# Workplace Safety and Insurance Board

Third Quarter 2016 Sufficiency Report to Stakeholders



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#### President and CEO's Message

I am pleased to present the Workplace Safety and Insurance Board's (the "WSIB") third quarter 2016 Sufficiency Report to Stakeholders. In this quarter, we saw positive outcomes for injured workers and strong financial performance.

Here are some highlights:

- Injured workers reported their highest level of satisfaction with their overall experience with the WSIB (73% satisfied) since this new metric was launched at the start of 2015. Employers' overall satisfaction this quarter (76%) improved slightly compared to last year (74%);
- The WSIB's Work Transition Program continues to deliver strong results for workers who are unable to return to their pre-injury jobs. Year to date, 84% of workers who completed their Work Transition plans through the program were then successful in finding work, which is up 5% compared to 2015; and
- Nearly nine in ten (89%) appeals that came into the WSIB were resolved within six months in the third quarter of 2016. This timeliness in bringing appeals to resolution is helping to keep a stable and low volume of active appeals in inventory (2,054 cases as of the end of the quarter, down from 2,251 at the same point in 2015).

The third quarter financial results are also encouraging. The Canadian economy appears to have stabilized in recent months, with unemployment remaining around 7% and the dollar trading around 75 cents US, up from 69 cents in January. Globally, equity markets continued their recovery this quarter and emerging markets outperformed as investors embraced risk.

The WSIB's investment portfolio returned +3.8% in the third quarter and grew by approximately \$1.5 billion, to \$28.9 billion. Portfolio returns were primarily due to strong equity returns along with moderate returns from diversified markets and infrastructure.

Due to the strong core earnings and the investment portfolio's performance, the system's unfunded liability (the "UFL") continued its downward trajectory, ending the third quarter at \$4.8 billion on a sufficiency basis. This corresponds to an increase in the Sufficiency Ratio to 84.9% as of September 30, 2016.

As we conclude this quarter, I am proud to say that we are on a sustainable path to meet our goal of becoming the leading workplace compensation board in North America.

Thomas Teahen President and Chief Executive Officer December 14, 2016 Toronto, Ontario



## Management's Responsibility for Financial Reporting

The Sufficiency Ratio and related notes (the "Sufficiency Statement"), and the Sufficiency Discussion and Analysis (collectively, the "Sufficiency Report to Stakeholders"), have been prepared by management and approved by the Board of Directors of the WSIB. The Sufficiency Ratio calculation has been prepared in accordance with the accounting policies described in note 2 to the Sufficiency Statement, pursuant to *Ontario Regulation 141/12* made under the *Workplace Safety and Insurance Act, 1997 (Ontario)* (the "WSIA"), as amended by *Ontario Regulation 338/13* and, where appropriate, reflects management's best estimates and judgment. Where alternative accounting methods exist, management has chosen those methods considered most appropriate in the circumstances. Management is responsible for the accuracy, integrity and objectivity of the Sufficiency Statement within reasonable limits of materiality, and internal controls. Management is also responsible for the preparation and presentation of additional financial information in the quarterly report to stakeholders and ensuring its consistency with the Sufficiency Statement.

**Thomas Teahen** President and Chief Executive Officer December 14, 2016 Toronto, Ontario

Pamela Steer Chief Financial Officer



## Sufficiency Discussion and Analysis

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## 1. Overview

#### An explanation of our regulations.

The following Sufficiency Discussion and Analysis should be read in conjunction with the unaudited condensed interim consolidated financial statements and accompanying notes of the WSIB as at and for the three and nine months ended September 30, 2016 (the "unaudited interim consolidated financial statements") and the Sufficiency Ratio and accompanying notes of the WSIB as at September 30, 2016 (the "Sufficiency Statement").

The Sufficiency Ratio measures whether there are sufficient funds to meet the WSIB's future projected claims payouts. The WSIB reports its Sufficiency Ratio pursuant to *Subsection 1 (3)* of *Ontario Regulation 141/12*, as amended by *Ontario Regulation 338/13* (collectively, the "Sufficiency Regulation"). Under the Sufficiency Regulation, the values of our assets and liabilities are determined using actuarial valuations that are consistent with accepted actuarial practices for going concern valuations.

Specific definitions for a number of terms in this Sufficiency Report to Stakeholders can be found in subsection 7.

