

Independent Actuarial Review

Ratemaking Processes of the
National Council on
Compensation Insurance, Inc.

State of Florida
Financial Services Commission

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INTRODUCTION

Scope of Assignment

Mercer Oliver Wyman Actuarial Consulting, Inc. (Mercer) has been engaged by the Financial Services Commission, State of Florida (the Commission) to conduct an independent actuarial peer review of the ratemaking processes of the National Council on Compensation Insurance, Inc. (NCCI), in Florida, as required by Section 627.285, Florida Statutes.¹ Specifically, Mercer has been engaged to complete an actuarial review of the following:

1. The methodologies, thought processes, judgments and assumptions used to determine statewide rate level changes, including, but not limited to, database (paid loss versus paid loss plus case reserve or other), loss development methodology and selections, experience periods, trend calculations, premium development calculations, premium adjustments, benefit on-level adjustments, expense provisions, profit and contingencies provisions, impact of experience rating off-balance, impact of single large claims, amongst others.
2. The methodologies, thought processes, judgments and assumptions used to distribute statewide rate level changes to the major industry groups.
3. The methodologies, thought processes, judgments and assumptions used to determine individual workers compensation classification rates, including, but not limited to, loss development, benefit on-level adjustments, trend adjustments, experience adjustments, off-balance adjustments, industry group differential adjustments, determination of maximum limit on individual claims and associated adjustments, test correction factors, amongst others. Mercer is specifically concerned with the impact of large claims and the potential distortions to individual workers compensation classification rates.
4. The methodologies, thought processes, judgments and assumptions used to determine the impact of legislative changes, benefit-level adjustments, and legislative proposals.²

Mercer's report to the Commission consists of the text and charts in this document.

¹ *The statute requires that the Commission contract for an independent actuarial peer review and analysis of the ratemaking processes of any licensed rating organization that makes rate filings for workers' compensation insurance in Florida. The NCCI is responsible for collecting statistical information and making workers' compensation rate filings, on behalf of Florida's insurers. The statute requires a final report no later than February 1, 2006 and requires full cooperation on the part of NCCI.*

² *Since implementation of SB 50A on October 1, 2003, there have been no benefit or law changes affecting workers' compensation costs. Since October 1, 2003, there have been a series of benefit level changes consisting of changes to medical provider reimbursement rates in Florida's Workers' Compensation Health Care Provider Reimbursement Manual (Medical Fee Schedule). As such, aside from examining the general methodology of NCCI's calculation of the impact of these changes, Mercer has focused its effort on examining the impact of SB 50A on workers' compensation rates and the appropriateness of methodologies and processes employed by NCCI in calculating post-SB 50A workers' compensation rates.*

NCCI Ratemaking Methodology

The final result of the ratemaking process is a revised premium rate for each of over 500 individual workers' compensation employer classifications. Classifications are grouped into five industry groups.³ Each classification is assigned a premium rate based on the combined impact of statewide average experience, the experience of the industry group to which it belongs, and the experience of the individual classification itself. The NCCI ratemaking methodology employed in Florida is composed of four general steps:

Step 1: Calculation of Statewide Rate Change

Statewide data for all workers' compensation classifications combined is used to determine the statewide rate change. This step relies primarily on what is known as Aggregate Financial Call data.⁴ Contributing elements to the statewide rate change include:

Loss Experience: Is the actuarial forecast of the final cost of benefits for a group of claims greater than or less than what is expected in current premium rates?

*Trend:*⁵ Are workers' compensation benefits increasing at a rate greater than or less than wages?

Benefit Changes: Have there been any changes in workers' compensation benefits not provided for in current premium rates?

*Claim Adjustment Expense (LAE)*⁶: Is the expected cost of LAE greater than or less than what is expected in current premium rates?

Other Insurance Company Expenses: Is the expected cost of insurance company overhead and commission greater than or less than provisions in current premium rates?

³ *The five industry groups are:*

Manufacturing, Contracting, Office and Clerical, Goods and Services, Miscellaneous

⁴ *NCCI collects, tabulates, checks, and edits combined statewide workers' compensation experience. Data is collected in a manner such that an actuarial analysis can be conducted to determine, on an average, statewide basis, whether rates need to be increased or decreased. The **Reporting Guidebook for the Annual Calls for Experience**, published by NCCI, includes a detailed description of the various data requests as well as instructions for completing these requests. Mercer relied on the January 2005 edition of this guide for the purpose of this report.*

⁵ *Premium rates are measured relative to payroll. Consequently, there is an a priori assumption in premium rates that benefit costs will increase at the rate of wage inflation. Therefore, premium rates will decrease if actuarial analysis shows that benefit costs are increasing at a rate less than wage inflation, all else being equal. Similarly, premium rates will increase if actuarial analysis shows that benefit costs are increasing at a rate greater than wage inflation, all else being equal.*

⁶ *Claim adjustment expense is commonly referred to as loss adjustment expense (LAE). LAE is the total cost of adjusting claims, including (in general) overhead costs of maintaining a claims adjustment staff and claim defense costs.*

Taxes and Assessments: Is the expected cost of taxes and assessments greater than or less than the provisions in current premium rates?

Profit and Contingencies: Is the economic/actuarial forecast of reasonable insurance company profit greater than or less than the provision in current premium rates?

If the answer to all the questions above is no, then the statewide rate change will be 0. Of course, if the answer to any of the questions above is yes, then the ratemaking process will indicate the need for a statewide rate change.

Step 2: Distribution of Statewide Rate Change to Industry Groups

The statewide rate change is distributed to each of the five industry groups based on the relative loss experience of each individual industry group.⁷ The weighted average of the rate changes for each of the five industry groups must equal the statewide rate change calculated in Step 1. The allocation to industry groups relies primarily on what is known as Workers' Compensation Statistical Plan (WCSP) Data.⁸

Step 3: Distribution of Industry Group Rate Changes to Individual Classifications

The industry group change is distributed to each individual classification within each industry group. The distribution is based on the actual loss experience of each individual classification, and relies on WCSP data. The weighted average of the rate changes for all classifications in an individual industry group must equal the industry group rate change calculated in Step 2.

Step 4: Calculation of Rating Values

Each employer is subject to an experience rating program, where, depending on employer size, the employer's premium rate is adjusted for the employer's actual experience. The employer's premium rate is adjusted upward or downward depending on whether the employer's actual experience is greater than or less than the average experience of its classification.⁹ While the experience rating program is mandatory, there are other voluntary rating programs, each of which relies on specific rating values. The final step of the ratemaking process is the calculation of the required rating values for these programs.

⁷ For example, if the average statewide rate change is a 5.0% increase, and the manufacturing industry group has much greater loss experience than expected, while the other four industry groups have lower loss experience than expected, the manufacturing industry group might be allocated a 10% rate increase, while the other four industry groups might be allocated a 2% rate increase. The weighted average for all five industry groups must equal the statewide 5.0% increase.

⁸ WCSP data is a database of individual claim experience and policy specific information collected, tabulated, checked, and edited by NCCI. Information is collected in sufficient detail such that workers' compensation experience can be allocated to individual classifications, and therefore, to the five industry groups. WCSP data is the basis for allocating the statewide rate level change to the five industry groups and to all individual classifications.

⁹ Employers must meet a minimum size threshold to be experience rated. Employers below that threshold are not experience rated due to their small size. For employers that meet the minimum size criteria, the weight, or credibility, assigned to actual experience depends on their size. For smaller employers, actual experience plays a smaller role because of the low credibility assigned to actual experience. For the largest employers, credibility is so high that these large employers pay premium rates based essentially on their own experience.

General Approach of this Review

The general approach in this review, as described in Mercer's proposal to conduct this review, was as follows:

1. Identification of data and methodology used.
2. Appropriateness of data and methodology used.
 - Is the methodology a commonly applied actuarial technique?
 - Is it appropriate in the circumstances of its use by NCCI?
 - Does it meet Actuarial Standards of Practice?
 - Is data appropriate for methodologies employed?
3. What additional methodologies were available?
 - Comparison to NCCI applications in other states
 - Comparison to approaches in non-NCCI jurisdictions
4. Identification of consistency of methodology used.
 - What changes to methodology were made in the past, and why?
 - What was the impact of the change in the methodology?
5. Is there evidence of bias in the ratemaking process?

The review process was as follows:

1. Review initial documentation provided by NCCI.
2. Issue requests for additional information from NCCI.
3. Discuss questions/concerns of NCCI regarding additional requests.
4. Discuss progress, questions, and concerns with the Florida Office of Insurance Regulation.¹⁰
5. Discuss general results with NCCI, and give consideration to NCCI concerns.
6. Issue Draft Report to Florida Office of Insurance Regulation.
7. Consider comments from Florida Office of Insurance Regulation and NCCI.
8. Issue Final Report

Items 2, 3, and 4 represented an iterative process that took place generally between January 6, 2006 and January 20, 2006. The draft report was presented to the Florida Office of Insurance Regulation on January 23, 2006. The final date for presentation of the final report was February 1, 2006.

Mercer did not use this assignment as a vehicle to substitute Mercer's professional opinions for those of NCCI. Rather, Mercer conducted an objective review and identified those areas where, in Mercer's opinion, NCCI's documentation was incomplete or where inappropriate actuarial judgments were made. Mercer's findings that specific processes, judgments, or assumptions were reasonable, or Mercer's lack of issue with the same, do not necessarily mean that Mercer endorses them or would take the same approach if Mercer were to conduct its own independent analysis. A complete list of documents and data provided is attached at the end of this report. Applicable Caveats and Limitations are attached as well.

¹⁰ Mercer's contact during the course of this review was Mr. James Watford, ACAS Actuary, Florida Office of Insurance Regulation

EXECUTIVE SUMMARY

Principal Conclusions

1. The NCCI ratemaking process (in Florida¹¹) is based on commonly applied actuarial methodologies that are supported in actuarial literature as well as frequency of usage by credentialed actuaries.

- a. The NCCI ratemaking process draws from a group of actuarial methodologies employed by NCCI and other ratemaking organizations in other states.
- b. Descriptions of certain methodologies that are part of the NCCI ratemaking process are required reading within the syllabus of examinations for membership published by the Casualty Actuarial Society.¹² In particular, Mercer notes that the NCCI Experience Rating Plan Manual for Workers' Compensation and Employers Liability Insurance and the Retrospective Rating Plan Manual for Workers' Compensation and Employers Liability Insurance are part of that group of readings.
- c. Actuarial methodologies used by NCCI are appropriate within the circumstances of their use in the NCCI ratemaking process.
- d. Actuarial methodologies used by NCCI meet the applicable Actuarial Standards of Practice (ASOP),¹³ as published by the American Academy of Actuaries.¹⁴

¹¹ *This report addresses NCCI ratemaking processes and methodologies in the state of Florida, only. Unless otherwise specified, any references to the NCCI ratemaking process or ratemaking methodologies are meant to be specific to the State of Florida.*

¹² *2006 Syllabus of Basic Education, Casualty Actuarial Society
4350 N. Fairfax Drive, Suite 250, Arlington, VA 22203*

¹³ *In Mercer's opinion, the following Actuarial Standards of Practice apply*
ASOP 9 Documentation and Disclosure in Property and Casualty Ratemaking, Loss Reserving, and Valuations
ASOP 12 Concerning Risk Classification
ASOP 13 Trending Procedures in Property Casualty Insurance Ratemaking
ASOP 23 Data Quality
ASOP 25 Credibility Procedures Applicable to Accident and Health, Group Term Life, and Property/Casualty Coverages
ASOP 29 Expense Provision in Property/Casualty Ratemaking
ASOP 30 Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking

¹⁴ *An umbrella organization of major actuarial organizations in the United States
1100 Seventeenth Street NW, Seventh Floor
Washington, DC 20036*

- e. In particular, actuarial methodologies used by NCCI are consistent with the Statement of Principles Regarding Property and Casualty Insurance Ratemaking, as published by the Casualty Actuarial Society, and referenced in ASOP 9, Documentation and Disclosure in Property and Casualty Insurance Ratemaking, Loss Reserving, and Valuations.

