

**VERMONT DEPARTMENT OF BANKING, INSURANCE,
SECURITIES, AND HEALTH CARE ADMINISTRATION**

**TECHNIQUES TO STABILIZE VERMONT
WORKERS' COMPENSATION PREMIUM COSTS AND MINIMIZE
THE IMPACT OF LARGE CLAIMS**

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I. BACKGROUND AND SCOPE

A. BACKGROUND

In response to fluctuations in Vermont worker's compensation premium levels during the past several years, the Vermont legislature has directed the state's Department of Banking, Insurance, Securities and Health Care Administration to study and report on ways to stabilize worker's compensation premium rates and to minimize the impact that large claims can have on rates. Specifically, the legislation provides as follows:

H 632: Workers' Comp

Section 2: Workers' Compensation Premium Stabilization or Reduction

The Vermont Department of Banking, Insurance, Securities and Health Care Administration ("the Department") shall issue a report to the General Assembly by February 1, 2005, that includes findings and proposals in regard to the following:

- (2) Techniques to stabilize rates and create predictability in workers' compensation insurance premiums, including extending the time period for amortizing extraordinary high claims.

The Department has engaged Milliman, Inc. ("Milliman") to provide suggestions and techniques for stabilizing workers' compensation premiums and to address techniques for the handling of large claims and their impact on workers' compensation premiums. Milliman is a large national firm of consultants and actuaries with extensive experience in worker's compensation issues.

B. THE NCCI RATEMAKING PROCESS

Much of the following analysis relates to the ratemaking methodology used by the National Council on Compensation Insurance ("the NCCI"). Before we proceed, we will provide a brief overview of the NCCI and how it calculates worker's compensation rates.

The NCCI is a statistical agency that collects workers' compensation data from insurance carriers each year. The NCCI analyzes the collected data to calculate annual loss costs for many states, including Vermont. *Loss costs are estimates of future claim costs, and include both indemnity and medical benefits.* The NCCI then submits a "loss cost filing" to each state's insurance regulator. The loss cost filing contains a "loss cost indication" or "indicated change" which identifies the recommended percent change in loss costs relative to current loss costs. Assuming the state regulator approves the recommended loss cost change, the NCCI publishes suggested (or "advisory") loss costs for insurance carriers writing workers' compensation. The regulator may approve a loss cost change different from that filed by NCCI. Finally, the insurance carriers may adjust the approved loss costs upwards or downwards and then add in their own overhead expenses. Loss costs that have been adjusted to reflect overhead expenses result in the "rates" that form the basis of premiums charged to employers.

We note that in Vermont, NCCI files loss cost changes for both the voluntary market and the residual market. The "voluntary market" includes those employers who are able to purchase workers' compensation insurance from a carrier (i.e. the insurance carrier "voluntarily" sells the workers' compensation insurance to them.) The "residual market" essentially includes all other employers (i.e. those employers who are turned down by insurance carriers). These "residual" employers are then placed into a pool and are able to purchase workers' compensation coverage at a fixed price. The premiums and losses in the residual market are shared by the voluntary carriers via the pooling mechanism.

C. SCOPE

The scope of our analysis includes the following items:

- 1. Options for Stability and Predictability.** We indicate options to make workers' compensation rates more stable and predictable.

- 2. Impact of Large Losses.** We review and provide commentary on the impact of large losses on the workers' compensation system. This includes a review of the new approach adopted by the NCCI, which caps large losses during the basic ratemaking process for each state, and then adds a cost factor for the expected losses in excess of the cap. A detailed description of the new NCCI approach is discussed in Section C.3. of the Executive Summary.
- 3. Formation of Excess Pool.** We provide commentary on the potential formation of a workers' compensation excess pool in Vermont. Included within our discussion will be commentary on the feasibility of a Regional Excess Pool.
- 4. Other States Activities.** We provide commentary on what actions other states have implemented to stabilize and create predictability in workers' compensation rates.

We address each of these items in the Executive Summary below.

II. EXECUTIVE SUMMARY

A. RECOMMENDATIONS

The following are recommended options for increasing stability and responsiveness in the Vermont workers' compensation market.

Ø **Review the number of years used in the loss cost filing.** In almost all states, NCCI analyzes two years of historical experience to estimate future rate levels. In its November 2002 loss cost filing, NCCI increased the number of years to three for Vermont. This change increased the stability of the ratemaking process. More stability may be achieved by increasing the number of years beyond three years. However, there are disadvantages associated with using additional years in the ratemaking process. Therefore, we do not believe moving past three years is warranted at this time.

