



Ohio Bureau of Workers' Compensation Comprehensive Study

Pricing Process: Public Employer State Agency Rates

Cost Controls: Retrospective Rating Program

Cost Controls: Safety and Hygiene Program

Cost Controls: Effect of Rates on Frequency, Severity, and
Loss Ratios

Report 3.1

Deloitte Consulting LLP

Group 3

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Audit • Tax • Consulting • Financial Advisory •

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Public Employer State Agency Rates

Executive Summary

Introduction

Public Employer State Agencies (“PES”) are part of the BWC’s State Insurance Fund (“SIF”). The PES operates as a pay-as-you-go system. PES premiums are intended to cover paid losses in the upcoming year. They are not intended to fund the losses incurred in the upcoming year, contrary to typical ratemaking practices. The pay-as-you-go nature of PES is based on statute.

PES rate levels are set at the individual agency level in most cases. Smaller agencies are rated together. The data used to rate agencies is the last five years of loss payments and payroll. Based on this information, a loss rate (paid losses divided by payroll) is estimated for the prospective year. This loss rate is multiplied by the actual payroll of the agency for the upcoming year to generate the premium paid by the agency. If premiums exceed or fall short of paid losses in a given year, the amount of overage or shortage is considered in the rate setting process for the next year.

An important factor in the PES rate setting process is the trend assumption. The trend assumption is intended to bring past loss rates to current cost levels. An overall trend is selected for the PES in total. A trend factor is selected for Individual agencies based on a weighting of the agency’s indicated trend and the overall trend. The trend factor will be discussed in more detail in the subsequent sections of this Report; our primary recommendation for PES relates to this assumption.

Conclusions

Findings

As of December 31, 2007, the PES has a cumulative deficit of approximately \$8 million. In recent years, premiums have exceeded loss payments, thereby reducing the cumulative deficit from approximately \$28 million as of December 31, 2004 to \$8 million as of December 31, 2007. It appears that the selected overall trend factor discussed above is the primary cause of premiums exceeding loss payments in recent years, as this factor is selected in part to recognize the deficit or surplus position of the PES.

Expected payments for the prospective year are estimated based on calendar year loss rates. Typical ratemaking practice is to use losses in accident periods or policy periods to project future losses. Calendar year losses can be misleading when the size of an agency is changing rapidly. Accident year or policy year approaches provide a better match of loss to exposure.

Recommendations

Deloitte Consulting's primary recommendations for the PES are shown below.

- **Change the PES Rate Calculation with respect to the Trend Assumption.** It appears that the overall PES trend assumption is selected in order to achieve a desired overall outcome. Deloitte Consulting recommends that any adjustment to achieve a targeted overall rate level should be made explicitly rather than through the trend assumption;
- **Change the Basis for Projected Paid Losses.** Deloitte Consulting recommends that the BWC use an accident year approach in estimating loss rates for the prospective policy period. This will provide a more accurate measure of expected losses for agencies that are changing rapidly in size over time.

The Situation

Task Background

RFP Task Reference	RFP Task Description	Task Category
Section 5.1.2 #2, page 12	Review and make written recommendations with regard to public employer state agency premium rate calculations. The public employer state agencies rates are calculated on a terminal funding basis. This review would include but would not be limited to an analysis of the rating program including the loss information and other data used including the reliability and quality of the data, the payroll, the trending factors, the amount of overage and shortage each year. This analysis should compare the BWC's rating calculation to industry standards and the Actuarial Standards of Practice promulgated by the actuarial standards board of the American Academy of Actuaries.	Pricing & Programs

As part of the BWC Comprehensive Study, this section of the Report comprises Deloitte Consulting's deliverable of Section 5.1.2 Task #2.

Methodology

Our approach to the study includes a review of the BWC's rate setting process for PES and a comparison to industry ratemaking practices.

Please refer to the "Information & Data Gathered Section" of this Report for a list of information and data utilized by Deloitte Consulting.

Primary Constituents

- **BWC Administrator and Chief Actuarial Officer** - Responsible for recommending PES rates to the BWC Board of Directors.
- **BWC Actuarial Department** – Responsible for determining indicated rates for PES and recommending these rates to the BWC Administrator.

Information and Data Gathered

Interviews

The following individuals were very helpful in answering our questions and responding to requests for information and data.

- Director - Actuarial Department
- Assistant Director - Actuarial Department
- Actuarial Supervisor - Actuarial Department

Information/Data Request

Deloitte Consulting was provided information by responsible officers and employees of the BWC. Specifically, we were provided with the following by the BWC:

- PES cumulative deficit/surplus from 1980 to 2007;
- Written descriptions of the PES ratemaking process; and
- PES Rate calculations from 2003 to 2008.

Review and Analysis

PES Cumulative Surplus/Deficit

The PES program has a cumulative deficit of approximately \$8 million as of December 31, 2007. This deficit represents the difference in total premiums collected for the PES program and total losses paid out by the BWC over the history of the PES program. From 1980 to 2007, total premiums have amounted to \$1.145 billion, and total paid losses have been \$1.153 billion. The surplus/deficit position of the PES program for the past nine years is displayed in the table below.

