Rate Framework Reform

Paper 4:
The Unfunded Liability

MARCH 2015

WORKPLACE SAFETY AND INSURANCE BOARD

wsib ONTARIO

MESSAGE FROM THE CHAIR AND PRESIDENT & CEO

In recent years, stakeholders, experts and the WSIB have identified a number of fundamental challenges to the WSIB's current classification and premium rate setting approach.

Following the recent engagement with stakeholders, Mr. Douglas Stanley released his final *Pricing Fairness* report, in which he recommends that the WSIB develop an Integrated Rate Framework that would change the way employers are classified and the way premium rates are set.

After a careful review of Stanley's recommendations, consideration of stakeholder perspectives and challenges, the WSIB's own analysis and advice from a team of actuarial experts from the firm Morneau Shepell, the WSIB committed to bring forward a proposed preliminary Rate Framework for discussion with stakeholders.

The WSIB's objectives are to consider reforms that ensure that everyone pays their fair share for workplace coverage, to ensure that there is a reasonable balance between premium rate stability and responsiveness, and to make it easier for stakeholders to understand and engage in the process.

The proposed preliminary Rate Framework described in these technical papers builds upon Stanley's recommendations and proposes a plausible working model – a way forward for the WSIB to distribute the costs of the system in a fair and transparent manner.

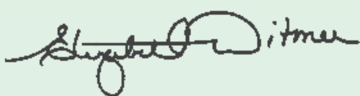
Its key features are:

- A simplified, transparent and modernized classification system, aligned to an accepted national standard;
- A fair process that prospectively sets premium rates, reflecting individual employers' claims experience relative to their industry; and
- Considerations for a reasonable transition path to ensure employers can gradually adjust to the new premium rate setting process.

Although the WSIB is proposing a plausible working model, there are a number of options and key questions for further consideration. The WSIB understands that it is only with stakeholders' varied and unique perspectives that it will be able to make informed decisions on the issues currently faced by the system.

The WSIB is thankful for the support and thoughtful engagement of stakeholders in the Rate Framework Reform initiative and looks forward to further opportunities to hear the diverse perspectives as we consider potential reforms to the current approaches for employer classification and premium rate setting.

Yours truly,



Elizabeth Witmer
Chair

I. David Marshall
President & CEO

March 31, 2015

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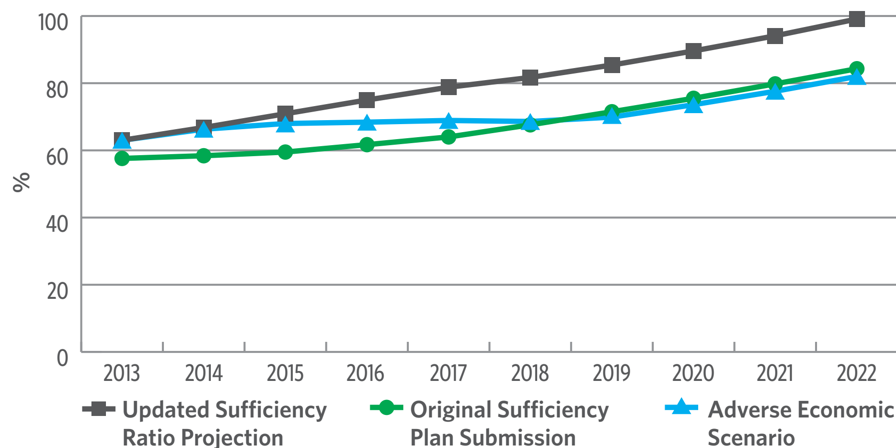
PAPER 4 | THE UNFUNDED LIABILITY

The unfunded liability (UFL) represents the shortfall between the money needed to pay the future benefits to workers for all established claims, and the money that is in the insurance fund.