Mercer reviewed the key elements of the NCCI ratemaking process, as well as selected specific details of the calculation of the statewide rate change and of the calculation of individual classification rates. Mercer's conclusion is based on this review. There may be minor elements of the NCCI ratemaking process that were not examined in this review. Some of these elements of the process might potentially benefit from review or updating. Additionally, while Mercer tested the behavior of certain rating values over time for reasonableness, Mercer did not examine the detailed calculations of all of these elements during this review. These issues are not material as respects the conclusion above.

2. The NCCI ratemaking process is based on data that is appropriate as respects the actuarial methodologies used in the ratemaking process.

- a. The financial call data collected by NCCI is appropriate for the actuarial methodologies used by NCCI to calculate the statewide rate change. In particular, the data is appropriate for the determination of the contributions of experience and trend to the statewide rate change.
- b. The WCSP data collected by NCCI is appropriate for the actuarial methodologies used by NCCI to distribute the statewide change to the five industry groups and the individual classifications in each industry group.

The financial call data and WCSP data are the primary data sets used by NCCI in the ratemaking process. Each set of data has advantages and limitations. The ratemaking processes employed by the NCCI tend to maximize the advantages of each set of data, and tend to minimize the impact of limitations of each set of data.

3. The general NCCI ratemaking process is consistent over time. However, judgments and assumptions as respects specific decisions on methodology and the selection of actuarial parameters may vary between rate applications.

- a. The general ratemaking process employed by NCCI and the specific algorithms used in the NCCI rate application have been consistent over time.
- b. Certain specific judgments and assumptions vary between rate applications. In general, specific judgments and assumptions are a matter of professional actuarial opinion. There is a concern that relying on varying judgments and assumptions rather than a consistent selection methodology over time introduces bias (or at least the perception of bias) into the ratemaking process. Conversely, there are arguments that fixing all aspects of the ratemaking methodology may lead to illogical results when changes occur to the workers' compensation system. This author, as respects statewide ratemaking, has generally recommended that methodologies and selection criteria be fixed over time unless there is a

compelling reason to change. However, this is a professional opinion. Mercer finds nothing inherently improper with NCCI's general approach to ratemaking as respects this issue. Additionally, given the material system changes that have occurred in Florida as a result of SB 50A, variation of specific methodologies, judgments and assumptions could be appropriate. However, in these circumstances adequate support demonstrating the need for suggested changes is required, or conversely, adequate support demonstrating the need for continuing with past practice is required in situations where change might be indicated.

4. In the proceedings for Revised Workers' Compensation Rates and Rating Values effective January 1, 2006, NCCI did not adequately investigate behavioral changes in key data elements that impacted NCCI's actuarial decision making process. This was a fundamental omission in the analysis.

A key element of the application for Workers' Compensation Rates and Rating Values effective January 1, 2006 was the material difference between results generated by two different data groups. The statewide change based on paid loss plus case reserve data was significantly lower than the statewide change based on paid loss data alone. NCCI did not give full weight to the paid loss plus case methodology. A series of quantitative data analyses conducted by NCCI and a consulting actuary engaged by NCCI attributed the lower results based on paid loss plus case reserve data to decreases in case reserve¹⁵ levels. NCCI, based on these data analyses, concluded that paid loss plus case reserve data will understate results because of the decrease in case reserve levels.

NCCI's conclusion that paid loss plus case reserve data will understate results was not based on an understanding of factors underlying the behavior of paid loss plus case reserve data. NCCI and its consulting actuary, based on material provided to Mercer for this review, established that changes to case reserve levels did indeed occur, but did not conduct an investigation as to the *reasons* for the change in case reserve levels. The changes to case reserve levels are almost coincident with implementation of SB 50A, and appear to be distinctive in Florida.¹⁶ Without investigating and understanding the reasons for the changes to case reserve levels, especially given implementation of SB 50A, NCCI's assertion that paid loss plus case reserve data will understate results was premature. This is a fundamental omission in the analysis. It is entirely possible that the new case reserve levels and the associated actuarial parameters¹⁷ generated by this data are reflective of post SB 50A loss experience, and would produce appropriate statewide

¹⁵ *Case reserves are established by claims management professionals at insurance companies and represent the expected future cost of individual claims, based on information available at the time the reserve is set. Actuarial projections rely on a consistent level of case reserves over time. All else being equal, sudden decreases to case reserve levels will cause unadjusted actuarial projections to underestimate costs.*

¹⁶ *The results of a data request by Mercer indicated that changes to case reserve levels for a common group of carriers in SC, VA, GA, AL, MS, TN and Florida was maximized in Florida. None of these states had a major system change in the past five years, except TN. The change in TN is an estimated statewide impact of -6.3 percent effective July 1, 2004, as compared to SB 50A, currently estimated to be -14.0%, effective October 1, 2003. Mercer's understanding is that NCCI did not conduct this data examination for its evaluation of rates effective January 1, 2006.*

¹⁷ *That is, primarily, loss development factors.*

rate changes, and that greater weight on the paid loss plus case reserve data than that given by NCCI would have been appropriate.

Mercer's opinion is that NCCI, prior to preparing the rate application, should have conducted a detailed examination, including questioning carriers and their claims departments, to understand the reasons for the case reserve behavior in Florida. An examination of claim behavior and case reserving practices before and after implementation of SB 50A in order to identify and understand the factors causing the change in data behavior would have been extremely useful. Such an examination would have provided crucial information that would have assisted NCCI, and regulators, in understanding the fundamental reasons for the change in data behavior. This information could have provided the link that tied NCCI's documentation of decreased case reserve levels to changes in case reserving practices and supported NCCI's proposed statewide rate change. Conversely, the information could have tied the change to case reserve levels to the impact of SB 50A, and perhaps indicated that greater reliance should have been placed on paid loss plus case reserve data. In this respect, NCCI's analysis was incomplete. This is a concern, because NCCI is in the unique position to conduct these examinations.

NCCI's analysis contained judgments and assumptions based on NCCI's concerns regarding the reliability of paid loss plus case reserve data. NCCI identified reductions to case reserve levels, as did the consulting actuary engaged by NCCI. Both NCCI and its consulting actuary assumed that the new, lower level of case reserves was understated and that rate indications based on paid loss plus case reserve data would be understated as well. NCCI and its consulting actuary did not investigate the underlying reasons for the change to case reserve levels. There was no discussion by NCCI or its consulting actuary of the very real possibility (given the coincidence of the implementation of SB 50A and the change in case reserve levels) that the reduction to case reserve levels was an appropriate reflection of the impact of SB 50A, and that, given the expected impact of SB 50A, paid loss plus case reserve data could be the best predictor of future rate level. This approach, of presuming a causative factor without investigation, could potentially give the appearance of a preconceived notion in the ratemaking process. From a public policy perspective, given the magnitude of the impact of SB 50A, and the wide range in rate indications from the different databases, it would have been prudent for NCCI to investigate the reasons underlying the behavior of the data to better support its own position, or perhaps support a position for a greater or lower rate change.

5. **There is a lag in the distribution of expected SB 50A savings to individual classes. As a result, while average statewide rate level has been appropriately adjusted for the impact of SB 50A, certain individual workers' compensation classifications have been charged premium rates that are too high, while others have been charged premium rates that are too low.**
 - a. NCCI did not distribute the 14% rate reduction effective October 1, 2003 using NCCI's standard classification ratemaking procedure. Rather, NCCI applied a flat factor of .86 across all workers' compensation classifications and decreased rates for all classifications by a uniform 14%.

In Mercer's opinion, the "flat factor approach" was not appropriate. SB 50A is expected to have the greatest impact on classifications with the highest percentage of indemnity loss experience. As such, the impact of SB 50A is expected to be greater than the 14% average statewide rate reduction for those classifications. The flat factor approach delayed realization of the greater savings to these classifications for 15 months, from October 1, 2003 to January 1, 2005, the effective date of the next rate revision. During this time, classifications with the highest proportion of indemnity loss experience were likely paying premium rates that were too high, while classifications with the lowest proportion of indemnity loss experience were likely paying premium rates that were too low. This is a material concern, because of the potential for cross subsidization between classes. Additionally, the 15 month delay is compounded by concerns regarding the impact of the current ratemaking methodology on realignment of classification rates in the wake of SB 50A. (See following paragraph).

- b. The current ratemaking methodology appears to be delaying full recognition of SB 50A savings for classifications with the highest proportion of indemnity loss experience.

The current ratemaking methodology incorporates a procedure that limits changes to individual classification rates to a range around the statewide change.¹⁸ The purpose of this procedure is to prevent large swings to rates for individual classifications. Notwithstanding SB 50A, the procedure is acceptable. However, Mercer's examination of data indicates that the current limiting procedure is delaying recognition of savings for classifications with the highest proportion of indemnity loss experience.

The combined impact of a) and b) above is potentially significant. Mercer's analysis shows that since January 1, 2005 rates for the most hazardous classes¹⁹ have decreased between 10% and 13%²⁰ more than rates for the least hazardous classes. It is likely that this value would have been higher if the limiting procedure in classification ratemaking had been temporarily relaxed.

¹⁸ *In actuality, it is a range around the industry group change to which the classification belongs.*

¹⁹ *For the purpose of this analysis, hazard is measured as the percentage that indemnity losses bears to total losses in the pure premium calculation underlying the calculation of individual classification rates. This definition is used because those classifications with the highest percentage of indemnity costs are likely to realize maximum savings from SB 50A.*

²⁰ *The exact value depends on the method of measurement and the groups of classes examined.*

Recommendations

- 1. NCCI should conduct a detailed investigation into the behavior of case reserve levels in Florida. The purpose of the study would be to provide an understanding of the fundamental reasons for the decrease in case reserve levels, including, but not limited to, the impact of SB 50A and the impact of changes in case reserve adequacy levels. The information would be used to better assess the reliability of paid loss plus case reserve data as well as the reliability of different techniques used to calculate key actuarial parameters associated with this technique.**

This issue was discussed at length under item 4 in the prior section

- 2. NCCI should investigate and quantify the impact of rate limiting procedures on classification rates and the classification ratemaking system in general, as respects the impact of SB 50A on individual classification rates and report back to the Florida Office of Insurance Regulation. The purpose of the study would be to determine if a temporary adjustment to the classification ratemaking procedure to accelerate classification rate realignment due to SB 50A is warranted. Mercer notes that this type of realignment is more readily accomplished in an environment where statewide rate level is declining, rather increasing.**

This issue was discussed at length under item 5 in the prior section.

3. Other Recommendations:

- a. Consideration should be given to decreasing the limit on claims used to determine individual classification rates.**

The current ratemaking procedure caps the amount an individual claim can contribute to data used to determine rates for individual classifications. The cap used in the most recent application is \$888,000. Consideration should be given to reducing this cap, given that only a small portion of total lost time claims in Florida reach this level, and that there are several classifications whose rates have been impacted by the occurrence of an exceptionally large claim. The argument for reducing the cap is that these claims represent such a small portion of total incurred lost time claims that their impact represents a risk that should be shared between all classifications in the state. The argument against is that rates for individual classifications should reflect the experience of that particular classification. Additionally, the procedure that limits changes to individual classification rates to a range around the statewide change helps mitigate the impact of large claims on rates for individual classifications. Ultimately, this becomes a regulatory decision. Mercer's recommendation is that this topic be investigated.