Calendar Year	Total Claim Loss Payments	Premium	Premium Minus Awards/Payments	Cumulative Surplus (Deficit)
2007	\$58,390,223	\$69,744,809	\$11,354,586	(\$7,866,238)
2006	\$62,050,380	\$67,420,777	\$5,370,397	(\$19,220,824)
2005	\$57,595,845	\$61,212,929	\$3,617,084	(\$24,591,221)
2004	\$56,593,418	\$53,784,050	(\$2,809,368)	(\$28,208,305)
2003	\$55,691,032	\$45,166,809	(\$10,524,223)	(\$25,398,936)
2002	\$55,691,493	\$39,286,197	(\$12,159,296)	(\$14,874,713)
2001	\$50,545,456	\$38,851,071	(\$11,603,385)	(\$2,715,417)
2000	\$44,693,689	\$37,638,954	(\$7,054,736)	\$8,887,968
1999	\$45,545,122	\$37,099,600	(\$8,445,522)	\$15,942,704

The table shows that the PES program was in a surplus position in 1999 and 2000. It then moved to a deficit position which remains through 2007. The amount of the deficit reached its peak in 2004 and has been reduced each year since that point.

Trend Factor

A trend factor is included in the PES rating process in order to reflect changes in loss levels over the historical period. An indicated trend factor is calculated for each individual agency. An overall trend factor is selected for PES in total. An individual agency's indicated trend factor is blended with the overall trend factor in order to determine the selected trend for the agency. The blending of an individual agency's trend factor and the overall trend factor is based on the credibility of the agency; small agencies receive little credibility and are trended at a rate similar to the overall selected trend. The cumulative deficit or surplus position of the program is one of the considerations for the overall trend factor selection.

There is a significant difference in the indicated overall PES trend and the selected PES trend in recent years. When the selected trend is higher than the indicated trend as is the case in policy years 2006-2008, the selected rates for agencies will be higher than the indicated rates. The extent to which the selected rates will be higher than the indicated rates is based on the size of the agency; smaller agencies will be affected to a greater extent, as these agencies have low credibility. The table below displays the difference in indicated and selected overall trend for the past four years.

Policy Year	Selected Trend	Indicated Trend
7/1/2005	2.0%	2.1%
7/1/2006	17.0%	1.0%
7/1/2007	14.7%	0.6%
7/1/2008	34.3%	-1.6%

The selected trend is much higher than the indicated trend for the 2006 to 2008 years. Since a higher trend assumption will lead to higher premiums, we would expect premiums in 2006 to 2008 to exceed loss payments. This has been the case in 2006 and 2007, as seen in the cumulative surplus/deficit table above. We expect the same to be true in 2008.

The overall trend assumption is a significant driver of rates for most agencies. As displayed in the table below, the overall trend assumption affects the rates for small agencies to a greater extent than larger agencies.

Credibility	# agencies	Average 7/1/08 Rate		IMPACT
		SELECTED (from overall trend selection)	INDICATED (without overall trend selection)	
Less than 50%	127	0.37	0.26	45%
Greater than 50%	11	1.95	1.84	6%

The selection of a trend higher than indicated is designed to reduce any cumulative surplus or deficit in the PES program. We believe that this goal could be accomplished through an explicit loading in the rates rather than the current method of selecting a trend factor which differs from the indicated trend. As demonstrated above, the current process impacts smaller agencies disproportionately. In our view, there should be more transparency to the methodology for reducing the cumulative deficit or surplus, and the methodology for doing so should spread the impact proportionally to all agencies who contributed to the surplus or deficit. The current methodology does not accomplish this and therefore should be changed.

Expected Payments

Expected payments in the next policy year are based on the last five calendar years of payments. An alternative approach is to estimate expected fiscal year loss payments based on an accident year analysis. In an accident year approach, expected payments in the prospective fiscal year are estimated based on the projected payout of unpaid losses by accident year. An advantage of an accident year approach is that it reacts appropriately to conditions of growth or contraction

Conclusions

Findings

The PES program has performed fairly well in achieving its goals of a cumulative surplus or deficit position of \$0; cumulative premiums from 1980 to 2007 are within 0.7% of cumulative payments over that time. However, the process for spreading rates to the individual agency level as described above is in need of improvement in our view. The primary areas for changes are the trend factor selection and the derivation of expected payments.

Performance Assessment

We assessed the performance of the Ohio workers' compensation system compared to these four overarching themes: Effectiveness & Efficiency; Financial Strength & Stability; Transparency; and Ohio Economic Impact. Each broad study element (Ohio Benefit Structure; Pricing Process; Cost Controls; Financial Provisions; and Actuarial Department Functions & Resources) is reviewed with these themes in mind to develop a performance assessment of the current state. Our performance assessment is made on each element in the context of its contribution to supporting the overarching themes.

