

# Review of the model to establish the premium rates

SEPTEMBER 2, 2016

wcb

Saskatchewan  
Workers'  
Compensation  
Board

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## Section 1: Introduction

Following the mandate received from the board, we have recently performed a review of the rate setting model used by the Saskatchewan Workers' Compensation Board (WCB) for the determination of its revenue requirements in 2016 and how they are apportioned among rate codes. This document outlines the main results of our review of WCB's current rate model and presents an overview of our principal recommendations for changes to the model for future years, as submitted to the board.

This review follows one of the recommendations of our 2015 report on the asset liability study that was performed to illustrate the financial risks inherent at the WCB, as well as their impact on the long term funding of the board and on the premiums eventually paid by Saskatchewan employers.

### General

In accordance with *The Workers Compensation Act, 2013* ("the Act"), the WCB provides benefits and services to workers who are injured at work. The cost of the workers' compensation system in Saskatchewan, as in all other provinces in Canada, is funded through premiums paid by employers. Rate making is the process of establishing premiums prospectively for the employers in Saskatchewan with the objective of ensuring the continued financial health of the WCB.

The WCB maintains an Injury Fund to provide for the estimated future cost of claims having already occurred in past years. The current amount in the Injury Fund is sufficient to cover these estimated costs; the WCB is thus considered *fully funded*.

### Premiums

Each year, the WCB determines the revenue required in the coming year to cover the expected future cost of all injuries occurring in the year as well as its expected administrative costs.

As the WCB is entirely funded by employers, it covers its costs by setting premium rates for its 50 rate codes, which consist of industries with similar business activities and loss expectations. Premium rates are based on the collective claim experience of all employers within the rate code. Employers are thus charged a premium at their rate code's premium rate, subject to certain experience rating incentives.

The main objectives of the premium setting process are to ensure that:

- The overall premium requirements of the WCB for the coming year are met. Premiums should cover all current and future costs for claims from employers operating during the year: worker compensation and vocational rehabilitation benefits, health care, survivor benefits, administration, safety associations, and other requirements.
- The distribution of these revenue requirements across all employers is equitable. While maintaining collective liability, it should promote accountability and fairness, and recognize injury prevention and disability management.

Premiums paid by employers in 2016 cover the costs, current and future, associated with workplace injuries anticipated to occur during the year as well as the WCB administrative costs. The average premium rate for 2016 has been set at \$1.34 per \$100 of assessable payroll. At the time of the review, the total assessable payrolls for 2016 have been estimated at about \$21.78B, translating into estimated employer premium revenues of about \$290M.

## WCB rate setting model

The WCB has been using its current rate setting model since 1998. Policy 05/2015 of the WCB outlines the actuarial based model used to set annual industry premium rates.

Currently, the rate setting model considers an industry's historical claim costs, payroll and time loss frequency trends to project all costs tied to next year's expected time loss claims. It then calculates the revenue required to fund these projected claims' costs 50 years into the future.

While some modifications have been made to this model in the past, we understand that the main components have essentially been in place for nearly 20 years.

To inform the recommendations contained in our review, we analysed the model in place at the WCB, in particular the calculations done for the determination of the 2016 premium rates, obtained detailed information on employers' payrolls, classification and claim costs since 2009, performed various calculations and tests, and reviewed the rate setting models in place in several other Canadian workers' compensation boards.

## Guiding principles

In formulating a rate model, competing principles must be balanced. The rate model should be robust and sustainable, satisfying the needs, goals and expectations of employers, while being actuarially sound, relatively simple and easy to understand, to communicate and to administer.

The key principles we have applied to guide our review of the rate making model are:

**Fairness (accountability, equity and incentives for prevention):** Premiums paid by current employers should cover the costs of their injured workers during the premium period. This principle covers inter-generational equity (current employers should not be paying for claim costs generated by past employers, nor should they be subsidizing the claim costs of future employers) and intra-generational equity (employers that incur injuries should be responsible for the costs associated with those injuries). A fair rate making model encourages workplace safety and effective return to work policies by financially incentivising employers' positive behaviours.

**Collective liability (insurance):** Employers, as a group and those within the same industry, are jointly responsible for all workers' compensation costs. Also, employers should not be excessively punished for unusually costly claims, thus portions of unusually costly claims' costs should be shared by all employers.

**Predictability (rate stability):** Employers should rely on a level of predictability and stability in premiums.

**Transparency (ease of understanding):** Employers should be able to understand the factors that went into setting their premiums, and the WCB should be able to clearly communicate this information to employers.

These principles are sometimes in conflict: for example, strongly basing rates on most recent claim experience would improve fairness, as the current generation of employers would pay premiums that are more representative of their current costs, but it would negatively impact rate stability because the rate may change unpredictably following rapid improvements or deteriorations in claim experience. Balancing of the principles is key as rates cannot be both fully fair and stable.

The above mentioned principles are foundational to our review and to rate models in general. To ensure the WCB's continued financial health we must also incorporate actuarial principles regarding ratemaking in a workers' compensation system<sup>1</sup>:

**Rates reflect anticipated future costs:** A rate is established using a reasonable estimate of expected future costs.

**Financial integrity:** A rate must provide for all costs so that the system as a whole is financially sound; no costs should be excluded from the rate unless funds can be raised elsewhere to cover them.

**Credibility:** Rates are determined so that equity among employers is maintained; when the experience of a rate code does not provide a credible basis for estimating costs, it is appropriate to consider the aggregate experience of similar rate codes.

An actuarially sound estimate of the expected value of all future costs provides for rates that are reasonable and not excessive, inadequate, or unfairly discriminatory.

### Questions to be addressed

The WCB strives to maintain high levels of fairness and transparency among employers in its rate making process, and in conducting our review, we have sought to answer these two questions:

- Will premiums collected during the coming year be sufficient to cover expected costs and expenses?
- Do the procedures, assumptions or methods that are used in the process correspond to the WCB's stated goals?

This report will address these questions and aims to explain to all stakeholders the rationale underlying the proposed changes.

Throughout this report, it is necessary for us to use a variety of technical terms, some specific to the Saskatchewan WCB. Readers unfamiliar with these terms are encouraged to refer to the glossary provided in Appendix A as needed.

Section 2 of this document identifies the components of the total premiums charged to employers and comments on the adequacy of the premiums charged to employers in 2016. The results of our review of the methodology to determine the premiums required by rate code and our main recommendations appear in Section 3, before concluding in Section 4.

<sup>1</sup> Based on the *Statement of Principles Regarding Property and Casualty Insurance Ratemaking*, adopted by the Board of directors of the Casualty Actuarial Society (CAS), a professional society of actuaries specializing in property and casualty insurance.