- b. The 24 year loss payout pattern used in the internal rate of return calculation that determines the profit and contingencies provision is unrealistically short. Consideration should be given to increasing the payout pattern to 35 or more years.**

In all likelihood, all claims with dates of loss in 2005 will likely not be closed until at least 2050 or later. The 24 year loss payout pattern used to determine the profit and contingencies provision is unrealistically short. NCCI should test 35, 40 and 50 year payment models. The 35 year payment model will likely have a measurable impact, and if so, should be adopted. It is unclear whether longer payment patterns will have an impact due to the nature of the internal rate of return calculation used in the calculation of the profit and contingencies provision.²¹ The 40 and 50 year models should, nevertheless, be investigated.

- c. The calculation of individual classification rates relies on paid loss plus case reserve loss development factors calculated from WCSP data. NCCI should monitor WCSP data for the same case reserve behavior observed in the statewide financial data.**

It is likely that the same behavior observed in statewide financial data will be observed in WCSP data, when that data becomes available for ratemaking. NCCI should monitor WCSP data and ensure that paid loss plus case reserve loss development factors used in individual classification ratemaking are appropriate for the purpose for which they are used.

²¹ *The models discount cash activity in the future to real money values today. Therefore, the real value of dollars paid in excess of 35 years may be so low that there is no material difference between results from the 35, 40, and 50 year models.*

DISCUSSION AND ANALYSIS

Statewide Rate Indication

Introduction

Contributing elements to the statewide rate change include

Loss Experience
Benefit Changes
Trend
Loss Adjustment Expense
Other Insurance Company Expenses
Taxes and Assessments
Profit and Contingencies

Each is discussed individually.

Loss Experience

The purpose of the analysis of loss experience is to forecast the final expected cost of claims with dates of loss during the specified time periods, or experience periods. Key considerations in this process are the selection of experience periods, database, and methods used to calculate loss development factors. Loss development factors (LDFs) are actuarial parameters used to adjust loss data to a final cost basis.

Experience Period

There are generally two experience periods available for analysis, policy year and calendar/accident year. Policy year experience is defined as losses associated with claims incurred on policies written during a specific calendar year. For example, policy year 2004 (PY2004) experience includes claims associated with policies written during 2004. Policy year experience extends over a 24 month period because only policies written on January 1 will have claims with dates of loss only in the year of writing. Using the PY2004 example, a policy written on December 31, 2004, will provide coverage for claims with dates of loss from December 31, 2004 through December 30, 2005. Roughly half the claims associated with policy year 2004 will have dates of loss in 2004. The other half will have dates of loss in 2005. The average date of loss is approximately December 31, 2004.²²

²² *This is the case if policies are written and incepted evenly over the year, and if claims occur evenly over the policy periods. As these are usually not the case, the average date of loss is generally close to, but not exactly equal to, December 31.*

Calendar/Accident year experience is defined as losses associated with claims with dates of loss in a specific calendar year. For example, calendar/accident year 2004 experience includes claims with dates of loss in 2004. The average date of loss is approximately June 30, 2004²³, which is six months earlier than policy year experience.

Each experience period has advantages and disadvantages. Accident year experience represents the most recent experience period available for analysis and is therefore a better indicator of current conditions and reduces reliance on trend. However, loss experience must be matched to premium paid to insure the claims generating the losses. Accident year experience generally is not an exact match of premium to losses. Additionally, being the most recent experience available also increases the potential for statistical variability of accident year experience.

As noted earlier, policy year experience is somewhat more mature than accident year experience, and therefore has less potential for statistical fluctuation. Additionally, policy year experience provides for a more precise match of premium to losses. Policy year experience is not as recent as accident year experience, and increases reliance on trend.

Information provided by NCCI indicates that NCCI examines both policy year and accident year experience during the course of its analysis of Florida workers' compensation experience. However, NCCI uses the two most recently available accident years to determine the statewide rate change. The process and selections are reasonable.

Database

NCCI has several types of loss data that may be used to forecast the final cost of claims. The choices are based on the loss data available from NCCI's financial calls. While different data elements are available, there are two combinations that NCCI has historically relied on in ratemaking:

Paid Loss data

Paid Loss plus Case Reserve data

Paid loss data relies exclusively on benefit payments. Paid loss plus case reserve data relies on benefit payments and case reserves. Case reserves are the most recent estimates by claims professionals of the outstanding costs on open reported cases. Therefore, the use of paid loss data, as opposed to paid loss plus case reserve data, excludes the most recently available information on expected future costs embedded in case reserves. Paid loss data relies much more heavily on loss development factors for forecasting purposes, whereas paid loss plus case reserve data essentially substitutes case reserves, the most recently available information on the expected future costs of individual claims, for a substantial portion of paid loss development. Paid loss data is distorted by changes in claim payment (settlement) patterns while paid loss plus case reserve data is also distorted by changes to case reserve levels.

²³ *This is the case if claims occur evenly over the year. As this is usually not the case, the average date of loss is generally close to, but not exactly equal to, June 30.*

Notwithstanding issues related to current case reserve levels, documentation provided to Mercer indicates that NCCI has considered the impact of the changes in Florida’s workers’ compensation environment on data used to determine statewide rate level indication, and the process, judgments, and assumptions are reasonable from an actuarial perspective.

However, there is concern, discussed at length in the Executive Summary, that while NCCI correctly identified that case reserve levels changed in Florida, NCCI did not investigate the underlying reasons for the changes, and assumed that the changes to case reserve levels were due to changes in case reserving practices.

In interrogatory 15 from Allan I. Schwartz in connection with the proceedings for rates effective January 1, 2006, NCCI is requested to “provide all analyses, calculations, documents, work papers, data, etc. that the NCCI performed or reviewed in reaching the conclusion that there has been a recent change in case reserving practices.” NCCI’s response was to refer Mr. Schwartz to interrogatory 2 (both directly, and indirectly) of the Office of Insurance Regulation’s standard interrogatories. In that response, NCCI demonstrated that case reserve levels have declined through quantitative analysis of data. However, NCCI conducted no studies and did no research to connect the decline in case reserve levels to a change in case reserving practices.

During the course of Mercer’s review, Mercer requested loss statistics from the top ten carriers in Florida, for Florida only and countrywide excluding Florida. The data was not readily available. As such, NCCI provided the ratio of paid loss to paid loss plus case reserve data for these carriers in Florida and in AL, GA, MS, SC, TN and VA. The purpose of the data request was to check and see if the behavior of this statistic was unique to Florida, or unique to the top ten carriers in all states examined. If the behavior of data in the other states was similar to behavior in Florida, it was likely that the decrease in case reserve levels in Florida was due to changes in case reserving practices and industry wide case reserve weakening. This would lend support to NCCI’s approach. On the other hand, if the behavior of the data was limited to, or exaggerated in, Florida, there was an increased likelihood that SB 50A was impacting the statistics. In either case, additional investigation was warranted. Market share by state for the common group of carriers were as follows, as provided by NCCI:

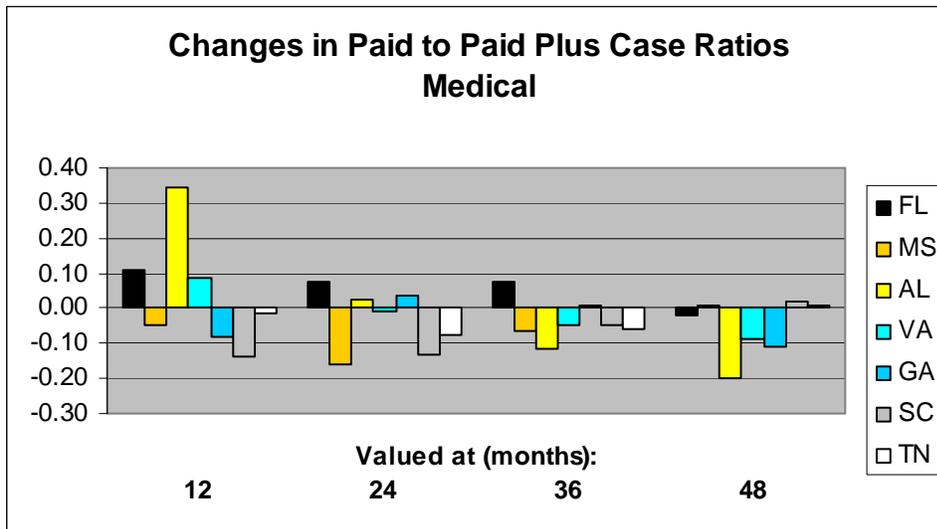
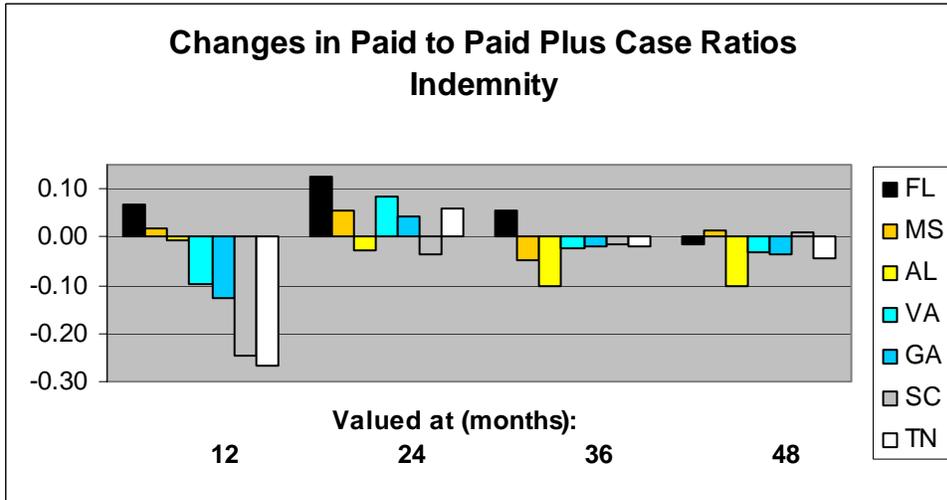
Alabama	Florida	Georgia	Mississippi	South Carolina	Tennessee	Virginia
41.3	54.1	36.6	41.7	41.8	48.3	38.9

Mercer measured the ratio of the average of the two most recently available data points (12/31/04 and 12/31/03) to the average of the oldest two data points (12/31/01 and 12/31/00). Five data points were available: 12/31/04, 12/31/03, 12/31/02, 12/31/01, and 12/31/00. An increase in paid loss to paid loss plus case reserve ratios is an indication of a decrease to case reserve levels. The underlying data and calculation for indemnity benefits in Florida and South Carolina is displayed on the next page. Exhibits summarizing data for all states examined are displayed at the end of this report.