Ø **Estimate Vermont's loss cost indication excluding large claims and apply a separate large claim cost factor.** A separation of claims by size is common for other lines of business in the property and casualty industry and should improve stability from year to year in loss cost indications. The NCCI's new method of calculating indicated loss cost changes is one way to do this and their November 2004 Vermont filing included this technique.

Each of these actions could serve to amortize (limit the impact of) large claims when estimating overall loss cost levels. The first, lengthening the experience period used for ratemaking, means that a single large claim would have less of a potential impact on the loss cost indication. The second, using a large claim adjustment from a larger database, would also mitigate the impact of individual large claims on the loss cost indication.

B. OTHER CONSIDERATIONS

Listed below are other considerations in achieving stability in premiums but are not necessarily recommendations.

- Ø Future NCCI loss cost indications should theoretically be more stable due to the new NCCI rating methodology. However, the new methodology as filed by NCCI may need to be adjusted to meet the needs of Vermont. We are currently analyzing the large loss limit and other factors that may need adjustment.

- Ø The implementation of a state-sponsored excess pool does not appear to be feasible given the constraints listed in our report. For similar reasons, a regional excess pool does not appear to be feasible.

- Ø Implementing a rate suppression strategy may produce unfavorable results on Vermont's workers' compensation environment. Suppressing rates is likely to increase the residual market pool. In addition, some of the leading existing carriers may exit from Vermont, regardless of the profitability of their existing book of business. Insurance companies allocate capital based on the opportunity to achieve adequate rates of return. Therefore, suppression of rates is likely to result in carriers leaving the market, as evidenced by our comments on the Massachusetts Personal Auto market in Section II.C.5.b.

- Ø Over the past ten years or so, the majority of states have not had indicated loss cost level changes in excess of +10%. To the best of our knowledge, no state has taken pre-emptive measures to "fix" or stabilize their workers' compensation program unless there is a consensus that the system is in crisis, at which time reductions in premium levels are usually achieved through benefit and administrative changes. *We believe the Vermont workers' compensation market is not currently in a crisis situation.*

C. COMMENTARY

1. *NCCI Ratemaking – Pre 2005*

The NCCI ratemaking procedure is a complex process involving the evaluation and estimation of multiple variables. The ratemaking process begins with a historical review of the claims incurred (loss amounts) in the individual state under review. The claims incurred over the experience period are compared to the historical premiums charged over the same period. The relationship of claims incurred to premiums charged is termed the loss ratio. The goal of ratemaking is to ensure that premiums charged each year are sufficient to cover incurred claims and overhead.

The estimation of claims incurred begins with looking at reported claim values as of a certain point in time (“evaluation date”). Since many workers’ compensation claims ultimately settle at an amount greater than the original amount estimated by the claims adjuster, most of the reported claim values at a given evaluation date will not reflect the ultimate value of the claims costs. This difference between the reported claim value at a given evaluation date and the ultimate claim value is termed Incurred But Not Reported (“IBNR”). Various actuarial methodologies are utilized in estimating IBNR but discussion of these methods is beyond the scope of this report.

Once NCCI has estimated the ultimate value of the losses by factoring in IBNR, two other key adjustments are made. The first is an adjustment to reflect changes in the benefit levels that may have existed over each of the years within the experience period. The idea of this adjustment is to recalculate the prior losses at the current level of benefits in the state, so that the historical loss evidence more accurately predicts future losses. The second adjustment is to adjust the losses for inflationary trends in both the medical and indemnity components of the claims incurred. This inflation adjustment is done separately for the medical and indemnity components, as their rates of inflation are significantly different. The adjusted losses are then compared to premiums that have also been adjusted to reflect the latest rate level changes. This

process of reflecting prior rate level changes is termed premium “on-leveling”. This on-leveling procedure estimates the level of the historical premiums at today’s rates.

After the prior years’ losses and premiums have been projected to the prospective policy year, a loss ratio is calculated based on the number of years utilized in the analysis (discussed more thoroughly below). This calculated loss ratio is then compared to a target loss ratio to determine the overall loss cost level change. The target loss ratio is generally defined as the amount of premium remaining to pay expected losses after insurer expenses have been taken into consideration.

While there are other analyses performed in the NCCI ratemaking process, such as the distribution of the overall rate level change to industry group and class code, in this section, we will only consider the overall statewide loss cost level indication.