## Section 2: Premium requirements

The determination of premium requirements and the distribution of these premiums among employers follow financing policies established by the WCB in accordance with the Act.

### Financing WCB policies

The basis for the financing of the WCB is found in the Act, in particular Part V on Injury Fund (sections 114 to 121) and Part VI on Assessments (sections 134 to 151). Appendix B presents some excerpts of *The Workers' Compensation Act, 2013 (Act)* that refer to the funding of the WCB and the determination of the premium rates. In addition, regulations have been adopted and the board has developed policies and procedures. The main elements that we have used in our review include:

**Injury Fund:** The WCB maintains an Injury Fund, crediting premiums and charging costs. The fund shall be maintained so that it is sufficient to meet all the payments to be made out of the fund and that the employers in any class are not unduly or unfairly burdened in future years with payments to be made in those years with respect to costs and injuries that have previously occurred.

This implies that the costs be fully funded. The full funding principle is followed by the WCB in setting the premiums required from employers and is consistent with all Canadian boards.

**Classification of employers:** The board may establish any classes of industries and subdivide a class into subclasses, and shall fix the premium rates payable by the employers in each subclass. The guidelines on the industry classification structure are presented in Policy 14/2011 on employer classification.

**Premium rates:** The board shall levy an assessment based on any percentage of the employers' payrolls in each class of industries to pay the compensation with respect to injuries to workers in the businesses within the class, the expenses of the administration of the Act, and the cost of the administration of the occupational health and safety program for that year. Industry premium rates are set annually at the rate code level based on the collective claims experience of all employers within the industry rate code.

**Maximum wage rate or assessable earnings:** For injuries before 2014, the maximum is \$55,000 per year, adjusted annually after 2013 in accordance with the change in the Saskatchewan's average weekly wage as reported by Stats Canada. For injuries in 2014 or after, the maximum is \$59,000 per year, adjusted annually so that the maximum wage rate per year for those workers is, in the fifth and subsequent years, equal to 165% of the product of the average weekly wage and 52.

In accordance with the above, the WCB has established the 2016 premium rates, 49 rates per \$100 of assessable earnings and one rate (for code S14 - Unions) at \$6.00 per delegate; they are presented in Appendix C for reference purposes. As can be observed, the 50 rate codes currently in place at the board are grouped into 10 classes.

### WCB 2016 average premium rate

The first item to address in a rate model review is the total premium requirements: Are the premiums collected during the coming year sufficient to cover all expected costs and expenses?

The premiums paid by current employers should cover the estimated current and future costs of current year injuries and all expenses. The WCB, like other Canadian workers' compensation boards, determines the average premium rate to be charged to employers on the basis of the following components:

- **Fully funded cost of claims:** To cover all expected benefit payments, current and future, arising from injuries assumed to occur in the coming year; the premium rate is determined such that sufficient funds are collected to ensure that long term claims can be paid when due.

- **WCB administrative expenses:** The annual costs to run the workers' compensation system.
- **Safety and prevention costs:** The safety and prevention costs, as well as any other legislated obligations.
- **Other costs:** Such as the net cost of the experience rating program (excess of discounts over surcharges) and the application of the funding policy (e.g. charges to replenish the Injury Fund in case of an unfunded liability).

The average premium rate at the board level is set as the sum of these requirements divided by the estimated assessable payroll of all employers in Saskatchewan for the year. In 2016, the average premium rate charged to employers is \$1.34 per \$100 of assessable payroll. The different components of the rate are as follows:

**Table 2.1 - Average 2016 premium rate at the WCB**

Components	2016 rate	Proportion
Fully funded cost of claims	\$0.963	71.8%
Administrative expenses	\$0.330	24.6%
Safety and prevention costs	\$0.049	3.6%
Other costs	\$0.000	0.0%
<b>Total</b>	<b>\$1.34</b>	<b>100.0%</b>

In analysing the adequacy of the average premium rate, we have used the 2005 to 2014 rate reconciliation of the rate setting model as prepared by the WCB.

For the **fully funded cost of claims**, the claim costs for each of the last 10 injury years as determined as of December 31, 2014 has been determined as the sum of:

- The total actual costs paid through December 31, 2014 for all claims occurring in the year, valued at July 1st of the injury year; and
- The outstanding costs (future liabilities) as at December 31, 2014 for all claims occurring in the year, as determined by the actuary, valued at July 1st of the injury year.

The average claim costs per \$100 of assessable payroll as determined at December 31, 2014 for the years 2005 to 2014 over different periods are as follows:

**Table 2.2 - Average actual claim costs from 2005 to 2014**

Period	Duration	Average rate
2005-2014	10 years	0.987
2005-2009	5 years	1.107
<b>2010-2014</b>	<b>5 years</b>	<b>0.867</b>

We observe that the cost of claims has fallen over the 2005-2014 period: while the average rate over the past 10 years stands at \$1.107 per \$100 of assessable payroll, the average rate over the most recent 5 years stands at \$0.867.

We contrast these amounts to the rate of \$0.963 used for the fully funded cost of claims in the determination of the 2016 average premium rate, reflecting a prudent approach to the emerging improvement in claim experience at the WCB.

A similar comparison for other premium rate components indicates that, for **administrative expenses** and **safety and prevention costs**, the difference between the actual costs and the expected costs at time of rate setting over the last 10 premium years has been on average at 2%. We can conclude that the estimated provision in the rate setting process for these cost components has been appropriately set.

The WCB should compare the expected fully funded cost of claims to the overall most recent claim experience to ensure that the premium requirements are actuarially sound and follow the actuarial principle that **rates reflect anticipated future costs** of the claims in the rate model year.

**Recommendation 1:** *We recommend that the fully funded cost of claims used for the determination of premiums represent the WCB's best actuarial estimate reflecting recent experience, using realistic long term assumptions, without expecting improvements in experience or providing for undue margins. The rate should not result in sustained gains or losses, and only the most recently available data should be used to establish it.*

## Experience rating programs

In keeping with the actuarial principle of **financial integrity** of the WCB, all sources of costs should be accounted for in the calculation of the premium rates. The 2016 average premium rate included all cost elements except the net cost of experience rating programs. Through experience rating programs, the WCB rewards individual employers for good past claim performance<sup>2</sup>.

Our analysis has revealed that the experience rating programs produce more discounts than surcharges. As no provision is included in the premium rates to cover this imbalance, it has resulted in less revenues being collected than anticipated. This imbalance has represented an average deficit of \$0.013 per \$100 of assessable payroll over the 2010-2014 period.