Florida Indemnity Paid to Paid + Case Ratios				Report						
AY	1	2	3	4	5	6	7	8	9	10
1986										
1987										
1988										
1989										
1990										
1991										0.907
1992									0.938	0.934
1993								0.945	0.947	0.949
1994							0.916	0.920	0.933	0.954
1995						0.918	0.944	0.954	0.979	0.965
1996					0.902	0.924	0.944	0.961	0.948	
1997				0.860	0.900	0.915	0.945	0.923		
1998			0.789	0.851	0.889	0.910	0.913			
1999		0.591	0.711	0.790	0.845	0.857				
2000	0.301	0.582	0.742	0.807	0.851					
2001	0.302	0.620	0.771	0.877						
2002	0.316	0.631	0.813							
2003	0.326	0.689								
2004	0.318									
(1) 2000 - 2001 avg	0.302	0.587	0.750	0.856	0.901	0.921	0.930	0.933	0.943	0.921
(2) 2003 - 2004 avg	0.322	0.660	0.792	0.842	0.848	0.884	0.929	0.942	0.964	0.960
(3) = (2) / (1) -1										
Growth	0.068	0.125	0.056	-0.016	-0.059	-0.041	-0.001	0.010	0.022	0.042

South Carolina Indemnity Paid to Paid + Case Ratios				Report						
AY	1	2	3	4	5	6	7	8	9	10
1986										
1987										
1988										
1989										
1990										
1991										0.990
1992									0.966	0.964
1993								0.978	0.980	0.983
1994							0.963	0.975	0.979	0.980
1995						0.955	0.971	0.962	0.963	0.901
1996					0.939	0.962	0.964	0.979	0.931	
1997				0.890	0.937	0.943	0.951	0.897		
1998			0.801	0.867	0.896	0.932	0.890			
1999		0.604	0.815	0.881	0.944	0.910				
2000	0.341	0.645	0.824	0.896	0.927					
2001	0.275	0.579	0.773	0.876						
2002	0.224	0.578	0.817							
2003	0.232	0.624								
2004	0.232									
(1) 2000 - 2001 avg	0.308	0.625	0.808	0.879	0.938	0.959	0.967	0.977	0.973	0.977
(2) 2003 - 2004 avg	0.232	0.601	0.795	0.886	0.936	0.921	0.921	0.938	0.947	0.941
(3) = (2) / (1) -1										
Growth	-.247	-.038	-0.016	0.009	-0.003	-0.039	-0.048	-0.039	-0.027	-0.037

The same measurements were made for all other states examined, for indemnity and medical losses separately. As stated, a measured increase to the paid loss to paid loss plus case reserve ratios is an indication of a decrease to case reserve levels. A summary of the results is presented in the following graphs:



The graphs demonstrate that the behavior of these metrics is almost unique to Florida for the earliest valuations. The paid loss to paid loss plus case reserve ratios for indemnity losses increased significantly in Florida for the first three valuation dates. The same can be said of medical losses, with the exception of one state at the 12 month valuation. The question that should be addressed is, given that this is the same carrier mix, with significant market share in each state examined, what occurred in Florida that did not occur in these other states? The most logical answer is the enactment of SB 50A.

Mercer’s concern is two-fold. First, the data indicates that changes to case reserve levels were exceptional in Florida, as discussed above. Second, regardless as to outcome, NCCI did not conduct this test.

The results presented in the graphs above are summarized in the table below. As mentioned earlier, underlying data and calculations for all states are attached as exhibits to the back of this report.

Changes in Paid to Paid Plus Case Ratios - Indemnity

	Valued at (Months)				
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>
Alabama	-0.007	-0.027	-0.101	-0.101	-0.020
Florida	0.068	0.125	0.056	-0.016	-0.059
Georgia	-0.127	0.044	-0.021	-0.036	-0.088
Mississippi	0.019	0.056	-0.050	0.014	0.006
South Carolina	-0.247	-0.038	-0.016	0.009	-0.003
Tennessee	-0.266	0.059	-0.018	-0.043	-0.025
Virginia	-0.097	0.085	-0.022	-0.032	-0.021

Changes in Paid to Paid Plus Case Ratios - Medical

	Valued at (Months)				
	<u>12</u>	<u>24</u>	<u>36</u>	<u>48</u>	<u>60</u>
Alabama	0.345	0.027	-0.113	-0.201	-0.057
Florida	0.108	0.077	0.073	-0.020	-0.056
Georgia	-0.084	0.036	0.010	-0.110	-0.137
Mississippi	-0.050	-0.163	-0.065	0.009	0.007
South Carolina	-0.139	-0.135	-0.049	0.021	0.007
Tennessee	-0.015	-0.076	-0.058	0.006	0.033
Virginia	0.084	-0.008	-0.047	-0.087	-0.043

It would not be appropriate to draw any conclusions regarding the accuracy of the paid loss plus case reserve method, one way or the other, based on this information. However, this information supports the need for additional investigation. Mercer’s opinion, as stated in the Executive Summary, is that NCCI, prior to the rate application, should have conducted a detailed examination, including questioning carriers and their claims departments, to understand the reasons for the case reserve behavior in Florida.

Loss Development

Loss development factors (LDFs) measure the growth in losses over time. The selected factors are generally some type of average of the most recent observations available. Such averages could include the most recent five observations, or the most recent five observations excluding the highest and lowest values, or the most recent three or two observations, etc. All of these averaging techniques are appropriate and reasonable. However, using an average of the most recent two observations could be more responsive to current conditions, but could also subject estimates to volatility over time. NCCI used an average of the latest five available LDFs.

The question of changes to case reserve levels impacts loss development methodology as well as the selection of the database. If decreases to case reserve levels are due to decreasing adequacy of case reserves, then the statewide rate change could be underestimated by two compounding problems. The base of losses to which LDFs are applied will be understated, and the LDFs themselves will be understated. NCCI was appropriately concerned with this possibility, especially if averages based only on recent observations were used. LDF selections using paid loss plus case reserve data based on the most recent two or three observations produce lower results than LDF selections based on other averages. However, while NCCI's concern was appropriate, NCCI (and the regulator) was not in a position to judge whether LDFs generated by paid loss plus case reserve data were understated without understanding the underlying reasons for changes to case reserve levels. As stated earlier, Mercer's opinion is that NCCI, prior to the rate application, should have conducted a detailed examination, including questioning carriers and their claims departments, to understand the reasons for the case reserve behavior in Florida.

Mercer also examined the method and calculation of what are termed the 19th to ultimate report LDFs. These factors estimate growth beyond a 19th report, the last report for which NCCI collects loss development data. Mercer also examined the response to the fourth question of Mr. Watford's second set of interrogatories in the proceedings for rates effective January 1, 2006. The calculation and results are similar to NCCI practice in other states and are reasonable.

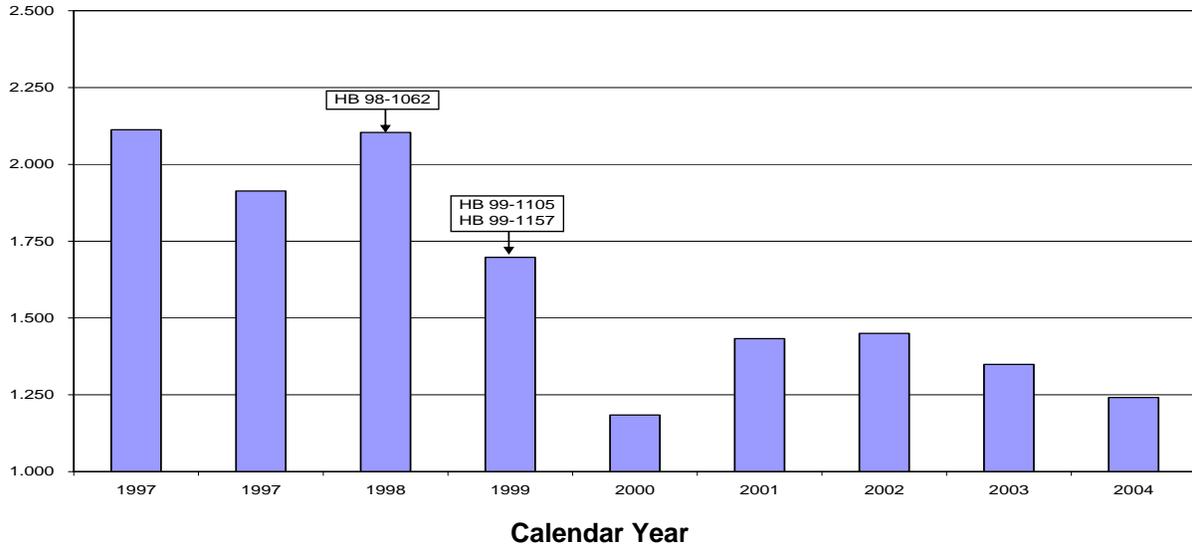
Additional Comments Regarding Paid Loss versus Paid Loss plus Case Reserve Data

Mercer's experience is that changes in law and administration can materially impact workers' compensation loss development data. In Colorado a series of law changes were instrumental in the change in loss development behavior. The change in observed paid loss plus case reserve development data contributed to a growing divergence between results based on paid loss plus case reserve data and results based on paid loss data only. The same appears to be true for Florida. The following are graphs of what is known as calendar year loss development, in Colorado and Florida. In each graph, we show observed calendar year loss development over time.²⁴

²⁴ *The values graphed are the product of observed calendar year loss development factors. From an actuarial perspective, the values are the product of the "calendar year diagonal." In Colorado, we measured development from a 1st to a 15th report. In Florida, we measured development from a 1st to a 19th report.*

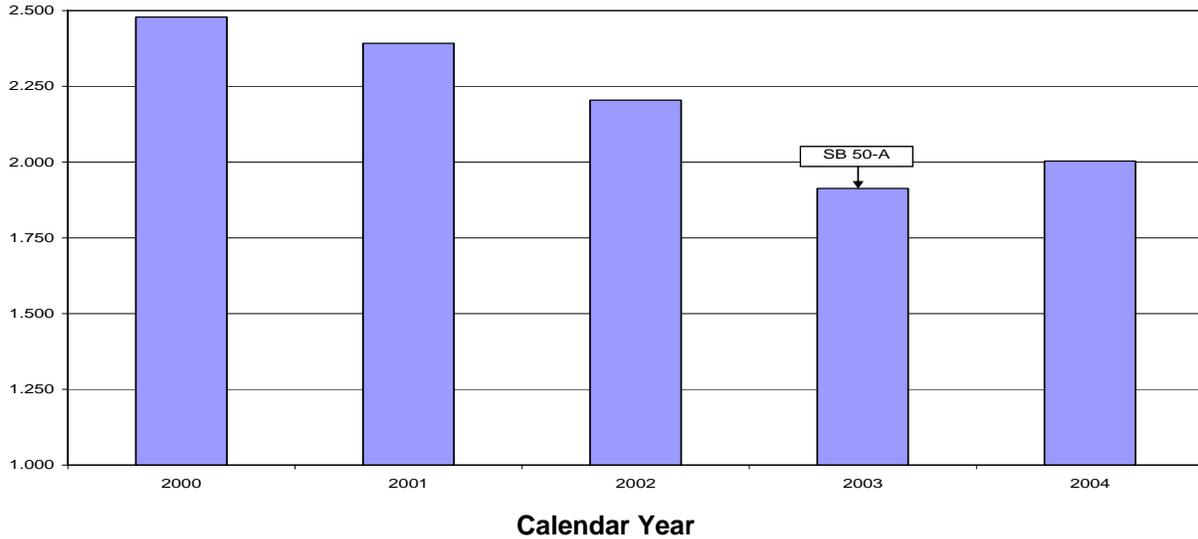
Colorado

**Calendar Year Paid Plus Case Reserve Development: Indemnity Losses
1st Report to 15th Report**



Florida

**Calendar Year Paid Plus Case Reserve Development: Indemnity Losses
1st Report to 19th Report**



Visual examination of both these graphs indicates that in Florida, it is plausible that the change in case reserve levels was driven, at least in part, by SB 50A. It is also plausible, given that development patterns were beginning to decrease prior to implementation of SB 50A, that case reserving practices may have changed, or that some other factor was influencing the data. In any case, the impact is substantial and should have been investigated by NCCI as part of the ratemaking process, as described earlier.