The results of NCCI’s annual ratemaking process are submitted to state regulators as part of a loss cost filing. Each regulator reviews the recommendations and, often with the assistance of outside resources, determines the appropriate level of the overall loss cost changes to be implemented in the state’s new rates. In Vermont, NCCI files changes for both the voluntary market and the residual market (as mentioned earlier). Table 1, below, lists the historical approved loss cost level changes for Vermont’s voluntary market.

As shown in Table 1 below, the loss cost level changes have fluctuated significantly over time. One reason is that there have been fluctuations in Vermont’s loss experience. The claims that are incurred in Vermont are ultimately going to be paid by Vermont policyholders through changes in the premiums charged. Three out of the last four approved premium level changes have been in excess of 10%. These premium level changes in excess of 10% are directly linked to the increased large claim activity. Note that from 1995 to 1998 there were 4 years in a row with premium level decreases, two of which were 10% or more.

Table 1	
NCCI Approved Premium Level Changes Vermont Voluntary Market	
Effective Date	Premium Level % Change
7/1/1990	7.6
4/1/1992	10.0
8/1/1992	10.9
7/1/1993	17.6
8/1/1994	9.2
7/1/1995	-6.5
8/1/1996	-8.1
7/1/1997	-14.0
7/1/1998	-10.0
4/1/2000	4.3
4/1/2001	10.2
4/1/2002	-2.3
4/1/2003	10.0
4/1/2004	10.3

One major impetus of this study was to review ways of achieving an increased level of stability in the workers' compensation premium rates. Stability in workers' compensation premiums increases predictability of future expenditures for employers. However, it is also desirable to have rates that are responsive to the current level of claims being paid and incurred in the state (i.e. more recent claim data), so that insurers can adjust their rates to reflect current costs. Since stability tends to come with more years reviewed while responsiveness tends to come with fewer years reviewed, the objective of stability may conflict with the objective of achieving responsiveness in the rates. Achieving both stability and responsiveness is especially difficult when the size of the underlying database is not large, because of the difficulty of drawing meaningful conclusions from small amounts of data.

Table 2 below lists a sample of state sizes as measured by Direct Written Premium.

Based on year-end 2003 statistics, Vermont ranked 44th as measured by Direct Written Premium. The size of Vermont should not prevent it from seeking to provide an appropriate balance between stability and responsiveness.

Table 2					
Market Share Analysis - Direct Written Premium					
(\$000's)					
State	2003 Rank	2003	2002	2001	2000
California	2	6,886,699	5,367,718	4,801,260	4,648,755
Minnesota	17	759,807	713,067	671,573	569,680
Maine	37	240,294	222,443	204,413	173,337
Vermont	44	166,395	143,315	118,351	95,659

2. Vermont Claims Experience

As can be seen in Table 1 above, three of the last four NCCI advisory loss cost changes have been 10% or greater. This suggests that the claims experience over the recent past has been higher than originally expected, resulting in increased premiums. A major contributor to the large positive loss cost changes has been the impact of large claims in the recent years. Table 3 below summarizes the portion of individual claims greater than \$500,000 and \$1,000,000 for policy years 1996 through 2001. For example, if there was a \$750,000 workers' compensation claim, \$250,000 of that claim is included in the "Excess \$500,000" column. Similarly, if there was a \$1,250,000 workers' compensation claim, \$250,000 of that claim is included in the "Excess \$1,000,000" column. What is shown in Table 3 is aggregate experience of all claims greater than these two thresholds (\$500,000 and \$1,000,000) for the policy years 1996 through 2001. The 1999-2001 loss dollars above the two thresholds are significantly greater than the 1996-1998 amounts. Later in the report we will examine possible remedies to handle this increased level of large losses.

Table 3				
Summary of Excess Losses				
Policy Years 1996 - 2001				
Policy Year	Calendar Year Net Earned Premium (000's)	Excess \$500,000	Excess \$1,000,000	
1996	\$98,809	\$1,152,943	\$0	
1997	90,912	2,586,092	835,699	
1998	86,716	892,293	0	
1999	84,684	1,458,654	946,241	
2000	88,752	7,840,063	6,312,639	
2001	105,365	1,089,136	458,569	
96 - 98	276,437	4,631,328	835,699	
99 - 01	278,801	10,387,853	7,717,449	

Historically, NCCI has not separated large claims from small claims in their calculation of the overall loss cost indications. Beginning in the 2003 rate filing, NCCI took some steps to mitigate the impact of large claims in Vermont (large claims were defined at that time to be greater than or equal to \$1 million per occurrence). Specifically, for each claim greater than \$1 million, NCCI assumed that each of these claims were at their ultimate settlement value. NCCI also calculated some key ratemaking variables excluding these apparently unusual large claims. Both of these adjustments were an ad hoc attempt to mitigate the effect that these large claims would have on workers' compensation premiums. We believe that NCCI felt that including the large claims without modification in the normal ratemaking model would produce inaccurate results.