## 2. Period in Review

A discussion of our performance for the nine months ended September 30, 2016 and the effect on our Sufficiency Ratio.

Our Sufficiency Ratio increased from 77.9% as at December 31, 2015 to 84.9%, primarily reflecting an increase in assets on a Sufficiency Ratio basis attributable to the valuation of invested assets at the long-term expected annual rate of return of 5.25% (net), the amortization of cumulative unrecognized investment returns as at September 30, 2016, and continued strong operating results.

Investment gains and losses that differ from our long-term expected annual rate of return are amortized over a five-year period, thus moderating the effect of investment market volatility on our financial results on a sufficiency basis. Effective January 1, 2016, the long-term annual rate of return was reduced from 6.0% to 5.25% (net) subsequent to the annual review by the Investment Committee and approval by the Board of Directors at the end of 2015.

Our Insurance Fund Ratio increased from 79.8% as at December 31, 2015 to 86.8%, primarily reflecting an increase in assets on a Sufficiency Ratio basis attributable to the valuation of invested assets at the long-term expected annual rate of return of 5.25% (net), the amortization of cumulative unrecognized investment returns as at September 30, 2016, and continued strong operating results. Investment gains and losses that differ from our long-term expected annual rate of return are amortized over a five-year period, thus moderating the effect of investment market volatility on our financial results on a sufficiency basis.

Our Employee Benefit Plans Ratio increased from 77.8% as at December 31, 2015 to 80.4%, reflecting an increase in plan assets, partially offset by an increase in the employee benefit plans obligation on a sufficiency basis. The increase in plan assets on a sufficiency basis is due to an increase in the asset base since December 31, 2015, based on the long-term annual rate of return and the amortization of cumulative unrecognized investment returns as at September 30, 2016. The increase in employee benefit plans obligation was due to combined interest and service accrual costs which were higher than benefit payments.



## 3. The Sufficiency Ratio Calculation Methodology

#### A description of the components of the Sufficiency Ratio calculation.

As required by the Sufficiency Regulation, we calculate our Sufficiency Ratio by comparing assets on hand to total estimated liabilities, as measured on a sufficiency basis. This fundamental measure is comparable with the methods used by other Canadian workers' compensation boards and as reported by the Association of Workers' Compensation Boards of Canada to measure the adequacy of funding and is a measure used by leading pension plans around the world. However, a standard definition for the Sufficiency Ratio does not exist.

As at September 30, 2016, we had a funding shortfall of \$4,799 million on a Sufficiency Ratio basis, which means our liabilities (the estimated present value of future benefit payments) exceeded the current value of our assets. Expressed in percentage terms, we had 84.9% of the assets required to meet our future benefit obligations.

#### **Sufficiency Ratio Calculation Policies**

Set forth below is a summary of the accounting policies used to calculate our Sufficiency Ratio as at September 30, 2016 and December 31, 2015 based on our interpretation of the Sufficiency Regulation.

#### Assets

The assets included in the Sufficiency Ratio are calculated with reference to our total assets shown on our unaudited interim consolidated statements of financial position. The total assets are adjusted to reflect measurement on a going concern basis. On a going concern basis, invested assets are valued at fair value adjusted for the unamortized gains or losses relative to the long-term expected annual rate of return on those assets, less the interests in those assets held by third parties (non-controlling interests). The adjustment to deduct assets held by third parties is necessary as our assets include portions of investments to which third parties ultimately have rights (including the assets of the WSIB Employees' Pension Plan) and therefore would not be appropriate to include in our Sufficiency Ratio. See note 2 to the Sufficiency Statement for further discussion.

#### Liabilities

The liabilities included in the Sufficiency Ratio are calculated as our total liabilities shown on our unaudited interim consolidated statements of financial position, adjusted to reflect valuations of the Employee Benefit Plans liabilities on a going concern basis rather than a market basis. See note 2 to the Sufficiency Statement for further discussion.

## 4. Our Funding Strategy

#### A discussion of our funding strategy and how we plan to increase the Sufficiency Ratio.

In accordance with *Ontario Regulation 141/12*, the WSIB submitted the Sufficiency Plan Update 2016 to the Minister of Labour in June 2016, describing the measures being taken by the WSIB to improve the Sufficiency Ratio and how these measures will achieve the prescribed ratios. See note 1 to the Sufficiency Statement for further discussion.