Premium Adjustment

For accident year analysis, calendar year earned premium is matched with loss experience. A number of adjustments to earned premium data are required to bring premium to current cost levels. These include an adjustment to remove premium generated by the expense constant, an adjustment to factor in historical rate changes, and an adjustment to remove the impact on premium of variations in the effect of the experience rating program. The adjustment procedure is a standard NCCI calculation in Florida and other states, and is reasonable.

Large Deductible and Standard Experience

NCCI analyzes loss experience generated by large deductible policies and loss experience generated by standard policies separately. The results from each analysis are combined in a weighted average technique using net premium as a weight for large deductible experience and standard premium for standard policies. This approach is reasonable.

Benefit Changes

Adjustment of Losses to Current and Expected Future Benefit Levels

Historical losses, for the purpose of the experience indication and the calculation of trend, must be adjusted to reflect changes in benefit levels at the time the losses were incurred to the period during which the prospective rates will be in effect. The NCCI calculation is a standard actuarial procedure.

Estimating the Impact of Changes in Provider Reimbursement Rates

The general method used by NCCI to estimate the cost impact of changes in provider reimbursement levels effective May 5, 2005 and expected to be in effect September 4, 2005, is reasonable. The estimated impacts appear to be reasonable. Mercer did not examine the detailed calculation.

SB 50A

Mercer examined NCCI's calculation of the expected cost impact of SB 50A. The result of NCCI's analysis was the basis for the -14% decrease to statewide rates effective October 1, 2003. Additionally, the estimated impacts by injury type will be used for a number of years in the benefit level adjustment procedures. Mercer examined NCCI's calculations, judgments and assumptions.

Given the uncertainty and difficulty in quantifying many of the changes in SB 50A, Mercer did not find NCCI's estimates to be unreasonable.

Trend

Trend forecasts the anticipated annual percentage change in loss ratios. Loss ratio trends represent the combined effect of changes in the incidence of claims over time, or frequency, as well as the change in the average cost per claim, or severity, over time.

Trend, as respects workers' compensation loss ratios, measures the change in loss experience relative to wage inflation. That is, a 0% loss ratio trend does not imply that workers' compensation costs are not increasing. Rather, a 0% loss ratio trend implies that workers' compensation costs are increasing at the same rate as wages. A loss ratio trend greater (less) than 0 implies workers' compensation costs are increasing at a rate greater (less) than wage inflation.

NCCI conducted a detailed analysis of trend factors separately for medical and indemnity loss experience. NCCI examined frequency trend, indemnity severity trend, medical severity trend, indemnity loss ratio trend, and medical loss ratio trend, separately for policy year data and accident year data, separately for paid loss data and paid loss plus case reserve data, separately for standard coverage and standard coverage combined with large deductible experience.²⁵

NCCI judgmentally selected trends that fell within the range of results of the various analyses. The selected trend was used in both the standard coverage analysis and the large deductible analysis. The methodologies employed by NCCI as well as the selected trends are within a range of reasonable results.

There can be an advantage to selecting and using a consistent trend calculation methodology over time. This approach removes the appearance of bias in the ratemaking process, and notwithstanding major system changes, will result in rates that are not biased over the long term. This is an approach taken in other jurisdictions. However, the approach used by NCCI is reasonable.

Mercer notes that there is potential benefit to examining severity and loss ratio behavior without the on-level adjustment for SB 50A. The different loss development methodologies and databases could have been examined to see which generated expected decreases to average claim cost after implementation of SB 50A.

Loss Adjustment Expense

LAE is calculated as a ratio to loss, and is the sum of two components, unallocated loss adjustment expense (ULAE) and allocated loss adjustment expense (ALAE). The methodology employed by NCCI is used in other NCCI states. Countrywide ratios of ALAE and ULAE to loss are calculated. The countrywide ratio of ULAE is assumed to apply in Florida. The countrywide ratio of ALAE to

²⁵ NCCI also calculated what are commonly referred to as econometric trends. These are trends based on a comparative analysis of loss ratio behavior with economic metrics. Mercer did not examine the process used to determine econometric trends because these did not appear to play a role in the rate application.

loss is adjusted by a relativity of Florida experience to countrywide experience. The relativity is based on a comparison of the ratio of paid ALAE to paid loss in Florida to the same calculated using countrywide data.

The approach in Florida is reasonable, but Mercer has the following concerns:

1. The ratio of LAE to loss in Florida has been amongst the highest in NCCI states.
2. It is likely that SB 50A will impact LAE costs. The current NCCI methodology does not contemplate an impact of SB 50A on the ratio of LAE to losses in Florida. This is something that should be considered in future rate applications.

Other Insurance Company Expenses

Other insurance company expenses include the provisions for production expense and general expense. The provision for production expense includes commission and brokerage costs, and other acquisition costs. The methodology used by NCCI is reasonable and consistent with the methodology used in the prior application. The resulting provisions are not materially different from provisions underlying rates effective January 1, 2005.

An important consideration in determining the production and general expense provisions is factoring back in the impact of the premium discount program. The data underlying the calculation of these provisions generates production and general expense provisions *after* the impact of premium discount. The premium discount program essentially gives a volume discount to large insureds. However, the starting point must be undiscounted premium and therefore the production and general expense provisions *before* application of premium discount are required. NCCI calculates the impact of the premium discount program and adds these components to the provisions calculated above. The calculation and approach is reasonable.

Taxes and Assessments

Taxes and assessments are based on actual charges in Florida. The only exception is the miscellaneous tax provision of 0.30%. The miscellaneous tax provision is a catch all provision for taxes, licenses and fees not specifically provided for. It is common ratemaking practice to include this provision, and the value of 0.30% is not unreasonable.

Profit and Contingencies Provision

The profit and contingencies provision provides the insurance company the required return on equity, after taking into account the investment income earned on premium payments until losses and expenses are actually paid. The approach and model used by NCCI is a commonly applied approach used in other NCCI states. While Mercer may disagree with certain judgments and assumptions in the modeling procedure, these are issues of either policy or professional judgment, not of actuarial reasonableness.

Mercer does, however, have an issue with the measurement interval used in the internal rate of return model. NCCI uses a model that measures cash flows over a period of 24 years and therefore assumes that all losses will be paid and claims closed after 24 years. This is not a realistic assumption. Indemnity benefits can be expected to be paid for at least 50 years. Medical benefits are a lifetime exposure. The 24 year model used by NCCI requires that unrealistic adjustments be made to the loss payment pattern in order to ensure that the loss payment pattern ends in 24 years. The resulting loss payment pattern is distorted and not reflective of reality. In particular, from the 18th to the 20th year of payout, annual payout percentages are small and declining in value, with six tenths of one percent of loss expected to be paid in the 20th year. Payout percentages jump to roughly 3% per year in the 21st through the 24th years. This is not a reasonable expectation.

Mercer recommends that NCCI test 35, 40 and 50 year models. In all likelihood, the 35 year model will have a measurable impact, and produce a lower profit and contingencies provision than the current 24 year model. If the impact of the 35 year model is material, it should be adopted. It is unclear whether payment patterns longer than 35 years will have an impact due to the nature of the internal rate of return model. The model discounts cash activity in the future to real money values today. Therefore, the real value of dollars paid 40 or 50 years from now may be so low that extending the model beyond 35 years may not have a material impact on results. The 40 and 50 year models should, nevertheless, be investigated.

Distribution to Industry Groups

The statewide rate change is distributed to each of the five industry groups based on the relative loss experience of each individual industry group. Classifications are grouped by industry association, not hazard. The industry groups are Manufacturing, Contracting, Office and Clerical, Goods and Services, and Miscellaneous. The procedure used to distribute the statewide change to each industry group essentially relies on a measurement, for each industry group, of actual losses to expected losses. Numerous adjustments are made to account for trend, development, experience rating, etc. Additionally, NCCI uses a credibility procedure to limit the impact of the procedure on an industry group with relatively low loss volume. In Florida, however, all industry groups are fully credible. The procedure is identical to procedures used in other NCCI states that Mercer has examined, and is reasonable. Of note is an adjustment implement to adjust for the impact of SB 1406, a bill effective 1/1/99 that impacted payroll in the contracting industry group. NCCI provided a detailed explanation of the reason and logic underlying the adjustment.

Distribution to Individual Classifications

Introduction

Rates for individual classifications are calculated in a four step process:

Calculation of the pure premium

The pure premium is the expected cost of indemnity and medical benefits per \$100 payroll during the period when rates will be in effect.

Conversion of the pure premium to a manual rate

The provisions for expense and profit (and contingencies) are added to the pure premiums to produce a manual premium rate.

Application of swing limits and correction factors

Disease Loadings

Each step is discussed individually.

Calculation of the Pure Premium

The pure premium is calculated as a weighted average of three factors:

Indicated Pure Premium

Pure Premium Present on Rate Level

Pure Premium Indicated by National Relativity

The weighted average pure premium is termed the Pure Premium Derived by Formula. The process is performed individually for three component pure premiums, serious²⁶ indemnity, non-serious indemnity, and medical combined. Loss data is partitioned into additional groups for the purpose of determining the indicated pure premium, as described below. However, once the indicated pure premium is determined, the process continues based on the three component pure premiums listed above.

Indicated Pure Premium

The indicated pure premium is calculated using actual loss experience in Florida. The most recent five available policy years of data from the WCSP are used. For the rates effective

²⁶ Serious cases include fatal, permanent total, major permanent partial. Non-serious includes all other.

January 1, 2006, the five most recent policy years were 1998 through 2002.²⁷ Losses are partitioned and analyzed by injury type, as follows:

Indemnity	Medical
Fatal	Serious
Permanent Total	Non-Serious
Major Permanent Partial	
Minor Permanent Partial	
Temporary Total	

Individual claims in the WCSP database are limited to a maximum limit to prevent distortion to individual classification rates. The limit on individual claims used for rates effective January 1, 2006 is \$888,000. The limit on multi-claim occurrences is twice the limit on individual claims.

The following adjustments are made to each loss component:

Loss Development: Losses are developed from a first report through a fifth report using paid loss plus case reserve loss development factors calculated from WCSP data. Loss development from a fifth report to ultimate is based on statewide LDFs calculated from financial call data and used in the calculation of the statewide rate change.

Experience Change: Losses are adjusted for the statewide average experience change.

Trend: Losses are trended based on the selected annual indemnity and medical trend factors used in the statewide rate change calculation.

Benefit Level: Losses are adjusted to the expected benefit level.

LAE: Losses are adjusted to include LAE.

Off-Balance: Losses are adjusted to remove the impact of experience rating off-balance.

Industry Group: Losses are adjusted to reflect the relative experience of their industry group.

Unlimited to Limited: Losses are increased to offset the impact of limiting individual claims. This is the process by which the impact of large losses is shared between all classes in an industry group.

²⁷ *Based on Mercer's review of the prior actuarial review, there had been a concern that the most recently available policy years were not being used, and that the data used to determine the indicated pure premium was older than necessary. This issue has been addressed.*

Pure Premium Present on Rate Level

The pure premium present on rate level is the pure premium underlying the current rate adjusted in a manner similar to the adjustments made to loss data used to calculate the indicated pure premium. Differences include no adjustment for loss development and no adjustment for loss limitation, as the pure premium underlying the current rate is already on an ultimate loss basis and already reflects unlimited losses.

Pure Premium Indicated by National Relativity

The pure premium indicated by national relativity is the pure premium for the specific classification adjusted to Florida cost and benefit levels.

Pure Premium Derived by Formula

The pure premium derived by formula is a weighted average of the indicated pure premium, the pure premium present on rate level, and the pure premium indicated by national relativity. The weights are calculated using a credibility procedure that gives weight to the indicated pure premium (actual loss experience) based on actual loss experience.