For these performance assessments, the following scoring method applies:

-  Strongly supports system performance
-  Supports system performance
-  Some support for system performance
-  Some opportunity for system performance change/enhancement
-  Significant opportunity for system performance change/enhancement

Based on this scoring method, the performance assessment for the PES program is as follows:



Industry Standards Considered

Actuarial Statement of Principles Regarding Property and Casualty Insurance Ratemaking; common industry ratemaking practices

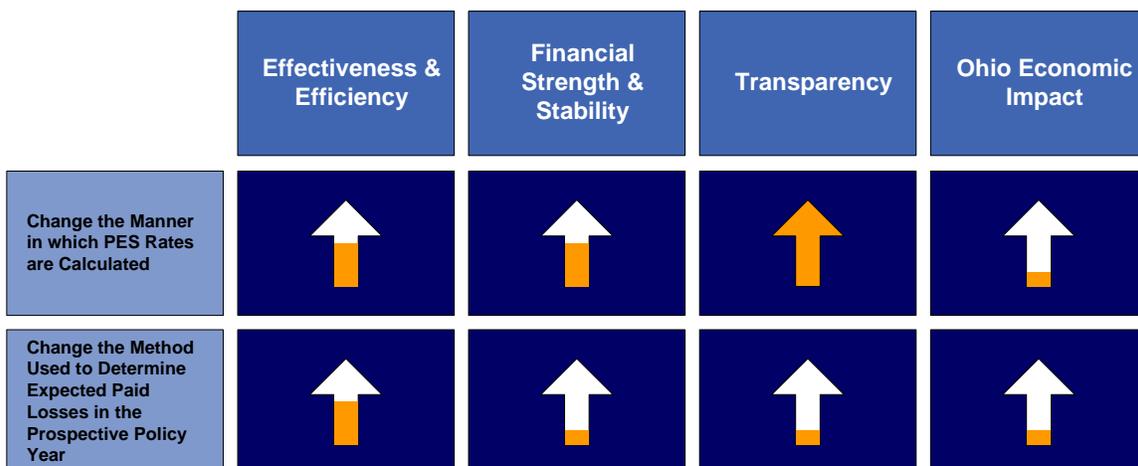
Recommendations

The following comprise Deloitte Consulting's recommendations for the PES program.

- **Change the PES Rate Calculation with respect to the Trend Assumption.** It appears that the overall PES trend assumption is selected in order to achieve a desired outcome with respect to the cumulative surplus or deficit of the program. Deloitte Consulting recommends that any adjustment to achieve a targeted overall rate level should be made explicitly rather than through the trend assumption; and
- **Change the Basis for Projected Paid Losses.** Deloitte Consulting recommends that the BWC use an accident year approach in estimating loss rates for the prospective policy period. This will provide a more accurate measure of expected losses for agencies that are changing rapidly in size over time.

Impact

The impact (high, moderate, or low) of the recommendations for the PES program as they relate to the overarching themes is shown in the following table:



Legend

High Impact	Moderate Impact	Low Impact	No Impact	Adverse Impact
				

Retrospective Rating Program

Executive Summary

Introduction

Employers who meet various eligibility requirements have the option to enroll in BWC's Retrospective ("Retro") Rating Program. Retros are plans in which an employer's premium is adjusted based on the employer's loss experience during the policy period. Retros are commonly offered in the industry. In the BWC's retro plan, participants are charged a minimum premium, based on a percentage applied to the premium that would have been charged for guaranteed cost coverage. Additional premium is paid by retro participants based on actual losses from that employer, up to a specified maximum. Retros protect the BWC from adverse loss experience to the extent losses during the policy period remain below the maximum. Retros are potentially attractive to employers who believe their loss experience will be more favorable than the expected losses underlying the premium they pay for guaranteed cost coverage.

Conclusions

Findings

Of the BWC's approximate 300,000 employers, 352 employers have participated in the retro program over the past 10 years. Thus the retro program has not attracted a large number of employers. One feature of the BWC's retro program that differs from typical industry practice is the fact that employers pay additional premium for all incurred losses up to the maximum. Typical retro programs include minimum premiums that are generated by losses within a specified threshold; under this type of plan, an employer can pay the minimum premium even with a certain amount of losses. Deloitte Consulting believes that a retro plan more closely resembling typical industry plans could potentially attract more employers.

Recommendations

Our primary recommendation for the retro program is shown below.

- **Redesign the Retro Program:** By adding features to the retro program, such as the ability to pay the minimum premium despite incurring a small amount of losses, the BWC may find more employers willing to participate in the retro program. We believe this would benefit the BWC, as well-designed retro programs tend to produce stable results, and the overall results for the State Insurance Fund have been unstable over the past several years.

The Situation

Task Background

RFP Task Reference	RFP Task Description	Task Category
Section 5.1.2 #4, page 13	Review and make written recommendations with regard to the retrospective rating program. This analysis would include a review of the selection criteria for the program, minimum premium percentages, the cost effectiveness of the program, and an overview of the program.	Pricing & Programs

As part of the BWC Comprehensive Study, this section of the Report comprises Deloitte Consulting’s deliverable of Section 5.1.2 Task #4.

Methodology

Our approach to the study includes a review of the BWC’s retrospective rating program in comparison to those typically seen in the industry.

Please refer to the “Information & Data Gathered Section” of this Report for a list of information and data utilized by Deloitte Consulting.

Primary Constituents

The BWC is responsible for reviewing applications from employers seeking to participate in the retro program, determining whether employers meet the criteria, and setting the retro parameters.