**Recommendation 2:** *We recommend that further study be done to determine the sources of the imbalance between discounts and surcharges in the experience rating programs and to evaluate if a provision should be included in the calculation of premium rates.*

<sup>2</sup> The nature of these programs is explained in a brochure available at <http://www.wcbask.com/employers/classification-premium-rates/experience-rating>

## Section 3: Methodology to determine the premium rates by rate code

The process of setting premium rates is intricate, deeply technical, and requires familiarity with a broad set of actuarial principles. We have thoroughly reviewed the methodology and all assumptions used by the WCB in its rate model and its calculations of premium rates and we have provided the board with our recommendations.

Broadly speaking, we find that the process used by the WCB for the determination of premium rates by rate code is sound. We believe that several refinements to the board's rate model are warranted as opposed to a complete overhaul. We present our main recommendations and the reasoning underlying each one in this report.

### General

Premiums paid by employers to the WCB are calculated in accordance with the following formula:

$$\text{Premium} = \text{payroll} \times \text{rate} \div 100$$

While employers are collectively responsible for the cost of the entire workers' compensation program, they are not all charged the same premium rate. A premium rate (or simply "rate") is determined for each rate code and used to calculate the actual premium. The WCB estimates the claim costs, administrative expenses and safety association expenses for the coming year for each rate code, and the rate charged to each rate code is simply the total of these expected costs divided by a reasonable estimate of the rate code's payroll for the coming year.

The difficulty is coming up with a reasonable estimate of future claim costs. We can never be certain of the number and the severity of injuries that will happen in the future because they are, by their very nature, unusual and random events; however, we can examine each rate code's past claim experience to inform our "prediction" of its claims performance that, suitably adjusted to economic conditions, can provide a reasonable estimate of future claim costs.

### Classification of employers

As mentioned above, each employer is classified into one of 50 rate codes broadly corresponding to industries<sup>3</sup>. Employers pay a premium calculated using the premium rate of the rate code in which they are classified.

Employers in each rate code are responsible for the costs of injuries and diseases that occur to the workers within the group, with the intent that each rate code be self-sufficient with regard to its claim costs. Ideally, to follow the principles of **fairness (accountability)** and **predictability**, the classification should limit cross-subsidization between industries and maintain relatively stable premium rates. The chosen classification structure is therefore foundational to the rate setting process and care must be taken when designing it.

The main parameter governing rate code creation is that of **homogeneity**, which is to say that employers within a rate code should have similar business activities such that their workers are exposed to similar risks. Having homogenous rate codes eliminates concerns of cross-subsidization as all employers within a given rate code have similar loss expectations, and it is therefore reasonable to charge each employer within the rate code the same premium rate.

However, homogenous rate codes are not created equal; some are quite large and others are much smaller. Large rate codes have many workers, and intuitively we would expect the number and severity of claims to be relatively stable from one year to the next. We cannot assume the same for small rate codes with fewer workers because a single serious claim may comprise a significant portion of all claim costs for any given year.

The observation that large groups tend closer to their own average performance than small groups leads to the second parameter of **credibility** governing rate code creation where the number and

<sup>3</sup> A full list of industry rate codes is available in Appendix C.

severity of claims in large groups are more predictable than that of small groups. The classification structure should thus seek to maximize the size of its rate codes so that each has enough credibility and, consequently, stable and predictable premium rates year-over-year.

These two parameters for designing rate codes, **homogeneity** and **credibility**, are at odds with each other. Homogeneity demands smaller rate codes with narrowly defined business activities, but credibility demands larger rate codes. An appropriate classification scheme strikes a balance between these two parameters.

In our review of the rate model, we have determined that several rate codes are too small to provide stable and predictable rates, therefore not adequately keeping with the actuarial principle of **credibility**. Methods exist to improve the stability and predictability of the rates obtained for these small rate codes, and we address them in our subsection on credibility further in this report.

That being said, in the future, a review of the classification of employers should be done to reduce and possibly eliminate rate codes with weak credibility all while preserving, as much as possible, homogeneity. This review should use a defined set of objective criteria in order to enhance the consistency and defensibility of the board's classification decisions. Additionally, the continued integrity of the classification structure should be monitored through a formal process, incrementally updating the classification structure over time as experience develops.

**Recommendation 3:** *We recommend that the WCB review its classification structure to ensure that rate codes are grouping employers with similar claim costs and that their experience has sufficient credibility for stable and predictable premium rates. Furthermore, the WCB should implement a process to periodically review its classification structure over time as experience develops.*

## Past experience basis

Each rate code's past claim experience is used to provide a reasonable estimate of future claim costs. As with all aspects of rate making, the WCB must strike a balance between the principles of **fairness** (shortening of the rate setting period in order to be more responsive and reflective of current experience) and actuarial **credibility**.

At the WCB, premium rates are based on the experience of each rate group and use statistical information for the most current five-year period. The rates for 2016 were set in 2015 using the experience period from 2010 through 2014. There are however some exceptions: 3-year experience is used for vocational rehabilitation and medical aid costs and 10-year experience is used for the cost of fatalities.

In line with the period typically used by Canadian workers' compensation boards, we believe that the use of a 5-year experience period is appropriate, and that the experience period should be the same for all benefits to simplify the model and facilitate the **transparency**.

**Recommendation 4:** *We recommend that the WCB maintain its practice of using the claim benefit costs charged to rate codes over the most recent 5 years, and that it be applied to all benefits for consistency and transparency purposes.*

## Indicator to compare experience of past injury years and estimate future costs

Past costs incurred in each rate code must be adjusted to be comparable and be used to estimate future costs, as economic conditions have certainly changed. Factors contributing to these changes in expected costs include the evolution of the number of workers in each industry, the workers' wages, the level of inflation over the economy, and the maximum wage rate at the WCB.

The WCB takes all these factors into account in the rate model by tying the evolution and effect of each factor to so-called "indicator variables", the most important of which is the number of claims having caused any amount of lost time for an injured worker, referred to as "time-loss claims" (TLCs).

Intuitively, using TLCs to adjust past claim costs to future claim costs seems reasonable: one would expect the number of claims to correlate with the total cost of claims. However, in the past decade, Saskatchewan has experienced a significant reduction in the number of TLCs per year which has *not* been accompanied by a proportional reduction in the total cost of claims.

Thus, the use of TLCs to adjust past experience does not follow the actuarial principle of **rates reflect anticipated future costs** because recent experience shows that the number of TLCs is no longer an appropriate measure of future costs.

A similar trend has been evident across all Canadian provinces' WCBs and, consequently, most Canadian boards are no longer using the number of time-loss claims as an indicator variable, preferring instead to look at other measures, such as the evolution of the assessable payroll, adjusted for the increase in wages, which represents an estimation of the evolution of the number of workers.