3. NCCI Ratemaking – 2005

A significant component of the ratemaking process is to estimate the ultimate losses for all claims incurred during the experience period. As mentioned previously, NCCI has historically not separated large claims and small claims in their ratemaking analyses. NCCI did, however, make a partial adjustment for the extraordinary large claims experience incurred within the experience period underlying the November 2003 loss cost filing. This was discussed previously.

In the November 2004 Vermont rate filing (which is effective in 2005), and in rate filings countrywide, NCCI implemented a new procedure to deal with large claims. The new procedure was in recognition of the fact that the workers' compensation premium levels are subject to significant variability due to large claim experience. This is especially true in small states, where just one or two large claims can significantly impact the historical loss data (experience) used to calculate future rates. The revised procedure limits the large claims to a predetermined limit based on premium levels in the state. Specifically, the large claim limit was selected by NCCI to be 1% of the sum of the past three years' net premiums. For Vermont, this amounts to a \$3 million large claim limitation. Thus, actual losses greater than \$3 million are excluded from part of the analysis. The claims limited to \$3 million are projected to an ultimate settlement basis by estimating IBNR amounts, as described previously. For the incurred amounts greater than \$3 million, a separate cost factor is included to reflect the long-term average for losses greater than \$3 million.

This revised procedure has the benefit of increased stability in that the ultimate level of claims below the limit are more predictable than the unlimited losses since there is only so much "room" for fluctuation. For the loss amounts greater than the limit, there is also increased stability in that the excess losses used to determine the claims greater than the limit are derived from a larger database and are expected to remain fairly consistent between periodic updates.

4. Detailed Recommendations

The issue at hand is striking a balance between achieving stability in the rates and responsiveness in the rates. Both the employers in the state of Vermont and the insurance carriers providing workers' compensation coverage in Vermont want more stability in the rates, while maintaining a degree of responsiveness that entices carriers to continue conducting business in Vermont. There exists a delicate balance between the two objectives.

To increase stability you must increase the number of years used in the ratemaking analysis. The increase in the number of years can be done on an overall basis ("increased length of experience period"), or it can be done for the more unstable portion of the ratemaking process, the excess portion (the "basic limits" approach). Both remedies will be discussed below.

a. Increased Length of Experience Period

The experience period is the number of years reviewed by NCCI in their estimation of the overall advisory loss cost change. Prior to the loss cost filing effective April 1, 2003 (submitted in 2002), the NCCI relied upon two policy years of experience to calculate advisory loss cost level changes in Vermont. Recognizing the fact that a state the size of Vermont does not have a large enough base of claims and payroll to be fully predictable using only two policy years, the NCCI changed the experience period to three years in their filing submitted in November 2002. This change to three years was judgmentally selected and has resulted in further stabilization of the indicated loss cost level changes.

It should be noted that, in almost all other states, NCCI uses only two policy years to estimate loss costs. Vermont may want to consider a further extension of the three-year experience period utilized in the current loss cost analysis. An advantage of lengthening the experience period is to increase stability. A disadvantage to

lengthening the experience period is that the indicated loss cost analysis is more susceptible to errors because it is difficult to accurately estimate such critical ratemaking items as trend (e.g. medical inflation) over a longer period of time. Another disadvantage to lengthening the experience period is to decrease responsiveness. Therefore, it is difficult to assess the net gain (if any) from further extending the experience period.

NCCI has already moved to the three years experience period in Vermont, which should increase stability. In addition, the current NCCI filing just introduced basic limits ratemaking, discussed below. We believe that further extending the experience period is premature at this time because the changes recently implemented by NCCI need to be in place a period of time before they can be evaluated. Instead, we recommend that the current three year experience period be allowed to remain in place for some time before further changes are introduced.

b. *Revised Ratemaking Methodology (“Basic Limits”)*

As mentioned above, NCCI has historically utilized total limits (i.e. unlimited) claims experience in their ratemaking procedure. This procedure has the effect of allowing large claims experience to directly impact the total limits loss cost indication. NCCI partially adjusted for the effect of large claims in their November 2003 filing by excluding the large claims in the determination of two key rating variable factors, namely loss development factors and trend factors. However, the full value of the large claims was included in the final determination of the overall loss cost level.