To meet our Sufficiency Ratio requirements, we will continue to manage our investments with the goal of generating returns that meet or exceed the expected long-term annual rate of return, while prudently managing the WSIB's operations to ensure premium revenues absorb benefit costs, administration and other expenses and provide an allocation towards the retirement of the unfunded liability. We have been managing our operations in this manner since early 2011, resulting in premium revenues exceeding cash



operating expenses over this time period. In addition, as a result of favourable claims experience and investment returns, we were able to make demonstrable progress towards retiring the unfunded liability.

As we approach the goal of 100% funding, we have refined our strategy to ensure at an appropriate confidence level that the Insurance Fund can withstand future economic shocks and remains at a stable level of funding. As a result, our Funding Policy requires the Chief Actuary to advise the WSIB as to the margin of prudence that should be maintained over and above the legal requirement to be 100% funded, currently assessed as a range between 115% to 125% Sufficiency Ratio. This prudent level of funding is referred to as "Full Funding". See subsection 6 for further discussion.

#### 5. Supplemental Measures

Supplemental measures to assess our financial condition.

In addition to the Sufficiency Ratio, we also assess risks and sustainability by monitoring our Insurance Fund Ratio and the Employee Benefit Plans Ratio as noted below:

#### Insurance Fund Ratio

The Insurance Fund Ratio excludes the net deficit of the WSIB's Employee Benefit Plans in order to provide a measure of the WSIB's insurance operations and is calculated as follows:

(millions of Canadian dollars)	September 30 2016	December 31 2015
Insurance Fund assets on the Sufficiency Ratio basis	27,134	24,736
Less: Non-controlling interests in investments	(94)	(83)
Total assets	27,040	24,653
Insurance Fund liabilities on the Sufficiency Ratio basis Less: Employee Benefit Plans deficit on the Sufficiency Ratio basis	31,839 (689)	31,637 (757)
Total liabilities	31,150	30,880
Insurance Fund Ratio	86.8%	79.8%

As at September 30, 2016, the Insurance Fund Ratio increased by 7.0% to 86.8% from December 31, 2015, primarily reflecting an increase in assets on a Sufficiency Ratio basis attributable to the valuation of invested assets at the long-term expected annual rate of return of 5.25% (net), the amortization of cumulative unrecognized investment returns as at September 30, 2016, and continued strong operating results. Investment gains and losses that differ from our long-term expected annual rate of return are amortized over a five-year period, thus moderating the effect of investment market volatility on our financial results on a sufficiency basis.

#### **Employee Benefit Plans Ratio**

The Employee Benefit Plans of the WSIB are a component of total compensation for the WSIB's permanent employees. The Employee Benefit Plans Ratio provides a measure of the sufficiency of the Employee Benefit Plans.



The Employee Benefit Plans Ratio is calculated as follows:

	September 30	December 31
(millions of Canadian dollars)	2016	2015
Employee Benefit Plans assets on the Sufficiency Ratio basis	2,821	2,646
Divided by: Employee Benefit Plans obligation on the Sufficiency Ratio basis	3,510	3,403
Employee Benefit Plans Ratio	80.4%	77.8%

The Employee Benefit Plans Ratio increased by 2.6% to 80.4% from December 31, 2015 reflecting an increase in plan assets, partially offset by an increase in the Employee Benefit Plans obligation on a sufficiency basis. The increase in plan assets on a sufficiency basis is due to an increase in the asset base since December 31, 2015, based on the long-term annual rate of return and the amortization of cumulative unrecognized investment returns as at September 30, 2016. The increase in Employee Benefit Plans obligation was due to combined interest and service accrual costs which were higher than benefit payments.

#### 6. Insurance Funding Risk

#### A discussion of the more significant risk factors affecting our business.

Insurance Funding Risk is the risk that the WSIB's funded status falls short of Sufficiency Ratio requirements due to unmitigated reductions in premium revenues, unmitigated increases in the benefit liabilities, significant and prolonged adverse investment returns, adverse changes in economic conditions, and changes in the regulatory and political environments.

While we take great care in preparing financial forecasts, actual results will vary due to evolving economic conditions and other factors such as changes to legislation or changes in the workplace that could expose us to unanticipated losses. For example, an economic downturn could lead to reductions in overall insured payroll or adverse investment returns. In addition, new injured worker benefit entitlements may emerge and constraints over premium rate adjustments could adversely affect the trajectory to Full Funding.