The government has recognized that the elimination of the UFL is an important goal and legislated a three stage sufficiency requirement for achieving full funding. As per the charts below, the WSIB must reach at least 60% funding by 2017, 80% funding by 2022 and 100% funding by 2027.

However, as per the updated sufficiency plan projections below, the WSIB is projecting the UFL to be essentially 100% funded by 2022.

Figure 1: Sufficiency Rate Projections



Year	Original Sufficiency Plan Submission (%)	Updated Sufficiency Ratio Projection (%)	Adverse Economic Scenario (%)	Variance to Updated Sufficiency Ratio Projection (%)	Variance to Adverse Economic Scenario (%)
2013	57.6	63.0*	63.0*	5.4	0.0
2014	58.4	66.8	66.3	8.4	0.5
2015	59.5	70.9	68.0	11.4	2.9
2016	61.7	75.0	68.4	13.3	6.6
2017	**64.0**	**78.8**	**68.9**	**14.8**	**9.9**
2018	67.6	81.7	68.6	14.1	13.1
2019	71.5	85.4	69.9	13.9	15.5
2020	75.5	89.6	73.6	14.1	16.0
2021	79.8	94.1	77.6	14.3	16.5
2022	**84.3**	**99.1**	**82.0**	**14.8**	**17.1**

** The 2013 Sufficiency Ratio is the actual result. Remaining Sufficiency Ratios are projections only.*

The WSIB's Current Apportionment of the UFL

Since 1999, the UFL charge has been determined for Schedule 1 employers as a collective whole. The charge has then been apportioned to rate groups (RGs) based on their share of new claim costs (NCC).

This methodology has been modified in recent years due to premium rate freezes or across the board premium rate changes for industry classes and RGs. In this environment, the past claim costs (PCC) charge, which includes the UFL charge, is determined by subtracting the NCC and overhead expense components from the premium rates of RGs.[1]

Analysis of UFL Apportionment Methods

To determine how the UFL should be apportioned under the proposed preliminary Rate Framework, the WSIB conducted analysis on different apportionment methods, taking into consideration that the WSIB's updated Sufficiency Ratio projection is set at nearly 100% by 2022.

Background

In his *Pricing Fairness* report, one of Douglas Stanley's recommendations of apportioning the UFL was that the WSIB should apply a fixed charge to all employers that recognizes collective responsibility for the UFL.

As well, as part of the Pricing Fairness Consultation, Stanley released three alternative approaches of apportioning the UFL by class for discussion purposes. All three approaches attempt to reflect past responsibility for the UFL at the class level and differ from the NCC method.

The WSIB reviewed these approaches and is suggesting that the third approach, in principle, merits further consideration as a viable approach of apportioning class responsibility for the UFL. Going forward, this approach will be referred to as the Past Responsibility (PR) method.

The WSIB has incorporated both of these concepts and developed an alternative method of apportioning the UFL that includes a:

- Fixed charge that is applied equally to all employers that recognizes collective responsibility for the UFL; and
- Variable charge (based on the PR method), that is applied to each class that recognizes its past responsibility for the UFL and apportioned to employers based on their share of the class NCC.

This alternative method is described in more detail on the following pages and will be compared to the NCC method.

1 For the purposes of the following analysis, all the components of the PCC charge (e.g., UFL, gains/losses etc.) are included as part of the UFL charge.

Fixed Charge

It is reasonable for all employers to be collectively responsible for the portion of the UFL that is unrelated to the claims experience of particular classes. For example, items such as gains/losses related to investment returns, the employee benefit plan and accounting changes, do not relate to benefit payment expenses. Since these types of costs cannot be specifically allocated to a particular class, it makes sense to have all employers collectively share in them through a fixed charge.

This collective portion of the UFL may fluctuate each year based on the various factors that are unrelated to the experience of particular classes. If the WSIB adjusted the fixed charge on an annual basis, employers may potentially experience premium rate volatility. To mitigate this, it could be suggested that the fixed charge remain unchanged until the UFL is eliminated.