A revised approach to limiting the effect of large claims on the overall loss cost indication would be to limit the large claims to a pre-determined threshold (“basic limit”). This procedure would begin with calculating the ultimate claims for a particular year that are below the basic limit and then factoring in to that year’s loss data an expected amount of claims above the basic limit. This approach is actually a variation on the recommendation of increasing the number of years used in the ratemaking procedure.

The amounts of large claims above the basic limit that are used in calculating each year's advisory loss cost would be determined based on more than two or three years of experience. This "basic limits " ratemaking approach will provide more responsiveness in rates if fewer years are utilized in the basic limits analysis, while an increase in the number of years utilized in the excess ratemaking procedure will tend to produce more stability in the excess portion of the total limits loss cost indication.

5. Other Findings

a. Formation of Excess Pool

The concept underlying excess pools is the sharing of large individual claims. Through the pool, each member of the pool is allowed to pass individual claim amounts greater than a pre-determined limit to the pool. In exchange for the sharing of large claims, each member pays a percentage of their written premiums to fund the claims to be paid out by the excess pool.

Currently for workers' compensation, Minnesota is the only state operating with an excess pool (Workers' Compensation Reinsurance Association or WCRA). A key observation from Table 2 (in Section II.C.1.) is that Minnesota had about three times the premium volume of Vermont as of December 31, 2003. In order to achieve stability in an excess pool, you need to establish a critical mass of size as measured by premiums. Even with the large size differential between Vermont and Minnesota, the Minnesota excess pools' latest underwriting results indicate that it is operating at a large loss. For the year ended 2003, earned premiums were \$32 million for the WCRA, while the incurred losses for the 2003 year were \$136 million (approximately 425% of earned premiums). Given the size of Vermont and the problems that the WCRA has experienced, we believe that the formation of an excess pool for Vermont would likely not be beneficial. While the formation of a multi-state excess pool would alleviate some of the size issues, there are many other factors that lead us to conclude that a multi-

state excess pool would not be beneficial either. We will now discuss why we believe this to be the case.

By the very nature of the pooling of risks, the more risks you pool, the more predictable the results become. However, if there is a pooling of risks among states, the states that would be involved need to agree on how it is done. In practice, this promises to be very difficult, and would probably require all the states participating to enact identical enabling legislation. Note that every state has different workers' compensation laws and workers' compensation structures. The question of who is going to decide whether Vermont is less or more likely to have a large loss than say, for example, New Hampshire or Maine, is an important issue that would need to be dealt with. The question of how administrative costs get allocated to each state is another difficult issue. Which party would estimate these items and get all the involved states to agree? In order for a regional pool to work, there needs to be a long-term buy in for each state. It may be difficult to get the required level of commitment for all the states.

b. Rate Suppression

Rate suppression is generally thought of as the artificial limiting of premiums and loss costs below their proper levels. A typical form of rate suppression would be legislatively mandated restrictions on carriers' filed loss cost changes. It is important to realize that given the inherent uncertainty associated with ratemaking, one must proceed cautiously in labeling mere differences of opinion over rating variables as rate suppression. Given Milliman's extensive experience in reviewing numerous Vermont workers' compensation rate filings, we do not believe that rate suppression has been an issue in Vermont.

We believe that directly implementing a plan to suppress rates would have some unfavorable results. These include, but are not limited to, a likely increase in the residual market pool and a possible exodus by some of the existing carriers, regardless of the profitability of their existing book of business in Vermont. In today's environment, experience indicates that carriers react negatively to restrictions on their return on

capital, and as such, some carriers would most likely deploy their capital elsewhere if such restrictions were imposed. The story of Massachusetts Personal Auto provides some insight into this issue. In Massachusetts, the Personal Auto rates are set by the state. In general, all carriers must use the same rates. During the last few decades, many carriers have left Massachusetts over the issue of Personal Auto rates. The number of carriers providing Personal Auto insurance in Massachusetts is considerably smaller than in most other states. For example, there are approximately 18 Personal Auto carriers in Massachusetts, while there are over 200 in New York and 350 in Connecticut. Some of the biggest Personal Auto writers in the United States (including Allstate, State Farm, GEICO, and Progressive) do not write Personal Auto in Massachusetts.

Milliman does not believe that any artificial suppression of rates will have a lasting positive impact on the Vermont workers' compensation system and would potentially be a poor remedy in the goal of achieving long-term stability in the workers' compensation market.