Information and Data Gathered

Information/Data Request

The following individuals were very helpful in answering our questions and responding to requests for information and data.

- Director - Actuarial Department
- Assistant Director - Actuarial Department
- Actuarial Supervisor - Actuarial Department

Deloitte Consulting was provided information by responsible officers and employees of the BWC. Specifically, we were provided with the following by the BWC:

- Private employer ("PA) and public employer taxing district ("PEC") retro premiums and losses for policy years 1988 to 2007 as of December 31, 2007;
- Written descriptions of the retrospective program application process; and
- Written descriptions of the retrospective program annual evaluation procedures and process.

Review and Analysis

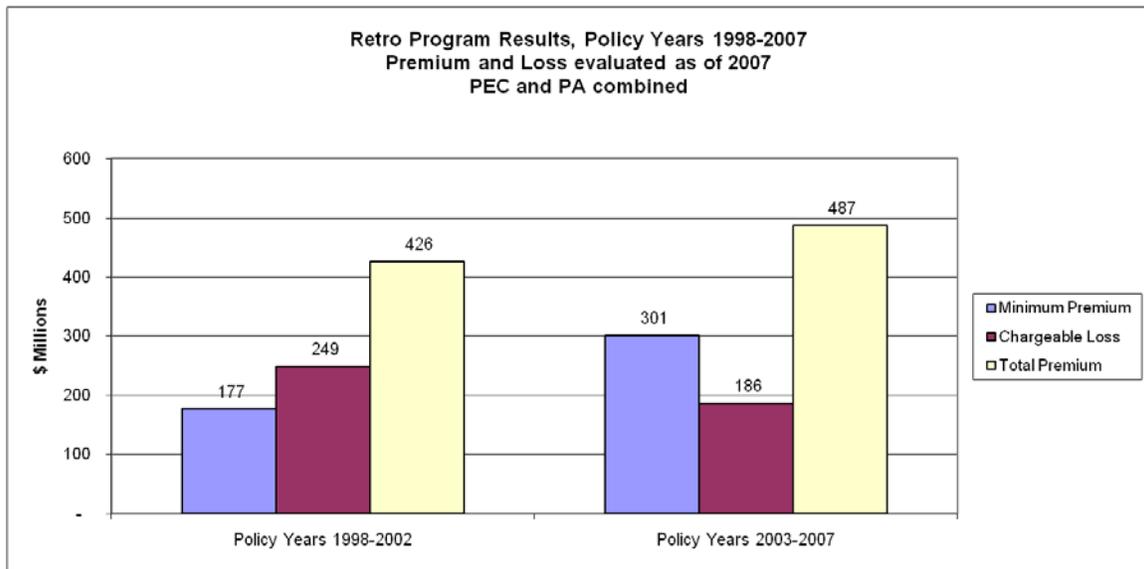
Retro Program Features and Results

The BWC's retro program shares many features with retro plans commonly seen in the insurance industry, including:

- Minimum Premium
- Maximum Premium
- Options for per Occurrence Loss Limitations

The BWC's retro plan is a paid loss retro with a closeout after 10 years. Retro premiums are adjusted each year based on paid losses until the end of the 10th year, at which point the final premium adjustment is made based on payments in the 10th year and any open reserves at that point.

The results for the last 10 years of the retro program are shown below.



The table shows the minimum premium in blue, the chargeable loss in red, and the sum of the two, which equates to retro premium, in yellow. Results are shown for the 1998 to 2002 policy years combined as well as the 2003 to 2007 policy years. It can be observed that the loss ratio as of December 31, 2007 for the 1998 to 2002 policy years is approximately 58% (\$249 million in loss and \$426 million of premium). The loss ratio for the 2003 to 2007 policy years is much lower, at approximately 38%. This is to be expected, as the losses above are undeveloped and are thus relatively immature for the latest five policy years. In general, however, it appears that the minimum premiums have been approximately 40-45% of the total retro premium (42% for policy years 1998 to 2002 combined). This is a higher percentage than is typically seen in the industry for the fixed charge of the retro premium. This suggests that the BWC's minimum premiums are higher than industry equivalents.

We also examined whether there has been a significant amount of loss in excess of the level that triggers the maximum premium. If this occurred frequently, there could be concern that the maximum thresholds might require re-evaluation. We found that as of December 31, 2007, there was approximately \$2 million in losses above the maximum. This is not a significant percentage of total chargeable losses for the last 10 policy years of \$435 million, and thus we believe the BWC's maximum premium thresholds are not a significant cause for concern.

Conclusions

Findings

The retro program has contributed to the goal of financial stability, as results for this program have been relatively favorable for the BWC to date. However, there has been only a small degree of participation in the retro program. One reason for this could be that the minimum premium appears to be higher than industry norms. If the BWC changes the retro program such that the fixed cost component of the retro premium is lower and some level of losses could still result in the employer paying the minimum premium, we believe participation could be increased in this program.

Performance Assessment

We assessed the performance of the Ohio workers' compensation system compared to these four overarching themes: Effectiveness & Efficiency; Financial Strength & Stability; Transparency; and Ohio Economic Impact. Each broad study element (Ohio Benefit Structure; Pricing Process; Cost Controls; Financial Provisions; and Actuarial Department Functions & Resources) is reviewed with these themes in mind to develop a performance assessment of the current state. Our performance assessment is made on each element in the context of its contribution to supporting the overarching themes.