**Recommendation 5:** *We recommend that the WCB discontinue the process of using the number of time-loss claims as an indicator variable to compare the experience of various injury years and to estimate future costs and instead use the evolution of the assessable payroll, adjusted for the increase in wages and the impact due to changes in the maximum assessable earnings in accordance with the Act.*

## Level of pooling for the allocation of costs among employers

As explained above, the board does not estimate future costs per employer: instead, the total cost for each rate code is estimated, and each employer pays its rate code's resulting rate. Claim costs are thus said to be "pooled" at the rate code level, and all employers in the pool pay the same rate for those costs.

However, certain costs are more appropriately pooled to a larger group than the rate code, at the class level or the board level. Examples of reasons for doing so include:

- The cost benefits all employers equally, such as costs related to safety and prevention programs at the WCB;
- The rate code would bear excessive proportions of a very costly claim resulting from an exceptional and unusual event.

In the course of our review, we have looked at possible improvements to the **level of pooling** of various claim and administrative costs. Costs can be shared at the rate group, class or board level. The level at which different costs will be shared depends on a number of criteria such as the nature of the costs, the possibility of allocating these costs at various levels and the necessary compromise between competing principles. The following table lists the current level of pooling of costs at the WCB along with our recommendations:

**Table 3.1 - Comparison of the level of pooling for the allocation of costs among employers**

Type of cost	Current pooling		Recommended pooling	
	Description	Level	Description	Level
Fully funded claim costs	All costs, except pooled costs	Rate code	All costs, except pooled costs	Rate code
Fatal claim costs	All costs for fatal claims	Board	All costs for fatal claims	Rate code
Costly claims	Capitalized pension costs over \$90,000	Class	All costs exceeding a certain multiple of the maximum assessable earnings	Board
Long term claim costs	N/A	N/A	All costs paid more than 5 to 10 years after the injury year	Board
WCB administrative costs	All administrative costs	Board	All administrative costs	Board

As shown in the above table, we recommend a change in the level of pooling of fatal claim costs, costly claims and long term claim costs. A summary of the context, the factors, the rationale and the impact of the recommendations is presented for each of these cost elements further in this report.

## Basis of allocation

After having decided which costs are pooled to which level, we must consider how these costs are allocated to the chosen pool.

The above mentioned pooled cost components can be apportioned between rate codes as:

- A **fixed rate** (% of payroll) for all rate codes; or as
- A **variable rate** between rate codes based on a measure of risk, i.e. the claim costs.

Currently, the WCB allocates most pooled costs as a fixed percentage of each rate code's payroll. The allocation of pooled costs based on payroll is an appropriate allocation for costs that are not claim-related, but could be construed as violating the principle of **fairness** when applied to claim-related costs, as rate codes would pay for the cost according to their payroll instead of their likelihood of incurring injuries.

The board could use two bases for allocating pooled costs: a fixed rate based on payroll and an alternative basis of allocation based on risk. The method of allocation used should depend on the nature of the costs that must be allocated and appear the most reasonable basis.

Costs allocated based on risk could be charged to rate codes in proportion to their expected fully funded cost of claims (FFCC) for the coming year (each rate code's FFCC being based on its own past claim costs). This allocation method aims to achieve a fairer distribution of claim-related costs, whereby employers in more hazardous industries with higher cost of claims pay more than their counterparts in less hazardous industries.

**Recommendation 6:** *We recommend that the WCB use two bases for allocating pooled costs to rate codes: a fixed rate based on payroll and an alternative basis of allocation of claim-related pooled costs based on risk, in proportion to the expected fully funded cost of claims of rate codes.*

The following table compares the **basis of allocation** of pooled costs currently used along with our recommendations:

**Table 3.2 - Comparison of the basis of allocation of pooled costs between rate codes**

Type of pooled cost	Current basis		Recommended basis	
	Level	Rate	Level	Rate
Fatal claim costs	Board	Fixed (% of payroll)	N/A	
Costly claims	Class	Fixed (% of payroll)	Board	Based on claim costs
Long term claim costs	N/A		Board	Based on claim costs
WCB administrative costs	Board	10%: Fixed (% of payroll) 10%: Based on claim costs 80%: Based on claim payments	Board	Appropriate split between a fixed rate (% of payroll) and a variable rate (based on claim costs)

The rationale for the changes we are recommending to the basis of allocation of pooled costs between rate codes is presented further in this report.

## Allocation of fatality costs

Tragically, work-related injuries sometimes cause the death of the worker, either rapidly due to physical trauma, or as the culmination of a battle with an occupational disease. Fatal injuries are the most serious and devastating of all injuries, and there should be strong incentives for the prevention of fatalities at the WCB.

Benefits paid following the death of a worker are two-pronged:

- Burial benefits, paid to the worker's estate as a lump sum payment, to cover death care services;
- Survivor benefits, paid on a periodic basis to the worker's surviving spouse and dependent children; they include wage-loss, vocational rehabilitation and retirement benefits.

The totality of the cost of fatalities is currently shared at the board level as a fixed percentage of payroll for each rate code. In other words, the WCB charges each and every employer a fixed premium in proportion to their payroll regardless of their past fatal claim costs or their future expected fatal claim costs.

We believe that this arrangement violates the principle of **fairness**: employers in industries with a higher risk of worker fatalities are charged the same amount, proportional to their payroll, as employers in industries with a low risk of worker fatalities. Consequently, rate codes with higher fatality costs are subsidized by rate codes with lower fatality costs.

This is in stark contrast to how the WCB allocates costs for all other non-fatal claims. A serious gap in incentives for the prevention of fatalities arises whereby it is much less costly for a rate code to have a fatal injury than a very serious and expensive one that does not result in death.

In other Canadian workers' compensation boards, the cost of fatal claims is typically charged at the rate code level; the amount charged per fatality is either the actual cost of each fatality or the average cost of fatal claims at the board level.

**Recommendation 7:** *We recommend that all costs arising from fatal injuries be directly charged to the rate code in which they occurred; the cost of fatal workplace injuries or occupational diseases leading to death should be treated as any other claim.*

The intent is to treat all employers and claims consistently and to recognize the serious nature of a fatality by assigning the cost where a fatality has occurred. Industries that incur more fatalities should be penalized through higher premiums, and they should see a material reduction in their premiums after incurring fewer fatalities.

## Costly claims

An important principle that lies at the heart of the board's ratemaking process is that of **fairness**: rate codes that incur injuries should be responsible for the majority of the costs associated with those injuries. Another important principle is that of **collective liability**, whereby employers should not be excessively punished for unusually costly claims and thus a portion of the costly claim's cost should be shared amongst a larger group.