III. LIMITATIONS

A. RELIANCE ON DATA

In performing this analysis, we relied on data and other information provided by the State of Vermont, the NCCI, and other industry sources. We have not audited or verified this data and information. If the underlying data or information is inaccurate or incomplete, the results of our analysis may likewise be inaccurate or incomplete.

We performed a limited review of the data used directly in our analysis for reasonableness and consistency and have not found material defects in the data. If there are material defects in the data, it is possible that they would be uncovered by a detailed, systematic review and comparison of the data to search for data values that are questionable or relationships that are materially inconsistent. Such a review was beyond the scope of our assignment.

B. UNCERTAINTY

Actuarial estimates are subject to uncertainty from various sources, including changes in claim reporting patterns, claim settlement patterns, judicial decisions, legislation, and economic conditions.

In estimating the impact various items may have on workers' compensation premiums, it is necessary to make assumptions regarding such things as the future frequency and severity of large claims, the actual effect that the new NCCI procedure may have on loss costs, and the probability of a successful state run excess pool. Actual results will not develop exactly as projected and may, in fact, vary significantly from our projections.

C. DISTRIBUTION

Milliman's work is prepared solely for the use and benefit of the State of Vermont in accordance with its statutory and regulatory requirements. Milliman recognizes that materials it delivers to the State of Vermont may be public records subject to disclosure to third parties. However, Milliman does not intend to benefit and assumes no duty or liability to any third parties who receive Milliman's work in this fashion. To the extent that Milliman's work is not subject to disclosure under applicable public record laws, the State of Vermont agrees that it shall not disclose Milliman's work product to third parties without Milliman's prior written consent.

IV. GLOSSARY OF INSURANCE TERMS

Advisory Loss Cost – the provision for losses per unit of exposure (\$100 of payroll for workers' compensation) that is filed by NCCI with state regulators after performing a rate study.

Case Reserves – the insurance company's claims personnel's estimate of future payments on claims that have been reported to the insurance company for a particular period at a specific point in time.

Claims Incurred – the sum of all paid losses and case reserves for a particular period at a specific point in time.

Current Rate – the loss cost adjusted to include expenses and overhead.

Excess Losses – the portion of losses for individual claims that are greater than a particular limit or threshold.

Experience Period – the length of time reviewed in determining expected ultimate losses.

Incurred But Not Reported ("IBNR") reserves – the loss reserve value established in recognition of the liability for future payments on losses that have occurred but that have not yet been reported, and for future development on the case reserves established for reported claims. IBNR is an estimate of the required reserves.

Indicated Rate/Loss Cost – the cost per unit of exposure that is indicated by a rate study.

Large Loss Adjustment – the process of removing actual large losses from the experience and adding back an expected large loss amount to approximate the average large loss experience per year.

Loss Ratio – the ratio of ultimate losses to premium earned for the same period.

Loss Costs – ultimate losses divided by payroll (in \$100 increments)

Loss Development Factors ("LDFs") – factors used to develop paid or incurred losses from their values at specific evaluation ages to their ultimate values. LDFs are estimated by reviewing historical experience.

National Council on Compensation Insurance ("NCCI") - a statistical agency that collects workers' compensation data from insurance carriers. The NCCI analyzes the collected data to calculate loss costs for many states, including Vermont.

Paid Losses – those losses for a particular period that have actually been paid on all known claims.

Policy Year – the premium and loss experience relating to all policies effective in a specific year. Policy year experience is used to track the ultimate claims incurred for a particular group of policies.

Premium – the dollar amount charged for an insurance policy based on current rates, payroll, and other considerations.

Premium On-Leveling – the process of estimating what historical premium levels would be, had the insurance been written today.

Residual Market – the collection of individual employers who are not able to obtain workers' compensation coverage through the voluntary market.

Target Loss Ratio – the loss ratio that, when multiplied by premium, produces a dollar amount available to pay estimated losses.

Trend Factors – factors used to adjust the losses or exposures for any underlying trends that are expected to produce changes over time (e.g., growth in losses and/or payroll due to inflation).

Ultimate Losses – the sum of paid losses, case reserves, and IBNR reserves for a particular period at a specific point in time. Until all claims are closed, any calculation of ultimate losses is an estimate.

Voluntary Market – the collection of individual employers who are able to purchase workers' compensation insurance from a carrier (i.e. the insurance carrier "voluntarily" sells the workers' compensation insurance to them.)