For these performance assessments, the following scoring method applies:

	Strongly supports system performance
	Supports system performance
	Some support for system performance
	Some opportunity for system performance change/enhancement
	Significant opportunity for system performance change/enhancement

Based on this scoring method, the performance assessment for the retrospective rating program is as follows:



Recommendations

Our recommendation for the retrospective program is shown below.

- **Change the Structure of the Retro Program.** In order to encourage a higher degree of participation, BWC should consider redesigning the retro program to be more in line with programs commonly used in other states.

Impact

The impact (high, moderate, or low) of the recommendations for the retro program as they relate to the overarching themes is shown in the following table:



Legend

High Impact	Moderate Impact	Low Impact	No Impact	Adverse Impact
				

Safety and Hygiene Program

Executive Summary

Introduction

BWC's Division of Safety & Hygiene ("DSH") offers safety consulting through a variety of means, including on-site visits to employers. BWC provided a list of employers who received on-site safety consulting by the DSH in recent years. We analyzed the loss experience of these employers to determine the extent to which the program appears to be demonstrating a positive impact on the workers' compensation system in Ohio.

Conclusions

Findings

We examined the frequency, severity, and loss ratios for employers receiving safety consultation through on-site visits from the DSH in 2003, 2004, and 2005 to determine whether it appeared such consultation resulted in improvements in these metrics. We found results were generally inconclusive. However, it does appear that employers who received these services have lower loss ratios than employers who do not. While the impact of the DSH on-site visits is not clear from the loss experience, it does appear that employers who receive these services tend to produce better results.

Recommendations

Deloitte Consulting's primary recommendation for the safety and hygiene program is shown below.

- **Monitor and Promote the Effectiveness of the Safety & Hygiene Program.** Deloitte Consulting is not aware of any analysis of the cost and benefit of this program. Our expectation is that the program should produce favorable results for those who participate, but this was not clear from the available data on the program. We recommend that the BWC actively monitor the results of those participating in the program and communicating these results to the BWC's constituents in order to maximize the favorable impact of these services.

The Situation

Task Background

RFP Task Reference	RFP Task Description	Task Category
Section 5.1.2 #29, page 14	Conduct a study on the effectiveness of the safety and hygiene programs. This study should include an evaluation on the reduction of claims and costs through safety intervention, the criteria for selection of employers to assist, the application of the safety and hygiene assessment and a comparison to industry standards. The evaluation should study the effect of workers compensation rates in reducing the number and severity of workers' compensation claims in the state.	Pricing & Programs

As part of the BWC Comprehensive Study, this section of the Report comprises Deloitte Consulting's deliverable of Section 5.1.2 Task #29.

Methodology

Our approach to the study includes a review of the results for employers who received on-site consultative visits from the DSH.

Please refer to the "Information & Data Gathered Section" of this Report for a list of information and data utilized by Deloitte Consulting.

Primary Constituents

- **BWC's Division of Safety & Hygiene** – Provides employers with technical support, library services, educational services, and publications. Also provides consultative services, including on-site visits to employers.

Information and Data Gathered

Interviews

The following individuals were very helpful in answering our questions and responding to requests for information and data.

- Director - Actuarial Department
- Assistant Director - Actuarial Department
- Actuarial Supervisor - Actuarial Department

Information/Data Request

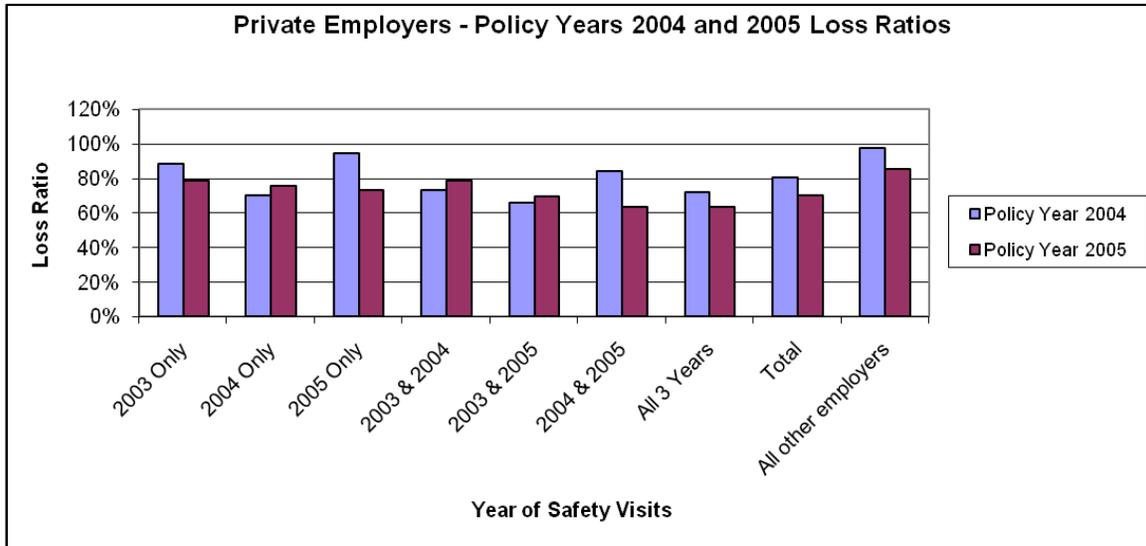
Deloitte Consulting was provided information by responsible officers and employees of the BWC. Specifically, we were provided with the following by the BWC:

- List of employers receiving on-site consultative visits from the DSH and the dates of those visits.