The cost of a claim following a workplace injury or an occupational disease can vary wildly, from a superficial cut requiring a short convalescence to a tragic injury requiring cutting-edge treatments over many years. The WCB must pay benefits to injured workers in full and for as long as medically necessary.

The principle of **fairness** dictates that rate codes should be charged the total cost of claims they incur regardless of their severity. This clashes with the principle of **collective liability** whereby all employers share a portion of responsibility for claim payment. Stated differently, an implicit function of the WCB's rate making process should be to provide a measure of insurance to rate codes, shielding them from unusually costly claims and adding **predictability** and stability to their rates.

The rate model currently charges all claim costs to the rate code in which they occurred, with the exceptions of:

- Fatality costs, which are pooled to all employers (as discussed above); and
- Capitalized pension costs<sup>4</sup>, of which costs under \$90,000 are charged to the employer's rate code and costs over \$90,000 are pooled to the employer's class.

Ignoring the issues with fatality costs discussed above, numerous problems surface when considering the \$90,000 cap pooling amount:

1. Only capitalized pension costs are pooled, yet usually these claims are accompanied by long term medical treatments and potentially many other benefits. These costs continue to be charged to the rate code until the worker's benefits eventually expire, and the rate code receives no "protection" from this unusually costly claim. This violates the principle of **collective liability**.
2. The timing of the capitalization of pension costs has an impact on the effect it has on the rate code's premium rate. This hampers ease of understanding and **transparency** for employers.
3. Not all rate codes exist in similarly sized classes. Those in large classes receive comparatively greater relief from pooling at the class level, whereas rate codes alone in their class receive no relief from this pooling. This can be construed as a distortion of **fairness**.
4. The current allocation based on payroll means that all rate codes within the same class pay the same rate for this cost, while the risk of rate codes forming the class is sometimes significantly different.

**Recommendation 8:** *We recommend that all claim costs be directly charged to rate codes, subject to a lifetime per-claim cap between 3 to 5 times the claim year's maximum assessable earnings. Costs exceeding the per-claim cap should be pooled to all employers and allocated based on each rate code's expected fully funded cost of claims.*

## Long term claim costs

The rate model currently considers costs paid during the past 5 years for claims having occurred over the past 50 years and beyond.

Since claim costs implicating claims going back over 50 years are used in setting rates, this has an impact on the perceived equity of the process, because:

1. The claims could have been incurred by entirely different employers, violating the principle of **fairness**.
2. Industry practices may have changed to prevent such serious claims from occurring.
3. The long term claims may simply have been exceptional and unusual for the rate code and are not truly representative of future costs, violating the principle of **collective liability**.
4. The legal and social framework may have changed drastically in the interim.
5. As it stands, the rate code's slate will never be truly "cleansed" from a very long term and ongoing claim with significant health care costs until the claimant is deceased.

<sup>4</sup> When an injured worker receives long term wage replacement payments, the WCB will "capitalize" all future payments into a single immediate lump sum amount; this capitalized amount is then charged to rate codes.

**Recommendation 9:** *We recommend that benefit payments made more than 5 to 10 years after the initial injury year be no longer considered in rate making. Costs postdating this period should be pooled to all employers and allocated based on each rate code's expected fully funded cost of claims.*

### Allocation of WCB administrative costs

In setting the premium rates, the WCB has to allocate the administrative expenses, covering the cost of WCB programs and services. The WCB uses its budget of administrative expenses for the forthcoming year, net of the fees charged to self-insurers.

The allocation basis is currently the following:

- 10% as a fixed rate to all rate codes;
- 10% as a variable rate based on the risk of rate codes, using the fully funded cost of claims (FFCC);
- 80% as a variable rate based on the risk of rate codes, but using the premium year benefit cash flows.

The distribution of administrative costs based on the premium year benefit cash flows is no longer appropriate as the claim administration costs for past years are now fully funded and included in the actuarial liabilities. In addition, this method violates the principle of **fairness** as the current generation of employers in a rate code may be punished by poor performing employers of a past generation; moreover, it is less **transparent** and difficult for stakeholders to understand. The portion of WCB administrative costs allocated based on a variable rate should therefore use the FFCC, as we are recommending for other allocations based on a variable rate.

The distribution of WCB administrative expenses between rate codes using a fixed rate and a variable rate currently stands at 10% and 90% respectively. This type of allocation basis (partly fixed and partly based on risk) makes sense and mirrors the practice of other Canadian boards. The allocation should shift towards a lower proportion based on a variable rate to ensure that rate codes with lower claim costs contribute their fair share of the WCB's administrative costs.

In our opinion, the split between the fixed and risk-based portions should be done considering the nature of each category of administrative cost. For example, costs incurred for claim management should be charged on the basis of risk, while the rate setting and premium collection functions should be charged based on payroll.

**Recommendation 10:** *We recommend that the WCB continue its practice of splitting the allocation of administrative costs between fixed and variable portions. However, the variable portion should no longer consider premium year benefit cash flows, and the WCB should further study the exact proportion of the split between fixed and variable portions to confirm its soundness.*

### Credibility

A key part of the rate making process is the estimation of expected claim costs for the coming year. In line with accepted actuarial practice, the WCB uses actual past costs coupled with appropriate economic factors to estimate future claim costs per rate code.

As mentioned above in our comments on the current classification structure, several rate codes are rather small and their past claim costs do not provide sufficient credibility to ensure stable and predictable premiums year-over-year. For these rate codes, the WCB must be cautious in using their past costs to establish rates because their past costs could be highly volatile and influenced by factors outside of the rate code's control, leading to poor rate stability.

The actuarial concept of **credibility** offers a method of improving the **predictability** of small rate codes' rates while maintaining **fairness**.

There are two components to actuarial credibility:

- What level of credibility do we assign to each rate code? Differently stated, how much do we believe that a rate code's recent experience accurately predicts its future experience?
- How do we set the rate for a rate code that is not fully credible, given that we do not fully believe its recent experience?

The level of credibility for each rate code is currently determined in the rate model based on the expected premiums with the following formula:

$$\frac{\text{Premiums}}{\text{Premiums} + 2,500,000}$$

In our opinion, the level of credibility should be based on the costs used in the rate model, and adjusted annually to reflect the experiential escalation and cost of claims. Furthermore, using the current formula based on premiums never attributes full credibility to any rate code.

