benefits and the sensitivity of their valuation to the selection of a discount rate, the government's review focused on these liabilities, although all discount rate methodologies applied by the government when using a present-value technique in the measurement of its long-term assets and liabilities were considered. In addition to liabilities for employee future benefits, these long-term items include:

- liabilities for contaminated sites
- asset retirement obligations
- liabilities for comprehensive land claims
- capital lease obligations
- the measurement of the concessionary portion of long-term receivables

2.1 Reasons for reviewing discount rates

The government's review of the discount rates used in the preparation of the consolidated financial statements was undertaken as a result of the following:

1. **The Auditor General's observations on the consolidated financial statements for the government's selection of discount rates for fiscal year 2016** [1] and fiscal year 2017. [2]. The observations for fiscal year 2017 stated: "While we have concluded that the assumptions underlying the Government's significant estimates are within a reasonable range, historically, certain discount rates have been at the high end of the acceptable range when compared with market trends."

2. **Promotion of consistent selection of discount rate methodologies when using a present-value technique.** The review considered the extent to which the discount rate methodologies may be streamlined within the requirements of PSAS for individual long-term assets and liabilities.
3. **The guidance in PSAS for employee future benefit liabilities is under review by the Public Sector Accounting Board (PSAB).** PSAB is currently reviewing its discount rate guidance in accounting standard PS 3250 Retirement Benefits, as well as the discount rate guidance in new standards under development, where applicable.

3. Current requirements in Canadian Public Sector Accounting Standards

In this section

- 3.1 General requirements
- 3.2 Specific discount rate requirements

3.1 General requirements

PSAB's conceptual framework in accounting standard PS 1000 Financial Statement Concepts states that "financial statements should communicate information that is relevant to the needs of those for whom the statements are prepared, reliable, comparable, understandable and clearly presented in a manner that maximizes its usefulness."

In support of the qualitative characteristics of financial information outlined in the conceptual framework, the observations of the Auditor General stated that "it is important that the Government's process for determining discount rates be sound and supportable by observable and relevant data."

3.2 Specific discount rate requirements

Discount rate requirements are currently described in the following PSAS:

- PS 3250 Retirement Benefits: This standard does not provide specific requirements for the discount rate methodology to be used to estimate the accrued benefit obligation. Rather, it refers to discount rates based on the **expected return on plan**

assets and the **cost of borrowing** in the context of the principle that actuarial assumptions underlying the valuation should be internally consistent.
- PS 3050 Loans Receivable and PS 3310 Loan Guarantees: These two PSAS state that the government's (long-term) average borrowing rate may be appropriate to use as the discount rate.
- Public Sector Accounting Guideline PSG-2 Leased Tangible Capital Assets: In order to calculate the capital lease obligation, this guideline requires that the discount rate be the lower of the government's rate for incremental borrowing and the interest rate implicit in the lease, if practicable to determine.

Although these standards provide direction on the discount rate basis to be used in measuring these financial statement items, they do not provide specific guidance on the appropriate methodologies applicable to the selection of rates that reflect the entity's cost of borrowing.

4. Considerations for discount rates

In this section

- 4.1 Industry practice in the public and private sectors
  - 4.1.1 Provincial and territorial governments
  - 4.1.2 International Financial Reporting Standards
  - 4.1.3 International Public Sector Accounting Standards
  - 4.1.4 Conclusions
- 4.2 Emerging changes in accounting standards
  - 4.2.1 Review of discount rates in Canadian Public Sector Accounting Standards
  - 4.2.2 Review of discount rates in international standards
  - 4.2.3 Conclusions
- 4.3 Reflecting trends in the Canadian financial market
  - 4.3.1 Requirements in Canadian Public Sector Accounting Standards
  - 4.3.2 Conclusion

The Auditor General's observations on the government's consolidated financial statements for 2016 and 2017, requested that, as part of the project to review its discount rates, the government specifically consider:

- industry practice in the public and private sectors

- emerging changes in accounting standards
- trends in the Canadian financial market

The extent to which these factors can be reflected in the government's selection of discount rates is limited by the current requirements in PSAS.