Review and Analysis

Impact of On-Site Safety Visits

We reviewed the premium and loss experience of private employers who received on-site visits any time during the 2003 to 2005 policy years. We compared the experience among these employers, and also compared the experience to all other employers, i.e. those who did not receive any consultative on-site visits. The results are shown below.



The table compares policy years 2004 to 2005 loss ratios for employers receiving on-site visits in one, two, or all three years during the 2003 to 2005 period, as well as the experience of those who did not receive any visits. Losses include reserves but are undeveloped. Thus the 2005 loss ratio is expected to be lower than 2004, as it is less mature. Losses are evaluated as of December 31, 2007. The total number of employers who participated in any one of the three years is approximately 9,500.

The results appear to be inconclusive for employers who participate in this program. The results for the participants in the program are represented in the chart above by all but the right-most set of bars. Results from 2004 to 2005 for the participants show no clear pattern of improvement.

There is a significant difference in the results for these employers as a group ("Total") compared to the results of those who do not participate in this program at all ("All other employers"). This suggests that employers participating in the program are potentially more safety-conscious and control losses more effectively than those who do not.

We reviewed the frequency and severity in policy years 2004 and 2005 of these employers, and found results to be similarly inconclusive, with very little difference in frequency between the two periods, and varying results with respect to severity.

Conclusions

Findings

The safety and hygiene program provides a variety of services that would be expected to result in a reduction in claims and lower loss ratios. We did not observe this effect for the policy years we reviewed, as results were inconclusive. We therefore believe it is important for the BWC to actively monitor the results for employers who make use of the services offered by the DSH and make these results available to the BWC's constituents so as to maximize the use and benefits of the program.

Performance Assessment

We assessed the performance of the Ohio workers' compensation system compared to these four overarching themes: Effectiveness & Efficiency; Financial Strength & Stability; Transparency; and Ohio Economic Impact. Each broad study element (Ohio Benefit Structure; Pricing Process; Cost Controls; Financial Provisions; and Actuarial Department Functions & Resources) is reviewed with these themes in mind to develop a performance assessment of the current state. Our performance assessment is made on each element in the context of its contribution to supporting the overarching themes.

For these performance assessments, the following scoring method applies:

	Strongly supports system performance
	Supports system performance
	Some support for system performance
	Some opportunity for system performance change/enhancement
	Significant opportunity for system performance change/enhancement

Based on this scoring method, the performance assessment for the safety and hygiene program is as follows:

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Safety & Hygiene Program				

Peers and Industry Standards Considered
Other states' safety programs

Recommendations

Our recommendation for the retrospective program is shown below.

- Monitor and Promote the Effectiveness of the Safety & Hygiene Program:** We recommend that the BWC develop the capability to track the loss experience of employers who participate in the various aspects of the safety & hygiene program. This will allow BWC to continually monitor the effectiveness of the program over time.

Impact

The impact (high, moderate, or low) of the recommendations for the safety and hygiene program as they relate to the overarching themes is shown in the following table:

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Develop the capability to track the experience of employers participating in the safety & hygiene program	↑	↑	↑	↑

Legend

High Impact	Moderate Impact	Low Impact	No Impact	Adverse Impact
↑	↑	↑		↓

Effect of Rates on Frequency, Severity, and Loss Ratios

Executive Summary

Introduction

Changes in an employer's premium can have an impact on employer behavior with respect to controlling workers' compensation costs. As an example specific to the Ohio workers' compensation system, employers who are part of groups have a strong incentive to control costs as a result of the significant cost savings available to group rated employers.

Conclusions

Findings

We examined the impact of rates on frequency, severity, and loss ratios by comparing results for private employers between policy years 2004 and 2005 for employers with large rate changes between years. We compared frequency, severity and loss ratios using both charged premium and base premium. Our findings suggest that there is no observable impact of large rate changes on frequency, severity, and loss ratios.

The Situation

Task Background

RFP Task Reference	RFP Task Description	Task Category
Section 5.1.2 #33, page 14	Study the effects of BWC's rates in reducing the number and severity of workers' compensation claims in this state.	Pricing & Programs
Section 5.1.2 #34, page 14	Study the effect that saving money has had on safety in the workplace in this state.	Pricing & Programs

As part of the BWC Comprehensive Study, this section of the Report comprises Deloitte Consulting's deliverable of Section 5.1.2 Tasks #33 and #34.

Methodology

Our approach to the study includes a review of the policy years 2004 and 2005 results for private employers. Employers were grouped by size of rate change between 2004 and 2005 as a means of gauging the impact of rates on employer behavior, as measured by frequency, severity, and loss ratios.