Following an analysis of the board's claim cost experience and considering the criteria adopted by other Canadian boards, we suggest using a level of credibility applicable to rate codes based on the claim costs over the experience period used in the model and adjusted annually (for example, the level of full credibility could be a percentage of the maximum wage rate). The full credibility parameter should currently be between \$5M to \$15M of claim costs. A rate code that has experienced that level of claim costs would henceforth be considered fully credible and only its own claim cost experience over the last 5 years would be used to determine its premium rate.

When the experience of a rate code does not provide a credible basis for estimating costs, it is appropriate to consider, as complement of experience, the experience of similar risks. We suggest that for rate codes that do not attain full credibility their experience be complemented with a longer experience period. This could be done for example by considering their experience for the previous rate setting process.

The following formula to calculate the credible experience for a non-fully credible rate code could be used:

$$\text{Credible experience} = \text{Experience} * Z + \text{Complement of experience} * (1 - Z)$$

Where:

- **Experience** is the claim cost experience of the rate code used for the current premium rate setting;
- **Complement of experience** is the claim cost experience of the rate code over a longer period (for example, its experience for the previous rate setting)
- Z is the credibility factor established using this formula:

$$Z = \sqrt{\frac{\text{Total costs}}{\text{Full credibility parameter}}}, \text{ with a maximum of } 1;$$

- **Total costs** represents the sum of claim costs considered in the 5-year experience period;
- **Full credibility parameter** is an amount between \$5M to \$15M (e.g. 100 times the maximum assessable earnings for the premium year).

**Recommendation 11:** *We recommend that the premium rates be determined by applying a credibility formula where full credibility would be provided to rate codes with at least a pre-determined level of experience claim costs; that level should initially be between \$5M to \$15M of claim costs, and adjusted annually. The review of the classification structure mentioned in our recommendation 3 will address the situation for rate codes that are not large enough to be statistically credible; before this review is completed, the claim cost experience of these rate codes should be complemented by a longer period of their claim experience.*

Applying this recommendation will generally increase the level of **credibility** of large rate codes, emphasizing recent experience in determining their premium rates and adding to the **fairness** of the process. For smaller rate codes, it will stabilize their premium rates by dampening the effect of factors outside of their control, providing more **collective liability** and **predictability**.

## Section 4: Conclusion

This document outlines the main results of our review of the model used by the Saskatchewan Workers' Compensation Board (WCB) for determining the premium rates applicable to employers in 2016 and presents the most significant changes that we are proposing for future years' rate setting. This review was undertaken following one of the recommendations in our asset liability study report prepared for the WCB in 2015.

The main objectives of the premium setting process are to ensure that the overall premium requirements of the WCB for the coming year are met and that the distribution of these revenue requirements across all employers is equitable. An actuarial rate making model is used by the WCB to determine premium rates.

The key principles we have applied to guide our review of the rate making model, which are foundational to rate models in general, are those of **fairness** (accountability, equity and incentives for prevention), **collective liability** (insurance), **predictability** of rates (rate stability) and **transparency** (ease of understanding). In addition, we have anchored our analysis to the actuarial principles regarding ratemaking in a workers' compensation system of **rates reflecting anticipated future costs**, of **financial integrity** and of **credibility**.

In reviewing the WCB rate model, we have found that the procedure employed for setting employer premium rates is sound. We believe that several refinements to the board's rate model are warranted as opposed to a complete overhaul. Certain modifications to better align the model with its stated goals and principles are required, and we have recommended several changes we feel will be impactful to the continued financial health of the WCB and in maintaining the confidence of all stakeholders in the system.

To summarize, we recommend that:

1. The fully funded cost of claims used for the determination of premiums represent the WCB's best actuarial estimate reflecting recent experience, using realistic long term assumptions, without expecting improvements in experience or providing for undue margins. The rate should not result in sustained gains or losses, and only the most recently available data should be used to establish it.
2. Further study be done to determine the sources of the imbalance between discounts and surcharges in the experience rating programs and to evaluate if a provision should be included in the calculation of premium rates.
3. The WCB review its classification structure to ensure that rate codes are grouping employers with similar claim costs and that their experience has sufficient credibility for stable and predictable premium rates. Furthermore, the WCB should implement a process to periodically review its classification structure over time as experience develops.
4. The WCB maintain its practice of using the claim benefit costs charged to rate codes over the most recent 5 years, and that it be applied to all benefits for consistency and transparency purposes.
5. The WCB discontinue the process of using the number of time-loss claims as an indicator variable to compare the experience of various injury years and to estimate future costs, and instead use the evolution of the assessable payroll, adjusted for the increase in wages and the impact due to changes in the maximum assessable earnings in accordance with the Act.
6. The WCB use two bases for allocating pooled costs to rate codes: a fixed rate based on payroll and an alternative basis of allocation of claim-related pooled costs based on risk, in proportion to the expected fully funded cost of claims of rate codes.
7. All costs arising from fatal injuries be directly charged to the rate code in which they occurred; the cost of fatal workplace injuries or occupational diseases leading to death should be treated as any other claim.

8. All claim costs be directly charged to rate codes, subject to a lifetime per-claim cap between 3 to 5 times the claim year's maximum assessable earnings. Costs exceeding the per-claim cap should be pooled to all employers and allocated based on each rate code's expected fully funded cost of claims.
9. Benefit payments made more than 5 to 10 years after the initial injury year be no longer considered in rate making. Costs postdating this period should be pooled to all employers and allocated based on each rate code's expected fully funded cost of claims.
10. The WCB continue its practice of splitting the allocation of administrative costs between fixed and variable portions. However, the variable portion should no longer consider premium year benefit cash flows, and the WCB should further study the exact proportion of the split between fixed and variable portions to confirm its soundness.
11. The premium rates be determined by applying a credibility formula where full credibility would be provided to rate codes with at least a pre-determined level of experience claim costs; that level should initially be between \$5M to \$15M of claim costs, and adjusted annually. The review of the classification structure mentioned in our recommendation 3 will address the situation for rate codes that are not large enough to be statistically credible; before this review is completed, the claim cost experience of these rate codes should be complemented by a longer period of their claim experience.

We will be pleased to discuss this report with you at your convenience.

Respectfully submitted,



Richard Larouche, FSA, FCIA

September 2, 2016

## Appendix A: Glossary of terms

**Actuarial principle:** A principle derived from the practice of actuarial science. The actuarial principles concern the WCB's continued financial health and the predictability of its cash flows.

**Capitalized pension:** When a worker is set to receive long term compensation benefits the WCB may "capitalize" all these future payments into a single lump sum amount. This lump sum amount is charged to rate codes once, and the periodic compensation benefits are no longer charged to the rate code.

**Class:** Rate codes are sorted into classes corresponding to larger categories of industries. Examples include "Agriculture" and "Building construction".