4.1 Industry practice in the public and private sectors

4.1.1 Provincial and territorial governments

Canada's provincial and territorial governments were consulted in order to understand their selection of discount rates in the measurement of liabilities for unfunded employee future benefits. As noted above, PS 3250 Retirement Benefits does not provide specific guidance on which discount rate methodology should be used. Based on this consultation, it was noted that a majority of provincial governments use their cost of borrowing to measure these liabilities. [3] A variety of methodologies are used to select discount rates that represent the cost of borrowing, all of which are considered acceptable under PSAS.

4.1.2 International Financial Reporting Standards

Publicly accountable enterprises in Canada, which include large corporations and certain Crown corporations, apply International Financial Reporting Standards (IFRS), developed by the International Accounting Standards Board (IASB). Therefore, the requirements in IFRS are important when considering industry practice in Canada's private sector. As well, some international governments apply IFRS.

Specifically, International Accounting Standard (IAS) 19 Employee Benefits requires that discount rates be determined by reference to market yields at the end of the reporting period on high-quality corporate bonds. If there is no deep market in high-quality corporate bonds, the market yields on government bonds are used. In practice, entities often apply a single weighted-average discount rate that reflects the estimated amount and timing of benefit payments when calculating the accrued benefit obligation.

It is noted that IAS 19 does not permit the entity to use the expected rate of return on plan assets as the discount rate methodology for funded pension plans. Neither does this standard require the use of the entity's cost of borrowing, which inherently includes its own credit risk. Rather, the intent is to use a market-based rate that reflects the time value of money. The IASB determined that the rate that best achieves this is the yield on high-quality corporate bond rates, although such rates reflect the credit risk of the issuing entities.

The selection of discount rates under IAS 19 may result in significant volatility in the Statement of Financial Position. However, the gains and losses that arise due to year-over-year changes in the discount rate are never recognized in the Statement of Operations under the IFRS reporting model. In contrast, the financial reporting model in PSAS requires that these gains and losses are amortized to the Statement of Operations over the expected average remaining service life of the entity's employees.

With respect to other long-term assets and liabilities for which measurement using a present-value technique is appropriate, there is limited guidance in the individual IFRS; generally, a current market-based rate is required. IFRS 13 Fair Value Measurement provides general guidance on selecting a discount rate under the fair-value measurement basis, along with the risks that should be reflected in the rate.

4.1.3 International Public Sector Accounting Standards

International Public Sector Accounting Standards (IPSAS) are:

- developed for use by public sector entities internationally
- used by certain jurisdictions and international organizations that do not develop their own public sector accounting standards

IPSAS are not applied by Canadian public sector entities but may be referred to as a secondary source of accounting principles, although there are certain differences in the financial reporting models. These standards were considered in order to provide context for the selection of discount rates by public sector entities.

The guidance in IPSAS 39 Employee Benefits states that "the discount rate reflects the time value of money but not the actuarial or investment risk. Furthermore, the discount rate does not reflect the entity-specific credit risk borne by the entity's creditors, nor does it reflect the risk that future experience may differ from actuarial assumptions…. The discount rate reflects the estimated timing of benefit payments. Discount rates are best approximated by reference to market yields at the end of the reporting period on government bonds, high quality corporate bonds, or by another financial instrument."

Similar to IAS 19, IPSAS 39 does not permit the entity to use the expected rate of return on plan assets for funded pension plans, and neither does it require that the entity use its own cost of borrowing. The discount rate is expected to represent a risk-free rate, but the guidance is non-specific in order to allow for jurisdictional differences, such as the presence or absence of a deep market in government or corporate bonds.