For the purpose of this analysis, a fixed charge of $0.05 is being proposed. This amount is consistent with the recommendations of both Douglas Stanley and Professor Harry Arthurs. Stanley recommended a "modest" fixed charge and Arthurs recommended a fixed charge of $0.03 which would collect 5% of annual UFL revenue. Using current insurable earnings and UFL revenue figures, a $0.05 fixed charge would collect about 5% of annual UFL revenue.

Class Variable Charge/PR Method

Prior to 1999, responsibility for the UFL was determined for each class, however, from 1999 to present, this practice did not continue.

To reflect each class's responsibility for the UFL, the PR method approximated their responsibility for the UFL, as if the practice continued.

To do this, the PR method used the 1998 closing balance for each class's UFL as its starting point (adjusted for investment returns through to 2012).

It then adjusted each class's UFL based on their notional gains/losses between 1999 and 2012 (adjusted for inflation). The notional gains/losses were determined by comparing gains from premiums paid (net of experience rating adjustments) against losses from claim costs.

The PR method of allocating responsibility for the UFL was then used to develop class variable charges.

To demonstrate the outcome of the PR method, as part of the Pricing Fairness Consultation, Stanley compared the PR method with the method of apportioning the UFL charge used in 2013.

As noted earlier, the 2013 UFL allocation method involved subtracting the NCC and overhead expense components from the premium rates of RGs.

Figure 2: 2013 Method Compared with PR Method

Class Letter	Class Description	2013 Allocation by Class (%)	PR Method Allocation by Class (%)	Change (%)
A	Forest Products	1.52	9.55	529
B	Mining and Related Industries	3.58	11.43	219
C	Other Primary Industries	0.94	2.11	124
D	Manufacturing	27.38	45.31	65
E	Transportation and Storage	8.86	2.11	-76
F	Retail and Wholesale Trades	12.80	2.11	-84
G	Construction	26.30	23.17	-12
H	Government and Related Services	7.67	2.11	-73
I	Other Services	10.95	2.11	-81
	Schedule 1	100.0	100.0	0

At the time of the consultation, it was noted that the premium rate implications associated with the PR method would bring significant volatility, particularly to certain classes, and would not be feasible to implement.

Apportionment Analysis

To be consistent with the other papers, 2014 UFL charges were developed for each method of apportioning the UFL, using 2014 updated insurable earnings and UFL revenue requirements of $1.5 billion.

To reflect the current state of the UFL in 2014, the WSIB used the 2013 UFL allocation by class and the 2014 figures (described above) to develop current state UFL charges.

Method 1 and 2

The fixed charge would collect about 5% of the annual UFL revenue. The remaining UFL revenue (95%) would be collected through the class variable charge.

This may be a fair method of apportioning responsibility for the UFL and will be referred to as Method 1 going forward.

While Method 1 may be fair, it may introduce too much premium rate volatility for certain classes. To reduce this volatility, Method 1 was adjusted to only allow the total class UFL charges to increase/decrease by a maximum of 50% from the current state UFL charges[2]. This 50% UFL limitation will be referred to as Method 2.

2 The total class UFL charges include both the fixed charge and class variable charge components.

The following chart outlines the impact of the UFL apportionment methods in the current class structure.

Nine Class Comparison

Class Letter	Class Description	Current State UFL Charge ($)	Method 1 $0.05 Fixed Charge PR Method Class Charge		Method 2 $0.05 Fixed Charge PR Method Class Charge 50% +/- Limit	
			UFL Charge ($)	Change (%)	UFL Charge ($)	Change (%)
A	Forest Products	2.00	11.92	497	3.00	50
B	Mining and Related Industries	2.72	8.24	203	4.08	50
C	Other Primary Industries	0.76	1.65	118	1.13	50
D	Manufacturing	1.08	1.74	61	1.63	50
E	Transportation and Storage	1.73	0.44	-75	1.07	-38
F	Retail and Wholesale Trades	0.60	0.14	-76	0.37	-39
G	Construction	2.31	1.97	-15	2.14	-7
H	Government and Related Services	0.33	0.14	-59	0.23	-30
I	Other Services	0.50	0.14	-72	0.32	-37
	Schedule 1	0.90	0.90	0	0.90	0

As you will note, Method 1 would result in significant UFL charge increases for some classes that they may be unable to bear (for example, a 497% increase for Class A).