Please refer to the "Information & Data Gathered Section" of this Report for a list of information and data utilized by Deloitte Consulting.

Information and Data Gathered

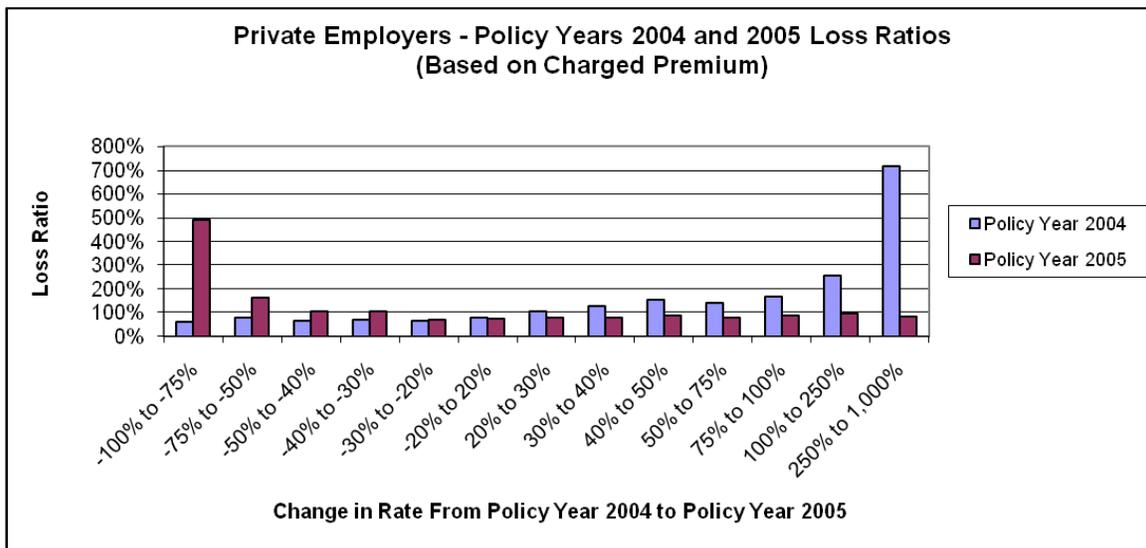
Information/Data Request

Our approach to addressing the questions raised by these tasks was to review information previously provided by the BWC for the Group 1 tasks involving the evaluation of the private employer rating process.

Review and Analysis

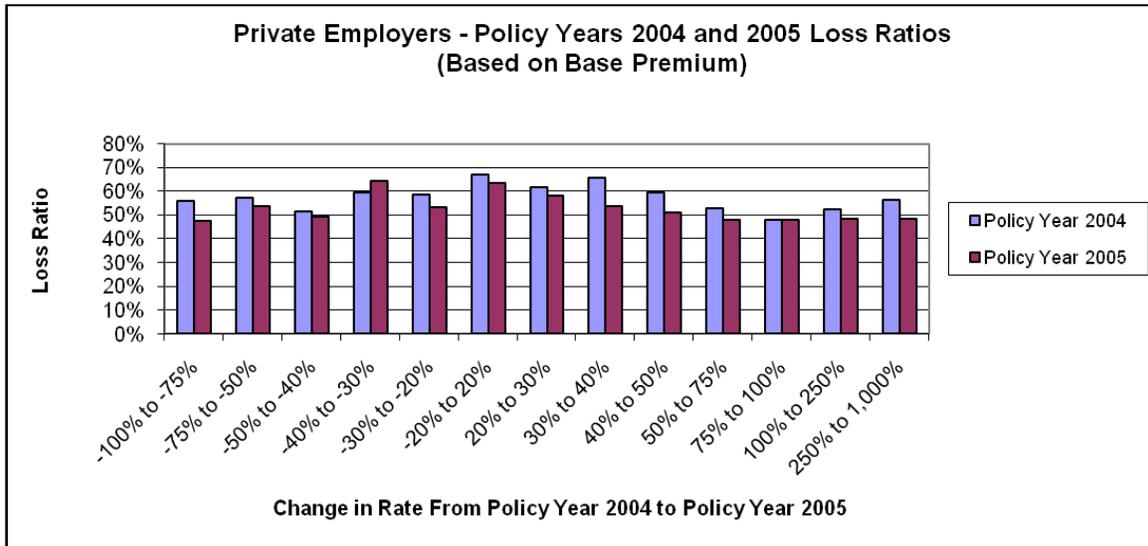
Relationship of Rate Change to Change in Loss Ratio – Charged Premium

We analyzed the relationship of rate change and change in loss ratio between policy years 2004 and 2005, using charged premium as the basis. We found that loss ratios increased dramatically for employers with the largest rate decreases; the converse is true as well. Severity is relatively stable between the two years across most groups of rate changes. Frequency behaves in the same manner as loss ratios when charged premium is used as the basis for this analysis.



Relationship of Rate Change to Change in Loss Ratio – Base Premium

In addition, we analyzed loss ratios relative to base premium. There are no clear patterns in this analysis; while 2004 loss ratios are generally higher, both years are evaluated as of December 31, 2007 and thus policy year 2004 has developed for 12 more months than policy year 2005. Frequency was relatively similar between the two years for most groups.