Conversion of the Pure Premium to a Manual Rate

In this step the pure premium derived by formula is loaded for expense and profit (and contingency) provisions determined in the statewide rate change calculation.

Application of Swing Limits and Test Correction Factors

Resulting manual rates are tested for rate swing. Currently in Florida, the rate change to an individual classification is limited to a range within 10% of the change to the industry group to which the classification belongs. For example, if a specific industry group has a 12% rate increase, the rate change for each classification in that industry group can be no greater than 22% (= 12% + 10%) or less than 2% (= 12% - 10%). As a result of the limiting procedure, as well as other processes within the ratemaking calculation, the resulting average rate change for all classifications in an industry group may not precisely equal the required industry group change. This is addressed by calculation of a test correction factor (TCF) that is applied to each individual classification rate to ensure that the required industry group change is achieved. The calculation of the TCF is an iterative procedure, because no individual classification rate is permitted to violate the swing limit test.

Disease Loadings

The last step is addition of specific disease loadings for individual classifications to which this applies. An example is the disease loading of 0.10 per \$100 of payroll for classification 8833 “whenever this classification is applied to a hospital or sanitarium specializing in the treatment of tuberculosis.”

Findings

Mercer reviewed the details of the calculation of individual classification rates. In particular, Mercer reviewed verification of the test correction factor calculation for rates effective January 1, 2006, and conducted analyses on the changes of individual classification rates over time, paying particular attention to the expected impact of SB 50A. The changes in relative rates between groups of classes over time was examined and quantified.

General Findings

The NCCI calculation of individual classification rates is actuarially sound and commonly applied in other states. Mercer verified, through analysis, that the behavior of classification rates during the period when SB 50A was enacted was as would be expected, that is, classes with the highest proportion of indemnity losses realized the greatest rate reductions. In particular, national pure premiums appear to have been appropriately adjusted for the impact of SB 50A. Mercer did request the derivation of a specific national pure premium from NCCI, but was advised that the calculation was complex and that it would be time consuming to assemble the required documentation. Given the time frame under which this report need to be produced, and that Mercer's analysis detected no issues with national pure premiums, Mercer elected to forgo this particular item.

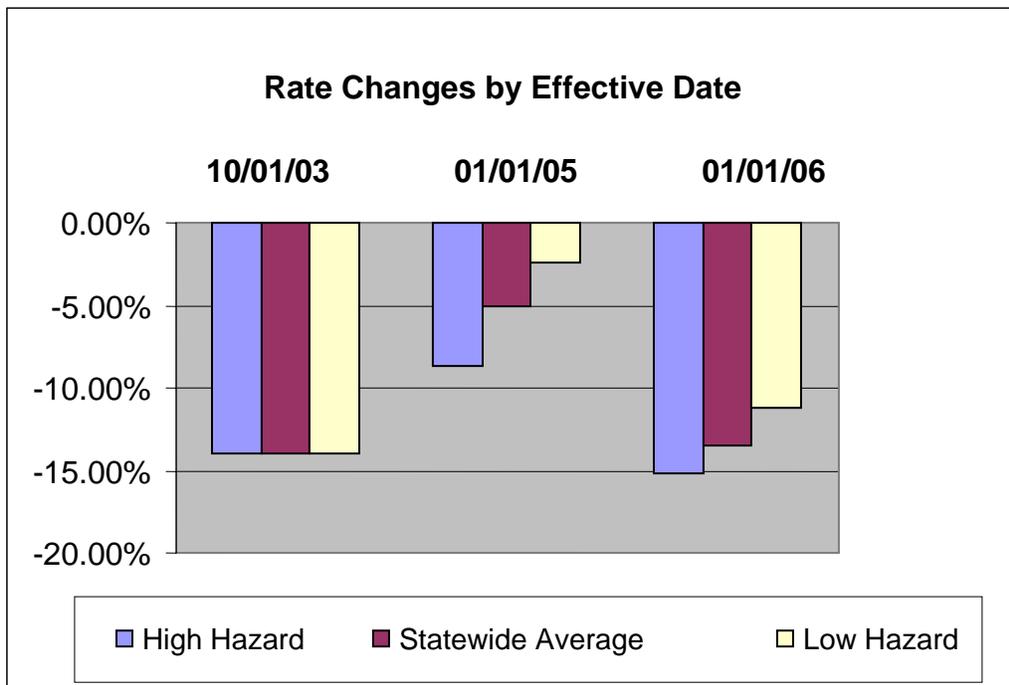
Specific Issues – Rate Realignment due to SB 50A

As discussed in the Executive Summary, there is a lag in the distribution of expected SB 50A savings to individual classes. As a result, while average statewide rate level has been appropriately adjusted for the impact of SB 50A, certain individual workers' compensation classifications have been charged premium rates that are too high, while others have been charged premium rates that are too low. There are two principal reasons for this:

1. NCCI did not distribute the 14% rate reduction effective October 1, 2003 using NCCI's standard classification ratemaking procedure. Rather, NCCI applied a flat factor of .86 across all workers' compensation classifications and decreased rates for all classifications by a uniform 14%. In Mercer's opinion, the "flat factor approach" was not appropriate. SB 50A is expected to have the greatest impact on classifications with the greatest indemnity claim experience. As such, the impact of SB 50A is expected to be greater than the 14% average statewide rate reduction. The flat factor approach delayed realization of the greater savings to these classifications for 15 months, from October 1, 2003 to January 1, 2005, the effective date of the next rate revision. During this time, classifications with the greatest proportion of indemnity loss experience were likely paying premium rates that were too high, while classifications with the lowest proportion of indemnity loss experience were likely paying premium rates that were too low.
2. The current ratemaking methodology appears to be delaying full recognition of SB 50A savings for classifications with the highest proportion of indemnity loss experience. The current ratemaking methodology incorporates a procedure that limits changes to individual classification rates to a range around the statewide change, as discussed earlier in this

section. The purpose of this procedure is to prevent large swings to rates for individual classification rates. Notwithstanding SB 50A, the procedure is acceptable. However, Mercer's examination of data indicates that the current limiting procedure is delaying recognition of savings for classifications with the highest proportion of indemnity loss experience.

Mercer examined the behavior of classification rates beginning with the October 1, 2003 14% rate reduction. One aspect of this analysis was to order classifications by the current ratio of the derived by formula indemnity pure premium (serious plus non-serious) to total pure premium. Mercer calculated the rate changes for three groups:²⁸ classifications with the highest ratio (the top 200, labeled "high hazard"), all classifications, and classifications with the lowest ratio (the lowest 200, labeled "low hazard"). The results are displayed in the following graph.



Effective October 1, 2003, each classification received a 14% reduction, verified by the graph. Effective January 1, 2005, "high hazard" classifications, those with the highest ratio of indemnity losses, received rate reductions significantly greater than the statewide average, while "low hazard" classifications, those with the lowest ratio of indemnity losses, received rate reductions significantly less than the statewide average. The same pattern is observed effective January 1, 2006. Mercer expects this pattern because classifications with the highest proportion of indemnity loss experience are expected to achieve the greatest savings due to SB 50A, based on NCCI's pricing estimate underlying the 14% rate reduction effective October 1, 2003. The concern is that there is a lag in recognition of these savings in classifications expected to benefit

²⁸ The measurements were made based on pure premiums underlying rates effective January 1, 2006, and excluded 18 classifications, out of 538, with rates greater than \$40.

the most from SB 50A. The flat 14% reduction applied to all classifications on October 1, 2003 was inappropriate and delayed for 15 months the price realignment observed on January 1, 2005. Additionally, the price realignment observed on January 1, 2006 would have occurred on January 1, 2005, and a third realignment would have occurred on January 1, 2006.

As expected, the realignment observed on January 1, 2006 is somewhat less than that observed on January 1, 2005, but is still significant. Mercer's analysis of data indicates that the limiting procedure on classification rates described earlier appears to be delaying the expected realignment of classification rates due to SB 50A. Mercer notes the following:

- Roughly 2/3 of the 148 classifications limited by the lower swing limit are in the top half of classifications as respects the proportion of indemnity in their pure premiums.
- Half of the 64 classifications with the highest proportion of indemnity in their pure premiums are limited by the lower swing limit.

The rates for these classifications would have been *lower* if not for the swing limit. The disproportionate impact of the lower swing limit on high hazard classes is evidence that the swing limitation procedure is preventing high hazard classifications from realizing full potential savings due to SB 50A. Additionally:

- Roughly 2/3 of the 147 classifications limited on the upper end swing are in the lower half of classifications as respects the proportion of indemnity in their pure premiums; and
- Half of the 96 classifications with the lowest proportion of indemnity in their pure premiums are limited by the upper swing limit.

The rates for these classifications would have been *higher* if not for the swing limit. The disproportionate impact of the upper swing limit on low hazard classes is evidence that the swing limitation procedure is attributing savings to low hazard classifications that is too high, based on NCCI's pricing analysis of SB 50A.

The combination of the impact of delaying the implementation of the impact of SB 50A on classification rate relativities with the impact of the swing limiting procedure on classification rates appears to have created a situation where a portion of the classifications expected to realize the greatest savings from SB 50A have been charged premium rates that are too high, while a portion of the classifications expected to realize the least savings from SB 50A have been charged premium rates that are too low, all else being equal. This raises a concern because this situation increases the potential for cross subsidization between classes. This situation, to a degree, defeats the purpose of the classification rating system, which is designed to minimize the potential for cross subsidization.

Based on its review, Mercer recommends that NCCI investigate and quantify the impact of rate limiting procedures on classification rates and the classification ratemaking system in general, as respects the impact of SB 50A on individual classification rates and report back to the Florida Office of Insurance Regulation. The purpose of the study would be to determine if a temporary adjustment to the classification ratemaking procedure to accelerate classification rate realignment

due to SB 50A is warranted. Mercer notes that this type of realignment is more readily accomplished in an environment where statewide rate level is declining, rather than increasing.

Specific Issues – Loss Development in Classification Ratemaking

The calculation of individual classification rates relies on paid loss plus case reserve loss development factors calculated from WCSP data. It is likely that the same behavior observed in statewide financial data will be observed in WCSP data, when that data becomes available for ratemaking. This is not an issue at this time. However, NCCI should monitor WCSP data and ensure that paid loss plus case reserve loss development factors used in individual classification ratemaking are appropriate for the purpose for which they are used.

Specific Issues – Claim Limitations in Classification Ratemaking

The current ratemaking procedure caps the amount an individual claim can contribute to data used to determine rates for individual classifications. The cap used in the most recent application is \$888,000 per claim, and twice that amount for multiple claim occurrences. Mercer examined large claim history provided by NCCI. The following chart displays the amount and proportion of reported large claim experience in Florida, based on the most recently available data.²⁹

<u>Accident Year</u>	<u>Total Claim Count</u>	<u>Claims from \$250K - \$500K</u>	<u>Claims from \$501K - \$888K</u>	<u>Claims over \$888K</u>
1998	55,913	478	106	58
1999	57,992	774	184	87
2000	62,250	698	162	65
2001	60,167	559	113	42
2002	57,014	255	63	48
2003	56,314	54	19	9

<u>Accident Year</u>	<u>Total Claim Count</u>	<u>Claims from \$250K - \$500K</u>	<u>Claims from \$501K - \$888K</u>	<u>Claims over \$888K</u>
1998	100.0%	0.9%	0.2%	0.1%
1999	100.0%	1.3%	0.3%	0.2%
2000	100.0%	1.1%	0.3%	0.1%
2001	100.0%	0.9%	0.2%	0.1%
2002	100.0%	0.4%	0.1%	0.1%
2003	100.0%	0.1%	0.0%	0.0%

²⁹ The descriptor “reported” is important. The data is immature and not developed to final or ultimate value. At ultimate, the proportion of large claim experience will be higher than what is displayed in the chart. This is not material to the analysis, because the per claim limit is applied to immature data as well, and therefore the data in the chart is on the same basis as the data used in classification ratemaking. However, it would be inappropriate to draw conclusions on the ultimate distribution of large workers’ compensation claims in Florida from this data.