Method 2 moderates the impact of Method 1 with the 50% increase/decrease limit to prevent classes from experiencing significant UFL charge increases that they may be unable to bear.

For analysis purposes, to see the impact under the proposed preliminary Rate Framework, the above three methods were transferred to the proposed 22 class structure.

To do this, the UFL was transferred by assigning employers a share of their class UFL under the 9 classes based on their share of class insurable earnings. Employers would then take their share of the UFL with them to the proposed 22 class structure. As an example, if an employer has 0.5% of their classes' insurable earnings (under the 9 classes), they would be assigned 0.5% of their classes' UFL. That portion of the UFL (0.5%) would then be transferred to one of the proposed 22 classes.

Note: Under Method 2, the 50% increase/decrease limit is applied when the UFL is reapportioned under the current class structure. This limit is no longer applicable after the UFL is transferred to the proposed 22 classes.

22 Class Comparison

			Method 1 $0.05 Fixed Charge PR Method Class Charge		Method 2 $0.05 Fixed Charge PR Method Class Charge 50% +/- Limit (Limit Applied to 9 Classes)	
Class Letter	**Class Description**	**Current State UFL Charge ($)**	**UFL Charge ($)**	**Change (%)**	**UFL Charge ($)**	**Change (%)**
A	Primary Resources Industries	1.89	5.48	190	2.80	48
B	Utilities	0.33	0.14	-59	0.23	-30
C	Public Administration	0.35	0.15	-58	0.25	-30
D	Food, Textile and Related Manufacturing	1.06	1.68	57	1.57	48
E	Resource and Related Manufacturing	1.18	2.78	135	1.74	47
F	Machinery and Other Manufacturing	1.09	1.70	56	1.60	47
G1	Building Construction	2.26	1.92	-15	2.09	-8
G2	Infrastructure Construction	1.87	1.70	-9	1.75	-6
G3	Specialty Trades Construction	2.21	1.92	-13	2.07	-7
H	Wholesale Trade	0.64	0.23	-64	0.44	-32
I	General Trade	0.62	0.17	-72	0.39	-37
J	Specialized Retail and Department Stores	0.61	0.16	-73	0.38	-37
K	Transportation and Warehousing	1.59	0.44	-73	1.00	-37
L	Information and Culture	0.69	0.66	-5	0.74	7
M	Finance	0.55	0.18	-67	0.36	-34
N	Professional, Scientific and Technical	0.58	0.24	-58	0.41	-30
O	Administrative, Waste and Remediation	0.73	0.39	-47	0.55	-25
P	Hospitals	0.33	0.14	-59	0.23	-30
Q	Health and Social Services	0.35	0.14	-60	0.24	-31
R	Leisure and Hospitality	0.51	0.15	-71	0.32	-36
S	Other Services	0.58	0.19	-67	0.38	-34
T	Education	0.33	0.14	-59	0.23	-30
	Schedule 1	0.90	0.90	0	0.90	0

Similar to its impact under the 9 classes, when comparing to the current state, Method 1 would result in significant UFL charge increases for some classes that they may be unable to bear (for example, a 190% increase for Class A).

When compared to Method 1, Method 2 strikes a more appropriate balance between reflecting past responsibly for the UFL and ensuring that classes do not experience unreasonable UFL charge increases. As a result, Method 2 is an alternative method that will be compared with the NCC method.