Our mitigation plan addresses specific drivers of Insurance Funding Risk accordingly. We perform annual and event driven testing of our assumptions and take steps to ensure we remain on the path to Full Funding.

Our mitigation of risks includes but is not limited to the following:

- modeling and monitoring economic scenarios to better understand the impact of economic risks and to determine the adequacy of our financial assumptions reflecting a reduction of the average premium rate by 6.2% in 2017 and consideration towards another 5% to 10% total reduction between 2018-2019, depending on emerging financial results and health of the economy;
- continued investment in prevention, recovery and return-to-work efforts and closely monitoring their performance;
- determining benefit liabilities based on assumptions that gradually incorporate emerging experience, thus providing a relatively stable basis for pricing and sufficiency measurement;
- coordinating asset-liability management processes including consideration of the impacts of economic and other risk factors on the funding position and desired level of funding;
- conducting annual scenario planning and stress testing as part of budget updates, sufficiency planning, rate setting and other financial modelling;



- executing the Strategic Investment Plan to ensure strong investment governance, effective diversification of assets, efficient cost structure, and rigorous risk management of investment assets;
- participating in the Province's Pooled Asset Management Initiative, which offers economies of scale, wider access to investment opportunities, enhanced risk management and the optimal use of internal and external investment management for more predictable returns with less volatility and therefore enhanced performance for the level of investment risk taken; and
- monitoring for potential legislative changes.

A full discussion of the significant Insurance Funding Risk factors that affect the WSIB's business and the corresponding mitigation approaches can be found in section 6 of our 2015 Sufficiency Report to Stakeholders. No additional risk factors or changes to mitigation approaches have been noted as at September 30, 2016 although we continue to closely monitor economic conditions and global events, such as Brexit and the US presidential election, that might impact our investment performance.

With our Sufficiency Ratio at 84.9% as at September 30, 2016, we have a very low risk of not maintaining funding at our 60% funding requirement in 2017.

Once the regulated Sufficiency Ratio requirements as set out in *Ontario Regulation 141/12* are attained, the WSIB plans to target a Sufficiency Ratio in the range of 115% to 125% in order to have a high level of confidence that we can maintain the regulated Sufficiency Ratio requirement (100%) when faced with periods of negative economic conditions.



## 7. Definitions

A glossary of the terms utilized in this report.

- **"Employee Benefit Plans"** refer to the long-term benefit plans offered to permanent employees of the WSIB. They include pension and other post-employment benefit plans, which include life insurance, dental and extended health coverage.
- "Employee Benefit Plans Ratio" refers to the ratio of the Employee Benefit Plans assets to the Employee Benefit Plans liabilities as presented in the Sufficiency Statement, and is expressed as a percentage.
- "Enhanced Assurance" represents a high degree of confidence in achieving the regulated Sufficiency Ratio requirements and maintaining Full Funding once reached, as determined by periodic asset-liability studies.
- **"Full Funding"** represents the level of funding sufficiency that provides Enhanced Assurance that the Sufficiency Ratio will not fall below 100%.
- "Funding Ratio" refers to the ratio of total assets of the WSIB, less non-controlling interests, to the total liabilities of the WSIB, as presented in the WSIB's unaudited interim consolidated financial statements prepared according to International Financial Reporting Standards ("IFRS"), and is expressed as a percentage.
- "Insurance Fund" refers to the assets and liabilities of the WSIB, excluding the assets and obligations of the Employee Benefit Plans.
- "Insurance Fund Ratio" refers to the ratio of Insurance Fund assets, less non-controlling interests, to Insurance Fund liabilities, as presented in the Sufficiency Statement, and is expressed as a percentage.
- "Non-controlling Interests" refer to the WSIB Employees' Pension Plan and other investors' proportionate interest of the net assets and comprehensive income of the WSIB's subsidiaries.
- "Sufficiency Ratio" refers to the ratio of total assets of the WSIB, less non-controlling interests, to the total liabilities of the WSIB, as presented in the Sufficiency Statement, and is expressed as a percentage.
- "Sufficiency Statement" refers to the statement that presents the Sufficiency Ratio, Insurance Fund Ratio, and Employee Benefit Plans Ratio. The basis of accounting for the Sufficiency Ratio is found in note 2 of the Sufficiency Statement.