The chart demonstrates that reducing the per claim limitation used in classification ratemaking from \$888,000 to \$500,000 would have the impact of limiting roughly 0.4% of all claims, as opposed to limiting roughly 0.1% of all claims using the current \$888,000 limit.

In tracing claims to individual classifications, Mercer notes that there are several classifications whose experience is distorted by large claims. The following is a sample of these classifications:

9220 9505 9534 9019 8279 8291 7855 7360

Consideration should be given to reducing this cap, given that only a small portion of total lost time claims in Florida reach this level, and that there are several classifications whose rates have been impacted by the occurrence of an exceptionally large claim. The argument for reducing the cap is that these claims represent such a small portion of total incurred lost time claims that their impact represents a risk that should be shared between all classifications in the state. The argument against is that rates for individual classifications should reflect the experience of that particular classification. Additionally, the procedure that limits changes to individual classification rates to a range around the statewide change helps mitigate the impact of large claims on rates for individual classifications. Ultimately this becomes a regulatory decision. Mercer's recommendation is that this topic be investigated.

Rating Values

Mercer's examination was limited to the variation of certain rating values over time. In particular, Mercer examined:

Expected Loss Rates

D Ratios

Excess Loss Factors

Ex Med Ratio

Mercer notes that while there were some outliers, changes from rating values effective January 1, 2005 to January 1, 2006 were not unusual.

CAVEATS AND LIMITATIONS

1. The conclusions within this study are developed in the accompanying text and exhibits, which together comprise the report.
2. The report was prepared for the use of the Financial Services Commission, State of Florida. This report may be distributed only in its entirety.
3. The information and advice contained in this document (including all attachments) is not intended by Mercer to be used, and it cannot be used, for the purpose of avoiding penalties under the Internal Revenue Code that may be imposed on the taxpayer.
4. Mercer's findings that specific processes, judgments, or assumptions were reasonable, or its lack of issue with the same, do not necessarily mean that Mercer endorses them or would take the same approach if Mercer were to conduct its own independent analysis.
5. The exhibits and conclusions drawn thereof in this report rely on the accuracy and completeness of the data and information provided without independent audit. If the data or information is inaccurate or incomplete, the findings and conclusions of this report may have to be revised.
6. The conclusions are projections of the financial consequences of future contingent events and are subject to uncertainty. There may have been abnormal statistical fluctuations in the past, and there may be such fluctuations in the future. Due to the inherent uncertainties actual costs may vary significantly from published rates.
7. Unanticipated changes in factors such as judicial decisions, legislative actions, claim consciousness, claim management, claim settlement practices, and economic conditions may result in actual experience that is significantly different from estimates.
8. In addition to the assumptions stated in this report, numerous other assumptions underlie the calculations and results presented herein.
9. Numbers in tables and exhibits are generally displayed to more significant digits than their accuracy suggests.
10. The opinions set forth in this document are for purposes of discussion of Mercer's findings with the State of Florida and NCCI. Mercer reserves the right to revise its recommendations should additional analysis performed in the future, or additional data and information that emerge in the future, indicate the need to do so.
11. These caveats and limitations notwithstanding, the conclusions represent Mercer's professional opinion as respects the analysis presented in this report.

DOCUMENTS AND INFORMATION

The following is list of documents provided by NCCI for the purpose of this report. In addition to documents listed below, Mercer may have relied on internal data sources, insurance industry data sources, or other information not specifically listed below.

Florida Workers Compensation Rate Hearing on October 7, 2005

- Robert F. Conger's Testimony
- Robert F. Conger's Supplemental Testimony
- Tony DiDonato's Testimony
- Tony DiDonato's Supplemental Testimony

FL-02-07.pdf: Letter from NCCI to Tom Gallagher on Workers Compensation Rates and Rating Values – Florida Voluntary Market – Effective January 1, 2003. Letter is dated August 23, 2002.

FL-02-08.pdf: Florida Voluntary Summary - Proposed Effective Date January 1, 2003.

FL-03-02.pdf: Florida Voluntary Summary - Proposed Effective Date April 1, 2003.

NCCI Florida Historical Experience Rating Analysis (1989 through 2004)

Florida A-Sheets effective January 1, 2003, including F-classes.

Florida A-Sheets effective January 1, 2005, including F-classes.

Florida A-Sheets effective January 1, 2006, including F-classes.

2005 NCCI Countrywide Loss Development Factors (excluding Florida)

Paid to Paid plus Case Ratios for the following states, provided by NCCI

Alabama Florida Georgia Mississippi South Carolina Tennessee Virginia

Workers Compensation and Employers Liability Rates, ELR, D Ratio, and Ex-Med Ratio valued as of:

01/01/2001 08/01/2002 04/01/2003 10/01/2003 01/01/2005 01/01/2006

Florida NCCI Converted Losses

Florida – Private Carrier and Self Insured

- Voluntary Business Only Frequency and Severity Based on Paid Losses
- Voluntary Business Only Frequency and Severity Based on Paid plus Case Losses
- Large Deductible Frequency and Severity Based on Paid Losses
- Large Deductible Frequency and Severity Based on Paid plus Case Losses
- Accident Year Weighting

Serious Severity by Classification Code (Extreme Classes)

Premium Comparison valued as of January 1, 2006, by Industry Group

Mercer Review of NCCI applications in Virginia and Colorado

Pennsylvania Compensation Rating Bureau Application

Statistical data published by New York Compensation Insurance Rating Board

Statistical data published by the Workers' Compensation Rating and Inspection Bureau of Massachusetts

Florida Workers Compensation Loss Ratios

Large Loss Listing of Florida individual claims with paid plus case of at least \$250,000

Reporting Guidebook for the Annual Calls for Experience, published by NCCI, January 2005

Market Shares by state of the top 10 carriers in Florida

SB 50-A: October 1, 2003 Law Only Filing and Related Documents

Summary of SB 50-A

SB 50-A 2003 Legislature (Enrolled 2003 Legislature, SB 50-A, 2nd Engrossed)

Florida SB 50-A Final Filing Effective October 1, 2003 including:

Explanatory Memo

Exhibits

Order on Rate

Appendix A

July 22, 2003 Interrogatories and Responses

List of Interrogatories from James D. Watford (3 Questions)

January 1, 2006 Interrogatories and Responses

James Watford (25 Questions)

James Watford (12 Questions dated September 13, 2005)

James Watford (4 Questions dated September 28, 2005)

Allan Schwartz (31 Questions)

Senate Bill 50A – 2003 Workers Compensation Reform Act Summary

Florida NCCI January 1, 2006 Filing Interrogatories from Allan I. Schwartz for Proposed Effective Data January 1, 2005. (62 Questions)

Florida NCCI January 1, 2006 Filing Effective January 1, 2005 including:

Exhibits

Appendix

Amended Filing Effective January 1, 2005
Amended Explanatory Memo
Amended Exhibits
Technical Supplement
Technical Supplement Explanatory Memo
Technical Supplement Exhibits
Technical Supplement Appendix A
Technical Supplement Appendix B
Technical Supplement Appendix C
James Watford Interrogatories (25 Questions)
James Watford Interrogatories (15 Questions dated September 13, 2004)

Department of Financial Services – Office of Insurance Regulation:
Actuarial Review of the Ratemaking Process of NCCI
RFP DFS 03/04-06 In Response to Senate Bill 50A, Section 34

EXHIBITS

Alabama Indemnity Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.946	
1992									0.949	0.962	
1993								0.947	0.953	0.965	
1994							0.906	0.912	0.916	0.920	
1995						0.930	0.944	0.943	0.945	0.931	
1996					0.888	0.889	0.894	0.930	0.939		
1997				0.845	0.892	0.927	0.940	0.959			
1998			0.737	0.826	0.875	0.909	0.942				
1999		0.587	0.735	0.803	0.854	0.887					
2000	0.282	0.500	0.697	0.755	0.890						
2001	0.258	0.482	0.617	0.748							
2002	0.231	0.521	0.706								
2003	0.262	0.537									
2004	0.274										

Alabama Indemnity Paid to Paid + Case Ratios										
2000 - 2001 avg	0.270	0.544	0.736	0.836	0.890	0.910	0.925	0.930	0.951	0.954
2003 - 2004 avg	0.268	0.529	0.662	0.752	0.872	0.898	0.941	0.945	0.942	0.926
Growth	-0.007	-0.027	-0.101	-0.101	-0.020	-0.013	0.017	0.016	-0.009	-0.030

Alabama Medical Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.849	
1992									0.853	0.827	
1993								0.851	0.847	0.806	
1994							0.795	0.785	0.753	0.744	
1995						0.868	0.899	0.829	0.832	0.851	
1996					0.729	0.753	0.694	0.711	0.774		
1997				0.872	0.872	0.784	0.786	0.801			
1998			0.825	0.858	0.825	0.809	0.811				
1999		0.792	0.851	0.843	0.821	0.782					
2000	0.320	0.604	0.680	0.671	0.688						
2001	0.437	0.617	0.683	0.712							
2002	0.455	0.739	0.804								
2003	0.493	0.695									
2004	0.525										

Alabama Medical Paid to Paid + Case Ratios										
2000 - 2001 avg	0.379	0.698	0.838	0.865	0.801	0.811	0.847	0.818	0.850	0.838
2003 - 2004 avg	0.509	0.717	0.744	0.692	0.755	0.796	0.799	0.756	0.803	0.798
Growth	0.345	0.027	-0.113	-0.201	-0.057	-0.019	-0.057	-0.076	-0.055	-0.048

Florida Indemnity Paid to Paid + Case Ratios			Report								
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.907	
1992									0.938	0.934	
1993								0.945	0.947	0.949	
1994							0.916	0.920	0.933	0.954	
1995						0.918	0.944	0.954	0.979	0.965	
1996					0.902	0.924	0.944	0.961	0.948		
1997				0.860	0.900	0.915	0.945	0.923			
1998			0.789	0.851	0.889	0.910	0.913				
1999		0.591	0.711	0.790	0.845	0.857					
2000	0.301	0.582	0.742	0.807	0.851						
2001	0.302	0.620	0.771	0.877							
2002	0.316	0.631	0.813								
2003	0.326	0.689									
2004	0.318										

Florida Indemnity Paid to Paid + Case Ratios											
2000 - 2001 avg	0.302	0.587	0.750	0.856	0.901	0.921	0.930	0.933	0.943	0.921	
2003 - 2004 avg	0.322	0.660	0.792	0.842	0.848	0.884	0.929	0.942	0.964	0.960	
Growth	0.068	0.125	0.056	-0.016	-0.059	-0.041	-0.001	0.010	0.022	0.042	

Florida Medical Paid to Paid + Case Ratios			Report								
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.860	
1992									0.867	0.873	
1993								0.929	0.893	0.908	
1994							0.958	0.940	0.941	0.951	
1995						0.934	0.954	0.959	0.981	0.965	
1996					0.890	0.906	0.936	0.964	0.948		
1997				0.875	0.909	0.915	0.938	0.923			
1998			0.796	0.873	0.902	0.910	0.913				
1999		0.668	0.744	0.819	0.847	0.857					
2000	0.361	0.639	0.784	0.836	0.851						
2001	0.386	0.714	0.839	0.877							
2002	0.413	0.719	0.813								
2003	0.414	0.689									
2004	0.414										