New Claims Cost Method

As mentioned at the beginning of this paper, the NCC method was used to apportion the UFL charge before premium rates were frozen or set with the across the board premium rate approach for classes and rate groups.

If the WSIB were to use the NCC methodology on a go forward basis, the required UFL charge would need to be determined for Schedule 1 and apportioned to each class based on their share of NCC.

The class UFL charges would then be apportioned to each employer within their class based on their share of class NCC. This is to ensure that the class UFL charges are fairly allocated to employers, since those employers with decreasing NCC would help reduce the UFL while those employers with increasing NCC would add to it.

Through prevention initiatives and timely return to work efforts, employers can reduce their NCC and thus their UFL charge.

Comparison of All Methods

The following chart compares the current state UFL charges with UFL charges under the NCC method and Method 2.

In many cases the NCC method and Method 2 are directionally consistent under the nine classes (i.e. classes that experience a UFL charge increase or decrease under the NCC method also experience an increase or decrease under Method 2).

Nine Class Comparison			**NCC Method**		**Method 2** $0.05 Fixed Charge PR Method Class Charge 50% +/- Limit	
Class Letter	**Class Description**	**Current State UFL Charge ($)**	**UFL Charge ($)**	**Change (%)**	**UFL Charge ($)**	**Change (%)**
A	Forest Products	2.00	2.18	9	3.00	50
B	Mining And Related Industries	2.72	1.77	-35	4.08	50
C	Other Primary Industries	0.76	1.81	139	1.13	50
D	Manufacturing	1.08	1.10	2	1.63	50
E	Transportation And Storage	1.73	1.74	0	1.07	-38
F	Retail And Wholesale Trades	0.60	0.57	-5	0.37	-39
G	Construction	2.31	2.10	-9	2.14	-7
H	Government And Related Services	0.33	0.49	49	0.23	-30
I	Other Services	0.50	0.43	-14	0.32	-37
	Schedule 1	0.90	0.90	0	0.90	0

However, under the proposed 22 classes, the number of classes that are directionally consistent (in increases or decreases) between the NCC and Method 2 is somewhat reduced.

22 Class Comparison			**NCC Method**		**Method 2** $0.05 Fixed Charge PR Method Class Charge 50% +/- Limit (Limit Applied to 9 Classes)	
Class Letter	**Class Description**	**Current State UFL Charge ($)**	**UFL Charge ($)**	**Change (%)**	**UFL Charge ($)**	**Change (%)**
A	Primary Resources Industries	1.89	1.75	-7	2.80	48
B	Utilities	0.33	0.34	1	0.23	-30
C	Public Administration	0.35	1.46	315	0.25	-30
D	Food, Textile and Related Manufacturing	1.06	1.15	8	1.57	48
E	Resource and Related Manufacturing	1.18	1.24	4	1.74	47
F	Machinery and Other Manufacturing	1.09	1.20	10	1.60	47
G1	Building Construction	2.26	2.01	-11	2.09	-8
G2	Infrastructure Construction	1.87	1.87	0	1.75	-6
G3	Specialty Trades Construction	2.21	1.75	-21	2.07	-7
H	Wholesale Trade	0.64	0.60	-6	0.44	-32
I	General Trade	0.62	0.58	-7	0.39	-37
J	Specialized Retail and Department Stores	0.61	0.49	-19	0.38	-37
K	Transportation and Warehousing	1.59	1.63	2	1.00	-37
L	Information and Culture	0.69	0.19	-72	0.74	7
M	Finance	0.55	0.46	-18	0.36	-34
N	Professional, Scientific and Technical	0.58	0.17	-71	0.41	-30
O	Administrative, Waste and Remediation	0.73	0.95	30	0.55	-25
P	Hospitals	0.33	0.36	8	0.23	-30
Q	Health and Social Services	0.35	0.83	135	0.24	-31
R	Leisure and Hospitality	0.51	0.67	32	0.32	-36
S	Other Services	0.58	0.88	53	0.38	-34
T	Education	0.33	0.13	-60	0.23	-30
	Schedule 1	0.90	0.90	0	0.90	0

Proposed Preliminary Rate Framework

While the NCC method does not consider past responsibility for the UFL, it is directionally consistent with Method 2 which strikes a more appropriate balance between reflecting past responsibly for the UFL and ensuring that classes do not experience unreasonable UFL charge increases in the majority of cases.