4.1.4 Conclusions

- Public sector accounting requirements and practices in Canada differ from those used in the private sector and internationally, as PSAS permits the use of both the expected return on plan assets, which is generally used for funded employee future benefit plans, and the entity's own cost of borrowing.
- A discount rate methodology based on actual rather than forecast rates would be more consistent with the accounting practices of other Canadian jurisdictions and international standards.
- The use of a yield curve reflects the approach applied in international standards.

4.2 Emerging changes in accounting standards

4.2.1 Review of discount rates in Canadian Public Sector Accounting Standards

In November 2017, PSAB issued an invitation to comment, which is a consultation document seeking input from its stakeholders, on Employment Benefits: Discount Rate Guidance in Section 3250. The invitation to comment considered whether the existing guidance in PS 3250 Retirement Benefits is sufficient, and presented various alternative discount rate bases, including those used by other accounting standard-setters. This project may result in changes to the selection of discount rates for employee future benefit liabilities. This consultation is part of a larger review of PSAB's guidance on employee benefit liabilities, which includes the accounting treatment of gains and losses arising from changes to estimates, such as discount rates, used in preparing actuarial valuations. As well, PSAB is considering changes to its financial reporting model in the conceptual framework project, which may affect the presentation of these gains and losses in the financial statements.

The invitation to comment states that the emerging view in accounting literature is that the discount rate consists of a risk-free rate, representing:

- the time value of money
- adjustments for risks that reflect the characteristics of the liability (or asset) being measured that have not been incorporated into the future estimates of cash flows

PSAB is also creating a standardized approach to providing discount-rate guidance based on this general principle, which is intended to be used during the current and future development of new standards.

4.2.2 Review of discount rates in international standards

The IASB has concluded a research project that:

- examined the discount rate requirements in IFRS to identify why differences exist between standards
- assessed whether there are any unjustified inconsistencies that the IASB should consider addressing

This project reviewed:

- how discount rates satisfy the measurement objectives and attributes under the various standards
- whether the measurements are entity-specific
- the extent to which liquidity and credit risk adjustments should be embedded in discount rates

The project findings include a number of possibly unjustified inconsistencies in IFRS requirements related to discount rates, which are planned to be considered in individual projects, although no specific changes to IFRS were proposed as a result of this review. The project findings also included a list of matters for future staff consideration in standard-setting work relating to discount rates and other aspects of present-value measurements.

4.2.3 Conclusions

- The research conducted by PSAB and the IASB supports the view that the discount rate reflects the time value of money and any risks specific to the asset or liability that are not reflected in the cash flows.
- Standard-setters use varying methodologies to determine the discount rates for financial statement items. It is recognized that doing so may create inconsistencies, which the standard-setters are seeking to streamline.

4.3 Reflecting trends in the Canadian financial market

The extent to which trends in the Canadian financial market can be reflected in the discount rates selected is constrained by the measurement basis of the long-term asset or liability required under PSAS.

4.3.1 Requirements in Canadian Public Sector Accounting Standards

PS 1000 Financial Statement Concepts states that “present value is not a basis of measurement, but a valuation technique that may be used within historical cost-based or current-value models.” This statement provides some guidance on whether it is appropriate to reflect current market trends in the discount rate:

- A current value measurement reflects the economic environment that prevailed on the reporting date. When there is no stated settlement amount, the measurement of a liability reflects the entity's best estimate of the cost to fulfill the obligation as at the financial statement date. A current market-based discount rate, which reflects the timing of future settlement, would provide an estimate that is based on observable and verifiable inputs.
- Under PSAS, various financial statement items are measured at their historical cost, generally when a historical transaction price is available. When non-financial items are measured at historical cost, it is not appropriate to subsequently revalue them to reflect current market trends.

4.3.2 Conclusion

- Reflecting trends in the Canadian financial market in the discount rate may be considered only when a current value measurement basis is used.