Conclusions

Findings

The loss ratio differences based on charged premium suggests that employers with the largest rate changes receive credits or debits that are higher than those indicated by subsequence experience. Large changes in charged rates are associated with employers moving in and out of groups. The loss ratio differences using base premium indicate no real difference between employers who have had rate increases or decreases, regardless of the size of the change in charged rate.

Performance Assessment

We assessed the performance of the Ohio workers' compensation system compared to these four overarching themes: Effectiveness & Efficiency; Financial Strength & Stability; Transparency; and Ohio Economic Impact. Each broad study element (Ohio Benefit Structure; Pricing Process; Cost Controls; Financial Provisions; and Actuarial Department Functions & Resources) is reviewed with these themes in mind to develop a performance assessment of the current state. Our performance assessment is made on each element in the context of its contribution to supporting the overarching themes.

For these performance assessments, the following scoring method applies:

	Strongly supports system performance
	Supports system performance
	Some support for system performance
	Some opportunity for system performance change/enhancement
	Significant opportunity for system performance change/enhancement

These tasks did not lend themselves to this type of assessment, and this we did not include ratings:

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Impact of Rates	Not Rated	Not Rated	Not Rated	Not Rated

Peers and Industry Standards Considered
NCCI, Other State Funds

Recommendations

We do not have recommendations related to these tasks.

Impact

No impacts have been identified in these areas.

	Effectiveness & Efficiency	Financial Strength & Stability	Transparency	Ohio Economic Impact
Impact of Rates on Frequency, Severity, and Loss Ratios				

Legend

High Impact	Moderate Impact	Low Impact	No Impact	Adverse Impact
				

Appendix A – Deliverable Matrix

Group 3 Study Elements

Pricing Process
Premium Rate Calculation – State Agencies
Programs
1) Handicap Reimbursement Program

Cost Controls
MCOs
1) Medical Payments to Providers
Retrospective Rating Program
Effectiveness of Rates in Reducing Ohio Claims
Effect of Saving Money on Ohio Workplace Safety
Safety Grant Programs
Safety and Hygiene Program

Pricing Process Areas

Premium Rate Calculation	Tasks Involved
<p>Premium Rate Calculation – State Agencies</p>	<p>2. Review and make written recommendations with regard to public employer state agency premium rate calculations. The public employer state agencies rates are calculated on a terminal funding basis. This review would include but would not be limited to an analysis of the rating program including the loss information and other data used including the reliability and quality of the data, the payroll, the trending factors, the amount of overage and shortage each year. This analysis should compare the BWC's rating calculation to industry standards and the Actuarial Standards of Practice promulgated by the actuarial standards board of the American Academy of Actuaries.</p>
Programs	Tasks Involved
<p>Handicap Reimbursement Program*</p> <p>*Originally scheduled to be part of the Group 4 deliverables.</p>	<p>17. Evaluate the effectiveness of the handicap reimbursement program to reward employers with pre-existing conditions. This evaluation should determine if the program is cost effective and compare the program to other states.</p>

Cost Control Areas

MCOs	Tasks Involved
1) MCOs	30. Conduct a study on the effectiveness of the use of Managed Care Organizations (MCO) in the workers' compensation system. This analysis would include an evaluation of the effectiveness of the use of MCOs, the payments to MCOs relative to the benefits received, the advantages and disadvantages of the MCO approach, the medical cost trends since MCO implementation, and a comparison to industry standards.
2) Medical Payment to Providers	25. Conduct a study on the medical payments to providers in Ohio and provide a comparison to industry peers. This study should recommend changes/improvements to the BWC's medical payment structure to be in line with industry standards.
Retrospective Rating Program	Tasks Involved
Retrospective Rating Program	4. Review and make written recommendations with regard to the retrospective rating program. This analysis would include a review of the selection criteria for the program, minimum premium percentages, the cost effectiveness of the program, and an overview of the program.
Effectiveness of Rates in Reducing Ohio Claims	Tasks Involved
Effectiveness of Rates in Reducing Ohio Claims	33. Study the effects of BWC's rates in reducing the number and severity of workers' compensation claims in this state.
Effect of Saving Money on Ohio Workplace Safety	Tasks Involved
Effect of Saving Money on Ohio Workplace Safety	34. Study the effect that saving money has had on safety in the workplace in this state.
Safety Grant Programs	Tasks Involved
Safety Grant Programs	9. Review and make written recommendations with regard to the safety grant programs. This study should include an evaluation on the reduction of claims and costs through safety intervention, the criteria for selection of employers to assist, the application of the safety and hygiene assessment and a comparison to industry standards. The evaluations should study the effect of workers' compensation rates in reducing the number and severity of workers' compensation claims in the state.

Cost Control Areas - continued

Safety and Hygiene Program	Tasks Involved
Safety and Hygiene Program	29. Conduct a study on the effectiveness of the safety and hygiene programs. This study should include an evaluation on the reduction of claims and costs through safety intervention, the criteria for selection of employers to assist, the application of the safety and hygiene assessment and a comparison to industry standards. The evaluation should study the effect of workers' compensation rates in reducing the number and severity of workers' compensation claims in the state

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