## **Sufficiency Ratio**

	September 30 2016	December 31 2015
Sufficiency Ratio assets (note 3)	29,886	27,324
Less: Non-controlling interests (note 3)	(2,846)	(2,671)
	27,040	24,653
Divided by: Sufficiency Ratio liabilities (note 3)	31,839	31,637
Sufficiency Ratio	84.9%	77.9%

## **Supplemental Ratios**

#### **Insurance Fund Ratio**

	September 30 2016	December 31 2015
Insurance Fund assets on the Sufficiency Ratio basis (note 5)	27,134	24,736
Less: Non-controlling interests	(94)	(83)
	27,040	24,653
Divided by: Insurance Fund liabilities on the Sufficiency Ratio basis (note 5)	31,150	30,880
Insurance Fund Ratio	86.8%	79.8%

### **Employee Benefit Plans Ratio**

	September 30 2016	December 31 2015
Employee Benefit Plans assets on the Sufficiency Ratio basis (note 6)	2,821	2,646
Divided by: Employee Benefit Plans obligation on the Sufficiency Ratio basis (note 6)	3,510	3,403
Employee Benefit Plans Ratio	80.4%	77.8%

The accompanying notes form an integral part of this Sufficiency Statement.



## 1. Governing Regulation

*Ontario Regulation 141/12* under the WSIA came into force on January 1, 2013 and requires the WSIB to calculate a Sufficiency Ratio of the Insurance Fund and ensure the Sufficiency Ratio meets the prescribed ratios by the following dates:

December 31, 2017	60%
December 31, 2022	80%
December 31, 2027	100%

*Ontario Regulation 141/12,* as amended by *Ontario Regulation 338/13* which became effective January 1, 2014 (collectively, the "Sufficiency Regulation"), states that the Sufficiency Ratio of the Insurance Fund shall be calculated by dividing the value of the Insurance Fund assets, as determined by the WSIB based on the long-term expected annual rate of return, by the value of the Insurance Fund liabilities, as determined by the WSIB's Chief Actuary in an actuarial valuation.

## 2. Summary of Significant Accounting Policies

The unaudited interim consolidated financial statements of the WSIB prepared in accordance with IFRS have been adjusted for the items that follow, to derive the assets and liabilities used in the calculation of the Sufficiency Ratio in accordance with the Sufficiency Regulation.

#### Assets

Assets for the purposes of the Sufficiency Ratio calculation have been determined by the WSIB to consist of the total consolidated assets of the WSIB. The amounts presented are adjusted to reflect measurement on a going concern basis. On a going concern basis, investment assets are valued at fair value adjusted for the unamortized gains or losses relative to the long-term expected annual rate of return on those assets, less the interests in those assets held by third parties, as represented by the balance of non-controlling interests. See note 4 for further discussion.

#### Liabilities

Liabilities for the purposes of the Sufficiency Ratio have been determined as follows:

The Insurance Fund liabilities include benefit liabilities which represent the actuarially determined present value of estimated future payments for reported and unreported claims incurred on or prior to the reporting date, including claims in respect of occupational diseases currently recognized by the WSIB. The measurement of benefit liabilities requires the actuary to make estimates and assumptions for a number of factors, including those for claim duration, mortality rates, wage escalation, general inflation and discount rates. Benefit liabilities are described in note 13 of the WSIB's 2015 consolidated financial statements.



Employee Benefit Plans consist of long-term employee benefits including pensions and other postemployment benefits. The Employee Benefit Plans obligation was determined through an actuarial valuation using the going concern basis, which assumes the plans will continue indefinitely. The going concern discount rate of 5.2% was determined with reference to the long-term expected annual rate of return of the pension plan assets and the WSIB's investment strategy. This differs from the accounting basis used in preparing the WSIB's unaudited interim consolidated financial statements. The accounting discount rate, a weighted average of 3.3%, was determined by reference to high quality corporate bonds and the projected cash flows from the various plans.

Also, significant impacts on liabilities that result from changes in legislation or actuarial or accounting standards are amortized over a reasonable period based on the size of their impact and their relation to the regulated sufficiency requirements, such period not to exceed five years.

All other liabilities are determined on an accounting basis as recorded in the WSIB's 2015 consolidated financial statements.