5. Discount rate methodologies for the Government of Canada

In this section

- 5.1 Expected rate of return on plan assets
- 5.2 Cost of borrowing
  - 5.2.1 Factors for selection
  - 5.2.2 Approach
  - 5.2.3 Adjustment for risks

Based on the analysis of the current requirements in PSAS discussed above, there are two acceptable discount rate bases:

1. the **expected rate of return on plan assets**, which is generally applicable to funded employee benefit plans
2. the **government's cost of borrowing** for all other financial statement items measured, using a present-value technique

In reaching a decision on the most appropriate discount rate methodology to select rates that represent the government's cost of borrowing, attention was given to:

- the qualitative characteristics of information for improving the usefulness of the financial statements
- the specific guidance provided in individual PSAS in addition to the considerations raised by the Auditor General discussed above

5.1 Expected rate of return on plan assets

Consistent with PS 3250, the government continues to use the expected rate of return on plan assets as its discount rate for the funded pension plans, without any changes:

- This rate reflects the view that, when plan assets have been segregated and legally restricted for funding future benefit payments, the economic burden of the entity is the net benefit liability rather than the accrued benefit obligation.
- The expected rate of return on plan assets is, by definition, a projected discount rate.
- Use of the expected rate of return on plan assets reflects the current practice of other Canadian jurisdictions.
- The Auditor General's review of this discount rate methodology deemed that it is appropriate and aligned with the requirements in PSAS.

5.2 Cost of borrowing

Under the revised discount rate methodology, the discount rates representing the government's cost of borrowing are selected from the actual yield curve for zero-coupon bonds generated using pricing data for Government of Canada bonds and Treasury bills ("actual yield curve") at the date that the long-term asset or liability is measured:

- The use of actual rather than forecast rates is consistent with the accounting practices of most other Canadian jurisdictions and with international standards for the private and public sectors.
- A yield curve provides a rate for each term to maturity, and therefore enables the selection of rates that reflect the timing of future cash flows. Consequently, a yield curve was considered to provide the most relevant information and reflects the approach set out in international standards.
- A zero-coupon yield curve is commonly used to calculate the present value of a stream of future cash flows, since the stated yield is equal to the actual annual return (as there are no coupon payments). Therefore, using rates on the zero-coupon yield curve that reflect the timing of the expected future cash flows is appropriate for the measurement of long-term assets or liabilities.
- The government's own cost of borrowing is reflected by using rates on the daily zero-coupon yield curves for Government of Canada bonds and Treasury bills published

by the Bank of Canada on the measurement date. These yield curves are generated using pricing data for Government of Canada bonds and Treasury bills, as the risk-free government zero-coupon term structure is not directly observable.

- As Government of Canada bonds are considered to be the most risk-free instruments in Canada, the zero-coupon yield curve for Government of Canada bonds may also be considered to closely represent a risk-free rate. Consequently, any risks specific to the long-term asset or liability being measured are reflected in the projected cash flows. This consequence supports the emerging view presented in the research on discount rates conducted by PSAB and the IASB.
- This methodology also supports the Auditor General's view that the discount rate should be supported by relevant and observable data.

5.2.1 Factors for selection

The selection of a historical, current, average or projected discount rate generally depicts the measurement basis required under PSAS for the long-term asset or liability being measured.

When liabilities are measured at the best estimate to fulfill or settle the obligation, such as the liabilities for unfunded employee future benefits and for contaminated sites, the actual yield curve as at the financial reporting date is appropriate, thereby reflecting current market expectations of future interest rates at that date.

For items measured at historical cost, such as capital lease obligations, the actual yield curve at the date of inception of the contract is appropriate, as this reflects the commitment of resources under the contract.

5.2.2 Approach

The approach to applying the discount rate methodology underpins the selection of the rates on the actual yield curve that reflect the timing of the expected future cash flows.