Florida Medical Paid to Paid + Case Ratios											
2000 - 2001 avg	0.374	0.654	0.770	0.874	0.900	0.920	0.956	0.935	0.880	0.867	
2003 - 2004 avg	0.414	0.704	0.826	0.857	0.849	0.884	0.926	0.944	0.965	0.958	
Growth	0.108	0.077	0.073	-0.020	-0.056	-0.040	-0.032	0.010	0.096	0.106	

Georgia Indemnity Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.944	
1992									0.960	0.964	
1993								0.937	0.952	0.950	
1994							0.930	0.943	0.951	0.956	
1995						0.876	0.906	0.902	0.919	0.777	
1996					0.907	0.924	0.926	0.934	0.928		
1997				0.865	0.881	0.907	0.910	0.862			
1998			0.765	0.817	0.851	0.887	0.871				
1999		0.604	0.736	0.796	0.847	0.805					
2000	0.290	0.590	0.714	0.783	0.784						
2001	0.291	0.540	0.680	0.838							
2002	0.272	0.566	0.789								
2003	0.263	0.681									
2004	0.244										

Georgia Indemnity Paid to Paid + Case Ratios											
2000 - 2001 avg	0.291	0.597	0.751	0.841	0.894	0.900	0.918	0.940	0.956	0.954	
2003 - 2004 avg	0.254	0.624	0.735	0.811	0.816	0.846	0.891	0.898	0.924	0.867	
Growth	-0.127	0.044	-0.021	-0.036	-0.088	-0.060	-0.030	-0.045	-0.034	-0.092	

Georgia Medical Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.931	
1992									0.936	0.909	
1993								0.925	0.931	0.917	
1994							0.934	0.934	0.944	0.893	
1995						0.790	0.808	0.808	0.804	0.777	
1996					0.923	0.922	0.912	0.915	0.928		
1997				0.917	0.927	0.918	0.882	0.862			
1998			0.795	0.830	0.852	0.841	0.871				
1999		0.730	0.793	0.802	0.812	0.805					
2000	0.363	0.622	0.710	0.716	0.784						
2001	0.463	0.724	0.815	0.838							
2002	0.461	0.720	0.789								
2003	0.434	0.681									
2004	0.323										

Georgia Medical Paid to Paid + Case Ratios											
2000 - 2001 avg	0.413	0.676	0.794	0.874	0.925	0.856	0.871	0.930	0.934	0.920	
2003 - 2004 avg	0.379	0.701	0.802	0.777	0.798	0.823	0.877	0.889	0.866	0.835	
Growth	-0.084	0.036	0.010	-0.110	-0.137	-0.039	0.006	-0.044	-0.072	-0.092	

Mississippi Indemnity Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.993	
1992									0.980	0.978	
1993								0.983	0.990	0.989	
1994							0.941	0.908	0.987	0.990	
1995						0.940	0.979	0.981	0.994	0.994	
1996					0.902	0.938	0.941	0.964	0.903		
1997				0.889	0.905	0.939	0.958	0.886			
1998			0.761	0.828	0.909	0.940	0.864				
1999		0.607	0.714	0.837	0.909	0.861					
2000	0.405	0.632	0.707	0.858	0.908						
2001	0.326	0.555	0.749	0.883							
2002	0.313	0.517	0.652								
2003	0.369	0.791									
2004	0.376										

Mississippi Indemnity Paid to Paid + Case Ratios										
2000 - 2001 avg	0.366	0.620	0.738	0.859	0.904	0.939	0.960	0.946	0.985	0.986
2003 - 2004 avg	0.373	0.654	0.701	0.871	0.909	0.901	0.911	0.925	0.949	0.992
Growth	0.019	0.056	-0.050	0.014	0.006	-0.041	-0.051	-0.022	-0.037	0.007

Mississippi Medical Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.936	
1992									0.958	0.945	
1993								0.974	0.981	0.982	
1994							0.981	0.984	0.987	0.985	
1995						0.986	0.989	0.988	0.991	0.994	
1996					0.827	0.890	0.891	0.893	0.903		
1997				0.930	0.913	0.925	0.912	0.886			
1998			0.847	0.839	0.874	0.847	0.864				
1999		0.811	0.790	0.832	0.845	0.861					
2000	0.563	0.830	0.852	0.902	0.908						
2001	0.544	0.809	0.878	0.883							
2002	0.342	0.583	0.652								
2003	0.519	0.791									
2004	0.533										

Mississippi Medical Paid to Paid + Case Ratios										
2000 - 2001 avg	0.554	0.821	0.819	0.885	0.870	0.938	0.985	0.979	0.970	0.941
2003 - 2004 avg	0.526	0.687	0.765	0.893	0.877	0.854	0.888	0.890	0.947	0.990
Growth	-0.050	-0.163	-0.065	0.009	0.007	-0.090	-0.098	-0.091	-0.023	0.052

South Carolina Indemnity Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.990	
1992									0.966	0.964	
1993								0.978	0.980	0.983	
1994							0.963	0.975	0.979	0.980	
1995						0.955	0.971	0.962	0.963	0.901	
1996					0.939	0.962	0.964	0.979	0.931		
1997				0.890	0.937	0.943	0.951	0.897			
1998			0.801	0.867	0.896	0.932	0.890				
1999		0.604	0.815	0.881	0.944	0.910					
2000	0.341	0.645	0.824	0.896	0.927						
2001	0.275	0.579	0.773	0.876							
2002	0.224	0.578	0.817								
2003	0.232	0.624									
2004	0.232										

South Carolina Indemnity Paid to Paid + Case Ratios											
2000 - 2001 avg	0.308	0.625	0.808	0.879	0.938	0.959	0.967	0.977	0.973	0.977	
2003 - 2004 avg	0.232	0.601	0.795	0.886	0.936	0.921	0.921	0.938	0.947	0.941	
Growth	-0.247	-0.038	-0.016	0.009	-0.003	-0.039	-0.048	-0.039	-0.027	-0.037	

South Carolina Medical Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.993	
1992									0.891	0.912	
1993								0.957	0.953	0.952	
1994							0.951	0.953	0.952	0.958	
1995						0.879	0.899	0.909	0.906	0.901	
1996					0.949	0.933	0.919	0.919	0.931		
1997				0.882	0.902	0.864	0.887	0.897			
1998			0.853	0.890	0.891	0.884	0.890				
1999		0.785	0.880	0.929	0.937	0.910					
2000	0.536	0.803	0.896	0.934	0.927						
2001	0.486	0.737	0.831	0.876							
2002	0.470	0.750	0.817								
2003	0.477	0.624									
2004	0.403										

South Carolina Medical Paid to Paid + Case Ratios											
2000 - 2001 avg	0.511	0.794	0.867	0.886	0.926	0.906	0.925	0.955	0.922	0.953	
2003 - 2004 avg	0.440	0.687	0.824	0.905	0.932	0.897	0.889	0.908	0.919	0.930	
Growth	-0.139	-0.135	-0.049	0.021	0.007	-0.010	-0.039	-0.049	-0.004	-0.024	

Tennessee Indemnity Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.990	
1992									0.989	0.992	
1993								0.981	0.982	0.984	
1994							0.959	0.966	0.975	0.981	
1995						0.954	0.966	0.978	0.983	0.778	
1996					0.920	0.951	0.960	0.964	0.796		
1997				0.898	0.930	0.950	0.968	0.828			
1998			0.820	0.903	0.944	0.957	0.817				
1999		0.628	0.815	0.891	0.937	0.875					
2000	0.306	0.639	0.800	0.906	0.867						
2001	0.289	0.576	0.782	0.817							
2002	0.233	0.548	0.824								
2003	0.222	0.794									
2004	0.215										

Tennessee Indemnity Paid to Paid + Case Ratios										
2000 - 2001 avg	0.298	0.634	0.818	0.901	0.925	0.953	0.963	0.974	0.986	0.991
2003 - 2004 avg	0.219	0.671	0.803	0.862	0.902	0.916	0.893	0.896	0.890	0.880
Growth	-0.266	0.059	-0.018	-0.043	-0.025	-0.038	-0.073	-0.080	-0.097	-0.113

Tennessee Medical Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.956	
1992									0.911	0.924	
1993								0.913	0.921	0.886	
1994							0.955	0.908	0.905	0.892	
1995						0.833	0.798	0.802	0.777	0.778	
1996					0.871	0.841	0.833	0.833	0.796		
1997				0.829	0.851	0.844	0.829	0.828			
1998			0.812	0.847	0.865	0.851	0.817				
1999		0.845	0.919	0.926	0.911	0.875					
2000	0.581	0.855	0.861	0.869	0.867						
2001	0.546	0.758	0.806	0.817							
2002	0.569	0.777	0.824								
2003	0.568	0.794									
2004	0.542										

Tennessee Medical Paid to Paid + Case Ratios										
2000 - 2001 avg	0.564	0.850	0.866	0.838	0.861	0.837	0.877	0.911	0.916	0.940
2003 - 2004 avg	0.555	0.786	0.815	0.843	0.889	0.863	0.823	0.831	0.787	0.835
Growth	-0.015	-0.076	-0.058	0.006	0.033	0.031	-0.061	-0.088	-0.141	-0.112

Virginia Indemnity Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.967	
1992									0.954	0.971	
1993								0.942	0.958	0.979	
1994							0.928	0.940	0.963	0.973	
1995						0.910	0.932	0.937	0.949	0.915	
1996					0.880	0.907	0.921	0.942	0.920		
1997				0.834	0.859	0.893	0.908	0.872			
1998			0.758	0.811	0.875	0.888	0.884				
1999		0.588	0.727	0.812	0.867	0.895					
2000	0.292	0.567	0.698	0.774	0.836						
2001	0.273	0.486	0.607	0.819							
2002	0.244	0.497	0.845								
2003	0.229	0.756									
2004	0.281										

Virginia Indemnity Paid to Paid + Case Ratios											
2000 - 2001 avg	0.283	0.578	0.743	0.823	0.870	0.909	0.930	0.941	0.956	0.969	
2003 - 2004 avg	0.255	0.627	0.726	0.797	0.852	0.892	0.896	0.907	0.935	0.944	
Growth	-0.097	0.085	-0.022	-0.032	-0.021	-0.019	-0.037	-0.036	-0.022	-0.026	

Virginia Medical Paid to Paid + Case Ratios				Report							
AY	1	2	3	4	5	6	7	8	9	10	
1986											
1987											
1988											
1989											
1990											
1991										0.918	
1992									0.903	0.915	
1993								0.925	0.923	0.915	
1994							0.941	0.941	0.930	0.926	
1995						0.936	0.913	0.908	0.888	0.915	
1996					0.919	0.927	0.926	0.933	0.920		
1997				0.889	0.899	0.887	0.868	0.872			
1998			0.871	0.912	0.911	0.885	0.884				
1999		0.767	0.859	0.886	0.904	0.895					
2000	0.421	0.774	0.832	0.825	0.836						
2001	0.481	0.734	0.804	0.819							
2002	0.470	0.772	0.845								
2003	0.486	0.756									
2004	0.492										

Virginia Medical Paid to Paid + Case Ratios											
2000 - 2001 avg	0.451	0.771	0.865	0.901	0.909	0.932	0.927	0.933	0.913	0.917	
2003 - 2004 avg	0.489	0.764	0.825	0.822	0.870	0.890	0.876	0.903	0.904	0.921	
Growth	0.084	-0.008	-0.047	-0.087	-0.043	-0.045	-0.055	-0.033	-0.010	0.004	