**Costly claims:** Claims that result in relatively significant benefit costs, possibly triggering a pooling threshold.

**Credibility:** The degree to which past claims' costs can be relied upon to predict future outcomes and therefore fairly and accurately set premium rates.

**Evolution of the assessable payroll:** The year over year change in assessable payroll, expressed as a percentage.

**Experience:** The past claim costs incurred by an employer or a group of employers.

**Experience rating program:** A mechanism through which individual employers at the WCB are rewarded or punished for good or poor past claim experience. The exact nature of these programs is explained in a brochure available at <http://www.wcbask.com/employers/classification-premium-rates/experience-rating>.

**Fully funded cost of claims:** The prospective estimate of total benefits to be paid for the lifetime of claims incurred in the coming year.

**Pooling:** Costs may be pooled at the class level or at the entire board, instead of being charged to the rate codes. The group to which the cost is pooled will be charged a uniform rate. The basis of allocation of pooled costs may be a fixed percentage of payroll or a variable rate based on claim costs.

**Rate or premium rate:** The fundamental billing unit at the WCB. Each year, employers pay premiums to the WCB according to the rate established for their rate code. An employer's premium is calculated as  $Premium = payroll \times rate \div 100$ . This report is mainly concerned with the method of setting premium rates.

**Rate code:** All employers in Saskatchewan are classified into rate codes corresponding to their main industrial activities. A full list of rate codes along with their corresponding 2016 rate is available in Appendix C.

**Risk:** The expected future claim costs incurred by a rate code. Rate codes with higher risk are expected to incur more claim costs per worker than rate codes with lower risk.

**Time Loss Claim (TLC):** A compensation claim that leads to at least one day of lost work due to the worker's convalescence.

## Appendix B: Some excerpts of the Act

Some excerpts of *The Workers' Compensation Act, 2013* that refers to the funding of the WCB and the determination of the premium rates:

### **PART IV - Compensation, DIVISION 1 - Eligibility**

#### **37 - Maximum wage rate**

(1) *For the purpose of making a decision or determination with respect to a worker who sustains an injury before the coming into force of this Act, the maximum wage rate is \$55,000 per year as adjusted annually after the coming into force of this Act in accordance with section 182.*

(2) *Notwithstanding subsection (1), for the purpose of making a decision or determination with respect to a worker who sustains an injury on or after the coming into force of this Act, the maximum wage rate is:*

- (a) *subject to clause (b), \$59,000 per year as adjusted annually in accordance with section 182; or*
- (b) *if the board has adjusted the maximum wage rate for a year in accordance with subsection (3), the maximum wage rate as adjusted by the board.*

(3) *After the coming into force of this Act, the board shall annually adjust the maximum wage rate with respect to workers who sustain an injury on or after the coming into force of this Act in steps that the board considers appropriate so that the maximum wage rate per year for those workers is, in the fifth and subsequent years, equal to 165% of the product of the average weekly wage and 52.*

### **PART V - Injury Fund, DIVISION 1 - Continuance of Fund**

#### **114 - Fund**

(1) *The Injury Fund is continued.*

(2) *All moneys collected by the board from employers pursuant to this Act are to be credited to the fund.*

#### **115 - Payments from fund**

*The board may expend moneys from the fund for any expenses incurred in the administration of this Act and, without restricting the generality of the foregoing, the board may expend moneys for:*

- (a) *the payment of compensation to a worker or the worker's dependants;*
- (b) *administrative expenses of the board, including salaries and other remuneration;*
- (c) *any medical aid provided pursuant to this Act to injured workers and any specialized treatment or other medical aid that the board considers necessary and that is not provided for in this Act;*
- (d) *the cost of any autopsy that the board considers necessary;*
- (e) *any grant with respect to any costs of rehabilitation related to any injured worker re-entering the work force or to assist in lessening any hardship caused by the worker's injury;*
- (f) *any costs that the board considers necessary or expedient to assist dependent spouses of deceased workers to become self-sufficient;*

- (g) the cost of administration of the occupational health and safety program;*
- (h) the expenses, including salaries and remuneration, of worker's advocates;*
- (i) the expenses of any committee of review established pursuant to this Act; and*
- (j) any other purposes that the board considers necessary to carry out the intent of this Act.*

**116 - Fund to be maintained to meet all payments**

*(1) The board shall at all times maintain the fund so that, with the reserves provided for in subsection 134(2) but exclusive of the special reserve fund mentioned in section 145:*

- (a) the fund is sufficient to meet all the payments to be made out of the fund with respect to:
  - (i) the cost of the administration of the occupational health and safety program; and*
  - (ii) compensation as it becomes payable; and**

*(b) the employers in any class are not unduly or unfairly burdened in future years with payments to be made in those years with respect to costs and injuries that have previously occurred. ...*

**119 - Classes of industries**

*(1) The board may, by order:*

- (a) establish any classes of industries that it considers necessary for the purposes of this Act; and*
- (b) rearrange the classes of industries, including establishing new classes or deleting classes.*

*(2) The board may subdivide a class into subclasses if:*

- (a) in the opinion of the board, the hazard to workers in any of the industries included in a class is less than the hazard in any other class of those industries; or*
- (b) for any other reason the board considers it proper to do so.*

*(3) If the board subdivides a class into subclasses, it shall fix the percentages or proportions of the contributions payable by the employers in each subclass to the fund.*

**120 - Separate accounts for each class**

*(1) The board shall keep separate accounts of the amounts collected and expended with respect to every class and subclass of industries.*

*(2) The amounts mentioned in subsection (1) form part of the fund.*

**121 - Where cost to fund much greater re certain employer than average of class**

*(1) If the total cost to the fund of injuries to the workers of any employer in a class or subclass is consistently greater than the average cost to the fund of injuries to the workers of other employers in the same class or subclass, the board may levy, in addition to the amount of any contribution to the fund for which the employer is liable, any amount it considers just.*

(2) With respect to any additional amount levied pursuant to subsection (1), the board shall, in its discretion:

- (a) add those additional amounts to the fund; or
- (b) apply those additional amounts to reduce the assessment on the other employers in the class or subclass to which the employer from whom it is collected belongs.

## **PART VI - Assessments**

### **134 - Levy of assessment**

(1) Subject to subsection (4), in every year, the board shall levy an assessment on the employers in each class of industries an amount based on any percentage of the employers' payrolls or on any other rate, or an amount specified by the board, that, allowing for any surplus or deficit in the class, the board considers sufficient to pay:

- (a) the compensation with respect to injuries to workers in the businesses within the class;
- (b) the expenses of the administration of this Act; and
- (c) the cost of the administration of the occupational health and safety program for that year.