For example, when an actuarial valuation is performed to estimate a liability for unfunded employee future benefits, the accrued benefit obligation is calculated by discounting the expected cash flows for each future period to the financial statement date, using the appropriate rate from the actual yield curve generated at the financial statement date. Therefore, the accrued benefit obligation is equal to the aggregate discounted value of all the expected future cash flows. Once the accrued benefit obligation has been determined, a single equivalent flat discount rate that results in the same accrued benefit obligation can be calculated. This equivalent flat discount rate is also used to measure other components, such as current service cost and interest cost.

5.2.3 Adjustment for risks

Discount rates may be adjusted to reflect the risks specific to the liability or asset to the extent that they are not reflected in the future cash flows.

Since the zero-coupon yield curve for Government of Canada bonds is considered to be close to a risk-free rate, the expected future cash flows are adjusted for risks specific to the long-term asset or liability, as applicable. For example, the risks associated with employee future benefit liabilities are reflected in the projected cash flows based on actuarial assumptions other than the discount rate.

6. Useful links

General

- Yield Curves for Zero-Coupon Bonds, Bank of Canada
- Public Accounts of Canada (includes consolidated financial statements)

Information on accounting standard-setters

- CPA Canada Public Sector Accounting Handbook
- International Financial Reporting Standards
- International Public Sector Accounting Standards

Appendix A: summary of changes

Financial statement item	Discount rate selection		Accounting impact
	Public Accounts 2017: old methodology	Public Accounts 2018: new methodology	
Employee future benefits			

* Consolidated Revenue Fund Monthly Lending Rates for Periods of One Year and Over, published by the Department of Finance Canada until June 2018

Financial statement item	Discount rate selection		Accounting impact
	Public Accounts 2017: old methodology	**Public Accounts 2018: new methodology**	
Funded pension benefits	Streamed expected rates of return on invested funds	Streamed expected rates of return on invested funds	No change
Unfunded pension benefits	Streamed weighted average of Government of Canada long-term bond rates	Yields on applicable zero-coupon yield curve for Government of Canada bonds that reflect a current or historical measurement basis	Change in accounting policy
Unfunded other employee future benefits	Expected Government of Canada long-term bond rate at March 31		Change in estimate
Asset retirement obligations	Government of Canada benchmark bond yields		
Liabilities for contaminated sites	Applicable Consolidated Revenue Fund monthly lending rate * that reflects a current or historical measurement basis		
Settled comprehensive land claims			
Capital lease obligations			

* Consolidated Revenue Fund Monthly Lending Rates for Periods of One Year and Over, published by the Department of Finance Canada until June 2018

Financial statement item	Discount rate selection		Accounting impact
	Public Accounts 2017: old methodology	Public Accounts 2018: new methodology	
Concessionary portion of long-term loans receivable			

* Consolidated Revenue Fund Monthly Lending Rates for Periods of One Year and Over, published by the Department of Finance Canada until June 2018

Appendix B: extract from Note 2 to the consolidated financial statements of the Government of Canada 2018

2. Accounting changes and restatement

(a) Change in discount rate methodology

The Government has reviewed its methodologies for selecting discount rates used in the measurement of its long-term assets and liabilities in order to promote consistency when using a present-value technique. This review considered industry practices and emerging changes in accounting standards. The revised discount rate methodology establishes the Government's cost of borrowing by reference to the actual zero-coupon yield curve for Government of Canada bonds, and affects liabilities for unfunded public sector pensions and other employee and veteran future benefits, environmental liabilities and asset retirement obligations, provision for contingent liabilities, capital leases and loans receivable.

Except as noted below for unfunded pension benefits, this refinement was accounted for as a change in estimate affecting the period of change and applicable future periods. The change in estimate did not have a material impact on the current year, except for other

employee and veteran future benefits, where the weighted average discount rate of 2.2% was lower than the discount rate of 2.4% used under the previous methodology resulting in an increase of $5,226 million in accrued benefit obligations.