#### 3. Reconciliation of the Sufficiency Ratio Assets and Liabilities to the Consolidated Financial Statements Prepared in Accordance with IFRS

A reconciliation of the total assets and liabilities used for the calculation of the Sufficiency Ratio to those under IFRS as at September 30, 2016 is provided below. The unaudited interim consolidated statements of financial position presented on an IFRS basis are from the WSIB's unaudited interim consolidated financial statements. Explanatory notes follow the reconciliation below.



	September 30, 2016			December 31, 2015		
		Su	ufficiency		Sı	Ifficiency
	IFRS	Adjust-	Ratio	IFRS	Adjust-	Ratio
	Basis	ments	Basis	Basis	ments	Basis
Assets						
Cash and cash equivalents	1,792	-	1,792	1,581	-	1,581
Receivables	1,680	-	1,680	1,614	-	1,614
Investments	27,049	(944) <sup>1</sup>	26,105	24,826	(981) <sup>1</sup>	23,845
Property, equipment and intangible	309		309	284		284
assets Total assets	<b>30</b> ,830	(944)	<b>29,886</b>	28,305	 (981)	204
	30,830	(944)	29,000	20,305	(901)	21,324
Liabilities						
Payables and accruals	1,252	-	1,252	1,077	-	1,077
Derivative liabilities	62	-	62	133	-	133
Long-term debt	133	-	133	116	-	116
Loss of Retirement Income Fund liability	1,776	-	1,776	1,724	-	1,724
Employee benefit plans liability	1,757	(1,068) <sup>2</sup>	689	1,222	(465) <sup>2</sup>	757
Benefit liabilities	27,927	-	27,927	27,830	-	27,830
Total liabilities	32,907	(1,068)	31,839	32,102	(465)	31,637
Deficiency of assets						
Unfunded liability attributable to WSIB						
stakeholders	(5,023)	224	(4,799)	(6,599)	(385)	(6,984)
Non-controlling interests	2,946	(100) <sup>1</sup>	2,846	2,802	(131) <sup>1</sup>	2,671
Total deficiency of assets	(2,077)	124	(1,953)	(3,797)	(516)	(4,313)
Total liabilities & deficiency of assets	30,830	(944)	29,886	28,305	(981)	27,324
Funding Ratio	84.7%		-	79.4%		-
Sufficiency Ratio	-		84.9%	-		77.9%
Insurance Fund Ratio	89.5%		86.8%	82.6%		79.8%
Employee Benefit Plans Ratio	62.4%		80.4%	69.3%		77.8%

Reflects the valuation adjustment of our total assets shown on our unaudited interim consolidated statements of financial position at the long-term expected annual rate of return of 5.25% (2015 – 6.0%) resulting in a decrease of \$944 (2015 – \$981), which includes the interests in those assets held by third parties (non-controlling interests) of \$100 (2015 – \$131). See note 4 for further discussion.

2. Reflects the use of a going concern discount rate of 5.2% (2015 – 5.2%) determined with reference to the long-term expected annual rate of return of the pension plan assets and the WSIB's investment strategy. For the purposes of the unaudited interim consolidated financial statements, an accounting weighted average discount rate of 3.3% (2015 – 4.0%) was used as at September 30, 2016. The accounting discount rate was determined by reference to high quality corporate bonds and the projected cash flows from the various plans.



## 4. Calculation of the Sufficiency Ratio

The Sufficiency Ratio is provided to illustrate the ratio of the assets and the liabilities of the WSIB on a sufficiency basis. The Sufficiency Ratio is calculated by dividing the Sufficiency Ratio assets less non-controlling interests by the Sufficiency Ratio liabilities.

The Sufficiency Ratio assets are established by adjusting the total assets by investment returns above or below the long-term annual rate of return assumptions in effect for the fiscal year of 5.25% for 2016 (December 31, 2015 – 6.0%), and are recognized over five years on a straight-line basis to smooth fluctuations in the market value of net assets. As at September 30, 2016, the Sufficiency Ratio assets reflect a cumulative total of \$944 in valuation adjustments (December 31, 2015 – \$981) representing the net unrecognized investment returns in excess of the long-term annual rate of return assumption.