(2) The board shall maintain a reserve fund of amounts that the board considers necessary:

- (a) to pay:
  - (i) the compensation payable in future years with respect to claims in that class of industries occurring in those years; and
  - (ii) the cost of the administration of the occupational health and safety program in future years; and

(b) to prevent the employers in future years from being unduly or unfairly burdened with payments that are to be made in those years with respect to injuries that have previously occurred and with respect to the cost of the administration of the occupational health and safety program. ...

(3) It is not necessary that the reserve fund mentioned in subsection (2) be uniform as to all classes of industries and, subject to sections 116 and 149, the board may provide for a larger reserve in one or more of the classes than is provided in other classes.

(4) If, in any year, the board proposes to levy an assessment on the employers in a class of industries that exceeds the assessment levied on those employers in the preceding year by more than 10.5%:

- (a) the board shall, before making the assessment:
  - (i) send a notice of the proposed assessment to the employers in the class; and
  - (ii) cause the notice to be published in *The Saskatchewan Gazette*; and
- (b) the employers in the class may, within 30 days after the date of publication of the notice in *The Saskatchewan Gazette*, make representations to the board with respect to the proposed assessment.

### **135 - Special assessment re fatal injuries**

The board may make a special assessment on all employers whose workers have had fatal injuries for the purposes of apportioning the costs associated with fatal injuries equally among those employers.

**138 - Assessment may vary with hazard**

(1) It is not necessary that the assessment levied on the employers in a class or subclass of industries be uniform.

(2) The board may fix the assessment on an employer in relation to the hazard found in the type of work or in relation to the hazard in any of the businesses included in the class or subclass.

**139 - Merit rating**

If the board considers it appropriate to do so, the board may adopt a system of merit rating and cause that merit rating to be made public in any manner that the board considers appropriate.

**141 - Notice of assessment to employer**

(1) The board shall:

(a) determine and fix the percentage, rate or amount for which each employer is assessed pursuant to sections 134 to 139 or the provisional amount of the assessment; and

(b) after fixing the percentage, rate, amount or provisional amount pursuant to clause (a), notify the employer of that percentage, rate, amount or provisional amount. ...

**144 - If deficiency caused by particular employers**

(1) A deficiency or loss must be made up by supplementary assessments on the employers in all the classes of industries if the deficiency in the amount realized from an assessment in any class is caused by:

(a) the failure of some of the employers in that class to pay their share of the assessment; or

(b) any disaster or other circumstance that in the opinion of the board would unfairly burden the employers in that class.

**145 - Special reserve fund**

If the board considers it appropriate to do so, the board may add to the assessment for any class or for all classes of industries a percentage or amount for the purpose of raising a special reserve fund to be set aside to meet the loss arising from any disaster or other circumstance the liability for which would, in the opinion of the board, unfairly burden the employers in any class.

**150 - Formation of reserves**

(1) In order to maintain the fund as required by section 116, the board may include in any amount to be assessed on the employers, and may collect from them, any amounts that the board considers necessary for that purpose.

(2) The amounts assessed and collected pursuant to subsection (1) are to form a reserve fund.

**151 - Investments of reserve fund**

(1) The board shall invest all or any part of the moneys standing to the credit of the reserve fund mentioned in subsection 150(2) in any securities authorized for investment of moneys pursuant to The Pension Benefits Act, 1992.

(2) The board may dispose of any securities in which any part of the reserve fund mentioned in subsection (1) has been invested pursuant to subsection (1) in any amount and on any terms that the board considers expedient. ...

## Appendix C: 2016 premium rates by rate codes

Rate code	Description	2016 rate
<b>CLASS A - Agriculture</b>		
A11	Light Agricultural Operations	2.98
A21	Farming and Ranching	1.97
A31	Grain Elevators and Inland Terminals	0.83
<b>CLASS B - Building Construction</b>		
B11	Construction Trades	1.57
B12	Residential Construction	2.82
B13	Commercial, Industrial Construction	2.15
<b>CLASS C - Commodity - Wholesale - Retail</b>		
C12	Light Commodity Marketing	0.60
C32	Grocery, Department Store, Hardware	1.09
C33	Wholesale, Chain stores	1.63
C41	Co-operative Associations	1.44
C51	Lumber Yards, Builders Supplies	2.32
C61	Automotive and Implement Sales and Service	1.17
C62	Automotive Service Shops, Towing	1.89
<b>CLASS D - Development - Mineral Resources</b>		
D32	Operation of Oilwells	0.72
D41	Oilwell Servicing	1.40
D51	Oil, Gas Drilling, Service Rigs and Water Well Drilling	1.76
D52	Seismic Drilling	1.92
D71	Open Pit Mining	0.86
D72	Underground Softrock Mining	0.77
D73	Underground Hardrock Mining	0.97
<b>CLASS G - Government and Municipal</b>		
G11	Universities and Regional Colleges	0.45
G12	School Divisions, Housing Authorities	1.14
G22	Health Districts, Hospitals and Care Homes	1.75
G31	Cities, Towns, Villages and Rural Municipalities	1.29
G51	Government of Saskatchewan and Departments	1.39

Rate code	Description	2016 rate
<b>CLASS M - Manufacturing and Processing</b>		
M31	Manufacturing, Pipeline Operations	0.54
M33	Refineries and Upgrader	0.72
M41	Dairy Products, Soft Drinks	2.62
M42	Bakeries, Food Preparation and Packaging	1.62
M62	Mills, Semi Medium Manufacturing	2.19
M72	Processing Meat, Poultry and Fish	2.64
M81	Metal Foundries and Mills	1.58
M91	Agricultural Equipment	1.69
M92	Machine Shops, Manufacturing	1.61
M94	Iron and Steel Fabrication	2.39
<b>CLASS R - Road Construction</b>		
R11	Road Construction and Earthwork	1.86
<b>CLASS S - Service Industry</b>		
S11	Legal Offices, Financial, Drafting	0.15
S12	Offices, Professionals	0.25
S14	Unions <sup>5</sup>	6.00
S21	Hostels, Independent Services	1.10
S22	Restaurants, Catering, Dry Cleaning	0.87
S23	Hotels, Motels, Taxis	1.58
S32	Service Clubs	1.11
S33	Caretaking, Park Authorities	1.09
S41	Engineering, Testing and Surveying	0.34
<b>CLASS T - Transportation, Warehousing</b>		
T42	Trucking, Courier, Commercial Bus	3.44
T51	Operation of Railways	1.43
T61	Commercial Air Transportation	1.15
<b>CLASS U - Utility Operations</b>		
U11	Telecommunications	0.46
U31	Electric Systems	0.83

<sup>5</sup> Rate per delegate.