Unfunded pension benefits

In the past, unfunded pension benefits were discounted using a streamed weighted average of Government of Canada long-term bond rates, which was calculated based on a 20-year weighted moving average of Government of Canada long-term bond rates projected over time. Unfunded pension benefits are now discounted using actual yields that reflect the timing of the expected future cash flows. This change represents a fundamental adjustment to the methodology used to select the discount rate and, therefore, is considered a change in accounting policy which was applied on a retroactive basis. The accrued benefit obligations for unfunded pension benefits are $198,000 million ($200,950 million in 2017) compared to $164,983 million ($166,482 million in 2017) under the old discount rate methodology.

A reconciliation of the restatement pertaining to unfunded pension benefits for the significant consolidated financial statement line items follows: (in millions of dollars)

	2017		
	As previously reported	**Effect of change in accounting policy**	**As restated**
Consolidated Statement of Operations and Accumulated Deficit			
Program expenses—other expenses	85,986	4,064	90,050
Public debt charges	24,109	(2,877)	21,232
Total expenses	311,265	1,187	312,452
Annual deficit	(17,770)	(1,187)	(18,957)
Accumulated deficit at beginning of year	(615,986)	(18,454)	(634,440)
Accumulated deficit at end of year	(631,899)	(19,641)	(651,540)
Consolidated Statement of Financial Position			

	2017		
	As previously reported	Effect of change in accounting policy	As restated
Public sector pension liabilities	151,806	19,641	171,447
Net debt	(714,457)	(19,641)	(734,098)
Accumulated deficit	(631,899)	(19,641)	(651,540)
Consolidated Statement of Change in Net Debt			
Net debt at beginning of year	(693,751)	(18,454)	(712,205)
Annual deficit	(17,770)	(1,187)	(18,957)
Net debt at end of year	(714,457)	(19,641)	(734,098)
Consolidated Statement of Cash Flow			
Annual deficit	(17,770)	(1,187)	(18,957)
Change in pensions and other future benefits	7,205	1,187	8,392

The effects of the restatement on Note 9 to the consolidated financial statements, public sector pensions and other employee and veteran future benefits, are as follows:
(in millions of dollars)

	2017		
	Unfunded pension benefits		
	As previously reported	Effect of change in accounting policy	As restated
Accrued benefit obligations at beginning of year	165,665	49,577	215,242
Benefits earned	313	22	335
Interest on average accrued benefit obligations	6,907	(2,877)	4,030

	2017		
	Unfunded pension benefits		
	As previously reported	Effect of change in accounting policy	As restated
Benefits paid	(8,817)	–	(8,817)
Administrative expenses	(91)	–	(91)
Net transfers to other plans	(88)	–	(88)
Plan curtailments	(4)	(1)	(5)
Actuarial (gains) losses	2,597	(12,253)	(9,656)
Accrued benefit obligations at end of year	166,482	34,468	200,950
Less: Unrecognized net actuarial loss	19,015	14,827	33,842
Net future benefit liabilities	147,467	19,641	167,108
Benefit expense			
Benefits earned, net of employee contributions	256	22	278
Actuarial losses recognized during the year	2,124	4,016	6,140
Plan curtailments	(4)	(1)	(5)
Actuarial losses recognized following plan curtailments	15	27	42
Total	2,391	4,064	6,455
Interest expense			
Interest on average accrued unfunded pension benefit obligations	6,907	(2,877)	4,030
Discount rates used to measure			
Accrued benefit obligations	3.7%	(1.5%)	2.2%

	2017		
	Unfunded pension benefits		
	As previously reported	Effect of change in accounting policy	As restated
Benefit and interest expenses	4.4%	(2.5%)	1.9%

Footnotes

1 Observations of the Auditor General of Canada on the Consolidated Financial Statements of the Government of Canada for the Year Ended 31 March 2016

2 Observations of the Auditor General of Canada on the Consolidated Financial Statements of the Government of Canada for the Year Ended 31 March 2017

3 Some provinces and territories did not provide comments.

ISBN: 978-0-660-29107-9

Date modified:

2019-01-02