As well, as is outlined at the beginning of the paper, the WSIB is projecting that the sufficiency ratio will be set at nearly 100% by 2022. In light of this factor, it may not be advisable to introduce a new method of apportioning the UFL given the shorter period to eliminate the UFL, as well as the changes associated with the introduction of Rate Framework reforms and transitioning employers to their new premium rates within that same time period.

This NCC method of allocating the UFL was used in the development of the plausible working model that is outlined in Paper 3: The Proposed Preliminary Rate Framework.

QUESTIONS FOR CONSIDERATION

As outlined in the WSIB's Sufficiency Plan and described in Paper 5: A Path Forward, the UFL is projected to be significantly reduced when the WSIB may introduce a new Rate Framework.

1. ***Should the WSIB use the NCC method or consider Method 2 of apportioning the UFL as described earlier in this paper?***

Pricing Fairness Recommendation #5.1

Mr. Douglas Stanley recommended that

… the contribution to the UFL be made up of two fixed and one variable charge.

- *A modest general fixed charge on all employers in the system recognizing their responsibility,*
- *A fixed sector amount based on the sector an employer is in, and*
- *An amount based on the employer's New Claim Costs (NCC).*

GLOSSARY

Actuarial Predictability is a process where the WSIB determines the degree to which past claims costs can be relied upon to predict future outcomes and therefore fairly and accurately set premium rates. Also referred to as actuarial credibility.

Class Actual Premium Rate is the premium rate that would be set by the WSIB, taking into consideration risk band limitations, previous year(s) premium rates, as well as the collective experience of all employers in that class.

Class Target Premium Rate is a premium rate based on the valuation of collective liabilities of new claim costs for the employers within a respective class, their allocation of administrative costs, and apportionment of the past claims costs for a particular class.

Employer Actual Premium Rate is an adjusted premium rate that represents how much each employer would pay taking into consideration risk band limitations, previous year(s) premium rates, minimum premium rate, as well as the collective experience of all employers in that class.

Employer Level Premium Rate Adjustment is a process where the Class Target Premium Rate is adjusted for an individual employer based on their risk relative to the Class Target Premium Rate, to arrive at their individual risk band position and corresponding Employer Target and Actual Premium Rates.

Employer Target Premium Rate is an adjusted premium rate that represents how much an employer needs to pay in order to fund their fair share of costs, as well as the collective costs of their class.

Net Premium Rate represents the premium rate, for a class, rate group or individual employer, comprised of the published premium rate combined with any premium adjustments resulting from the existing experience rating programs, as applicable.

Predominant Class is the class that represents the largest percentage of the employer's annual insurable earnings.

Risk Adjusted Premium Rate Setting is a two-step process that includes setting the Class Target Premium Rate and Employer Level Premium Rate Adjustments.

Risk Bands are hierarchical series of divisions within each class. Each division represents a different level of risk where employers would be placed relative to the Class Target Premium Rate. In each class, risk bands are subject to limitations, such as the premium rate of the minimum risk band ($0. 20), and the maximum risk band will not exceed about three times the Class Target Premium Rate. Each risk band represents approximately 5% increments in premium rate.

Risk Disparity is when claims experience or premium rates vary significantly from the average experience of the class.

Risk Profile is a step in determining the allocation of the costs to the system between the classes and/or individual employers, and is based on an employer's (or a class') claims costs relative to their insurable earnings.