	2013	2014	2015	2016	Total
Unrecognized investment returns above (below) expected annual rate of return	1,214	848	(17)	317	2,362
Investment returns recognized in 2013	(243)	-	-	-	(243)
Investment returns recognized in 2014	(242)	(170)	-	-	(412)
Investment returns recognized in 2015	(243)	(170)	4	-	(409)
Investment returns not recognized in the current period	486	508	(13)	317	1,298
Amortized in the current period	(182)	(127)	2	(47)	(354)
Total valuation adjustments as at September 30, 2016	304	381	(11)	270	944

The changes in the valuation adjustments are detailed as follows:

The Sufficiency Ratio liabilities are established by adjusting the valuations of the Employee Benefit Plans liabilities with a going concern discount rate of 5.2% determined with reference to the long-term expected annual rate of return on the pension plan assets as described in note 2. The Insurance Fund liabilities include benefit liabilities which are determined through an actuarial valuation with a discount rate of 4.75%, as described in note 13 of the WSIB's 2015 consolidated financial statements. All other liabilities are determined on an accounting basis as recorded in the WSIB's 2015 consolidated financial statements.

The amount of unrecognized investment returns by the year they are to be recognized are as follows:

	Valuation	Valuation adjustments to be recognized in:				
Year earned	adjustments as at September 30, 2016	Remainder of 2016	2017	2018	2019	2020
2013	(304)	61	243	-	-	-
2014	(381)	43	169	169	-	-
2015	11	(1)	(3)	(4)	(3)	-
2016	(270)	16	64	63	64	63
	(944)	119	473	228	61	63

#### **Reconciliation of the Sufficiency Ratio assets**

	September 30 2016	December 31 2015
Market value of investment assets <sup>1</sup>	28,873	26,301
Add/(Less): Cash transfers in the period <sup>1</sup>	(119)	11
Adjusted market value of investment assets	28,754	26,312
Investment assets at expected rate of return <sup>2</sup>	28,437	26,329
Unrecognized investment returns above (below) expected rate of return <sup>3</sup>	317	(17)
Add/(Less): Amount amortized in current period <sup>4</sup>	(47)	4
Valuation adjustments, current period	270	(13)
Valuation adjustments, prior periods <sup>5</sup>	674	994
Total valuation adjustments <sup>6</sup>	944	981
Sufficiency Ratio Assets		
Total assets per consolidated financial statements	30,830	28,305
Less: Valuation adjustments <sup>6</sup>	(944)	(981)
Sufficiency Ratio assets	29,886	27,324

1. Represents the market value of investment assets at the end of the reporting period, less cash contributed from operations, assuming the cash was contributed at the end of the last month of the period.

The expected investment assets are calculated based on the long-term annual rate of return assumption of 5.25% (2015 – 6.0%) on the ending total investment assets balance as of the last reporting period.

 Calculated as the difference between the expected investment assets and the actual market value of investments, representing the unrecognized investment returns above (below) the long-term annual rate of return assumption of 5.25% (2015 – 6.0%).

4. Represents the amount recognized in the period. See table in note 4.

5. Represents the valuation adjustments from the prior years' unrecognized investment returns above (below) the long-term annual rate of return. See table in note 4.

6. Represents the total valuation adjustments deducted from the total assets shown on our unaudited interim consolidated statements of financial position to establish the Sufficiency Ratio assets used in the calculation of the Sufficiency Ratio.



## 5. Calculation of the Insurance Fund Ratio

The Insurance Fund Ratio is provided as a supplemental measure to illustrate the ratio of assets to liabilities of the WSIB on a sufficiency basis prior to the inclusion of the Employee Benefit Plans on a sufficiency basis. The Insurance Fund Ratio is calculated using the same components as the Sufficiency Ratio as described in notes 2 and 4, except that the investments and net liability of the Employee Benefit Plans as calculated in note 3 are excluded.

## 6. Calculation of the Employee Benefit Plans Ratio

The Employee Benefit Plans Ratio is provided as a supplemental measure to illustrate the ratio of the assets and the liabilities of the Employee Benefit Plans on a sufficiency basis. The Employee Benefit Plans Ratio is calculated by dividing the assets of the Employee Benefit Plans on a sufficiency basis by the liabilities of the Employee Benefit Plans on a sufficiency basis. The balance of the liabilities of the Employee Benefit Plans on a sufficiency basis. The balance of the liabilities of the Employee Benefit Plans is calculated using a discount rate of 5.2% determined with reference to the long-term expected annual rate of return on pension plan assets and the WSIB's investment strategy as described in note 2.